AGRICULTURAL MARKETING COOPERATIVES, RURAL DEVELOPMENT and FOOD SYSTEM DEVELOPMENT IN TWO SOUTHEAST ASIAN COUNTRIES

By

Antoon Gerard Vergroesen

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ABSTRACT

AGRICULTURAL MARKETING COOPERATIVES, RURAL DEVELOPMENT and FOOD SYSTEM DEVELOPMENT IN TWO SOUTHEAST ASIAN COUNTRIES

An evaluation was made of the performance of agricultural marketing cooperatives within the context of rural development strategies in the Philippines and Indonesia. It was also recognized that cooperatives in LDCs could act as an important institutional mechanism for improving the coordination of the food systems in the two countries.

The study identified major shortcomings in operational efficiency, the equitable distribution of benefits to members and in the progressiveness of cooperatives in both countries.

The policy conclusions and recommendations emphasize that (1) the role of the government in rural development programs should be redefined to emphasize a public service role while encouraging a "de-officialization" approach in cooperative development; (2) the cooperative marketing systems should be restructured to allow for a more decentralized system of local marketing cooperatives that can compete effectively with other private sector enterprises; and (3) a reconsideration of the basic foundation of the government-promoted cooperatives be made to allow for a more participatory approach to rural development.

Suggestions for improving the performance of Philippine and Indonesian cooperatives give priority to membership support, capital accumulation, adequate training and education, and organization and management of marketing cooperatives.
ACKNOWLEDGEMENTS

The successful completion of this research paper would not have been possible without the active collaboration of several individuals. As Chairman of my graduate committee, Dr. Harold Riley provided constructive guidance on the theoretical framework and drafting of this research paper. Dr. John Staatz encouraged me to come to Michigan State University at an early stage during a 1985 IAAE meeting in Malaga, Spain and offered study support throughout my course work at the Department of Agricultural Economics.

Also, the opportunity offered to present part of methodological framework and the results in the AEC 941/995 classes was a welcome opportunity to get input from student colleagues and faculty during the analysis stage.

My wife, Babylita, encouraged me to keep a busy study schedule and was very helpful during the writing stage of the thesis.

Finally, I want to thank the farmers, traders, managers, directors and counterparts connected with the cooperative development projects in Benguet, Philippines and West Pasaman, Indonesia. Without their collaboration, this research simply would have not been possible.
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<th>Description</th>
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<tbody>
<tr>
<td>AIC</td>
<td>Audit and Inventory Committee of Cooperative</td>
</tr>
<tr>
<td>AMC</td>
<td>Area Marketing Cooperative</td>
</tr>
<tr>
<td>BCOD</td>
<td>Bureau of Cooperative Development</td>
</tr>
<tr>
<td>CAVADECO</td>
<td>Cagayan Valley Development Cooperative</td>
</tr>
<tr>
<td>CB</td>
<td>Central Bank of the Philippines</td>
</tr>
<tr>
<td>CDLF</td>
<td>Cooperative Development Loan Fund</td>
</tr>
<tr>
<td>CFPI</td>
<td>Cooperative Foundation of the Philippines, Inc.</td>
</tr>
<tr>
<td>CMP</td>
<td>Cooperative Marketing Project (sponsored by USAID)</td>
</tr>
<tr>
<td>CMSI</td>
<td>Cooperative Management System Incorporated</td>
</tr>
<tr>
<td>CMSP</td>
<td>Cooperative Marketing System of the Philippines</td>
</tr>
<tr>
<td>CRB</td>
<td>Cooperative Rural Bank</td>
</tr>
<tr>
<td>CUP</td>
<td>Cooperative Union of the Philippines</td>
</tr>
<tr>
<td>DBP</td>
<td>Development Bank of the Philippines</td>
</tr>
<tr>
<td>ETC</td>
<td>Education and Training Committee of Cooperative</td>
</tr>
<tr>
<td>FAO</td>
<td>Food and Agricultural Organization of the United Nations</td>
</tr>
<tr>
<td>FSDC</td>
<td>Farm System Development Corporation</td>
</tr>
<tr>
<td>GA</td>
<td>General Assembly Meeting of the Cooperative</td>
</tr>
<tr>
<td>GSK</td>
<td>Gulayan Sa Kalusugan- &quot;Vegetable for Health&quot; Vegetable Intensification Program</td>
</tr>
<tr>
<td>IAC-MAC</td>
<td>Inter Agency Committee Marketing Assistance Center</td>
</tr>
<tr>
<td>IRRI</td>
<td>International Rice Research Institute</td>
</tr>
<tr>
<td>KB</td>
<td>Kilusang Bayan - full fledged cooperative</td>
</tr>
<tr>
<td>MA</td>
<td>Ministry of Agriculture</td>
</tr>
</tbody>
</table>
MAC  Marketing Assistance Center
MAR  Ministry of Agrarian Reform
MASAGANA  Bountiful Harvest Rice Intensification Program
MAISAGANA  Bountiful Harvest Corn Intensification Program
MLGCD  Ministry of Local Government/Community Development
MMCC  Metro Manila Consumer Cooperative
MTAP  Management Training and Assistance Program
NACIAD  National Council on Integrated Area Development
NAMVESCO  National Market Vendors Service Cooperative
NEDA  National Economic Development Authority
NGA/NFA  National Grains Authority/National Food Authority
NIA  National Irrigation Authority
PNB  Philippine National Bank
PCARR  Philippine Council on Agric. Resources Research
SN  Samahang Nayon - Village Association
UNDP  United Nations Development Program
ACRONYMS
(Indonesia)

BALATKOP  Balai Latihan Koperasi - Provincial Cooperative Training Center
BANGDA  Pembangunan Daerah - Rural Development Program
BAPINDO  Bank Pembangunan Indonesia - Development Bank of Indonesia
BAPPEDA  Badan Perencanaan Pembangunan Daerah - Provincial Planning Agencies
BAPPEDAII  Badan Perencanaan Pembangunan Daerah Tingkat II - District Planning Agency
BAPPENAS  Badan Perencanaan Pembangunan Nasional - National Development Planning Board
BI  Bank Indonesia - Central Bank
BIMAS  Bimbingan Massal Swa Sembada Bahan Makanan - Mass Guidance for Self-Sufficiency in Foodstuffs, (a farm input credit package program)
BKKBN  Badan Koordinasi Keluarga Berencana Nasional - National Family Planning Coordination Board
BRI  Bank Rakyat Indonesia - People's Bank of Indonesia
BPD  Bank Pembangun Daerah - Provincial Development Bank
BP  Badan Pemeriksa - Supervisory Committee in KUD
BUKOPIN  Bank Umum Koperasi Indonesia - Indonesian Cooperative Bank
BULOG  Badan Urusan Logistik - National Logistics Body
(Rice procurement agency)
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>BUUD</td>
<td>Badan Usaha Unit Desa - Forerunner of KUD as Village Level Cooperative</td>
</tr>
<tr>
<td>CRIA</td>
<td>Central Research Institute for Agriculture</td>
</tr>
<tr>
<td>DEPKEK</td>
<td>Departement Kesahatan - Department of Public Health</td>
</tr>
<tr>
<td>DEPKOP</td>
<td>Departement Koperasi - Department of Cooperatives</td>
</tr>
<tr>
<td>DEPP+K</td>
<td>Departement Pendidikan dan Kebudayan - Department of Education and Culture</td>
</tr>
<tr>
<td>DEPTAN</td>
<td>Departement Pertanian - Department of Agriculture</td>
</tr>
<tr>
<td>DKI</td>
<td>Dewan Koperasi Indonesia - Indonesian Cooperative Council</td>
</tr>
<tr>
<td>DIPERTA</td>
<td>Dinas Pertanian - Provincial Agricultural Office</td>
</tr>
<tr>
<td>DIPERTAI</td>
<td>Dinas Pertanian tingkat I - District Agricultural Office</td>
</tr>
<tr>
<td>DOLOG</td>
<td>Daerah Organisasi Logistic-BULOG Provincial Branch</td>
</tr>
<tr>
<td>DPU</td>
<td>Departement Pekerjaan Umum - Dept of Public Works</td>
</tr>
<tr>
<td>INKUD</td>
<td>Induk Koperasi Unit Desa - National Cooperative</td>
</tr>
<tr>
<td>INMAS</td>
<td>Intensifikasi Massal - Massive Intensification, (farm input program, however on cash basis)</td>
</tr>
<tr>
<td>INPRESS</td>
<td>Instruksi Presiden - &quot; Presidential Instruction&quot; rural works program for schools, bridges, roads.</td>
</tr>
<tr>
<td>IPEDA</td>
<td>Iuran Pembangunan Daerah - (Land) Property Tax</td>
</tr>
<tr>
<td>KABUPATEN</td>
<td>District Level of Local Government or Regency</td>
</tr>
<tr>
<td>KCK</td>
<td>Kredit Candak Kulak - Small Credit Program of KUDs</td>
</tr>
<tr>
<td>KIK</td>
<td>Kredit Investasi Kecil - Small Investment Credit</td>
</tr>
<tr>
<td>KKOPD</td>
<td>Kepala Kantor Koperasi Departement Koperasi - Head of the District Cooperative Office</td>
</tr>
<tr>
<td>KMKP</td>
<td>Kredit Modal Kerja Permanen - Small Permanent Working Capital Credit Program</td>
</tr>
</tbody>
</table>
KANDEPKOP Kantor Departement Koperasi -
District Cooperative Office

KAKANWILKOP Kepala Kantor Wilayah Koperasi -
Head of the Provincial Cooperative Office

KANWILKOP Kantor Wilayah Koperasi -
Provincial Cooperative Office

KJA Koperasi Jasa Audit - Audit Service Cooperative

KUD Koperasi Unit Desa - Village Level Cooperative

LINIII provincial distribution point for PT. PUSRI

LJKK Lembaga Jaminan Kredit Koperasi -
Cooperative Credit Guarantee Institute

PKK Progr Kesejahtera Keluarga - Family Health Program

PPK Pusat Penge. Koperasi - Cooperative Service Center

PPPTP Pusat Pengembangan Penelitian Tanaman Pangan -
Central Research Institute for Food Crops

PPW Proyek Pengemb. Wilayah - Area Development Project

PUSKESMAS Pusat Kesehatan Masyarakat - Rural Health Center

PUSKUD Pusat Koperasi Unit Desa - Secondary Cooperative

PUSLATPENKOP Pusat Latihan Pendidikan Koperasi - Central
Training and Education Center for Cooperatives

PUSRI Pupuk Sriwidjaja - National Fertilizer Company

SUBDOLOG Sub Daerah Organisasi Logistic - DOLOG District
Branch Office/Warehouse of Logistics Agency BULOG

RAT Rapat Anggota Tahunan - KUD Annual Members Meeting

REPELITA Rencana Pengembangan Lima Tahun -
Five Year Indonesian Development Plan

SENSUS PENDUDUK Population Census
CHAPTER 1: INTRODUCTION

1.1. Background of the Study

This paper is based upon the author's field experience in the Southeast Asian region, combined with the subsector framework of agricultural marketing analysis, and coursework completed at Michigan State University in East Lansing, Michigan, USA.

The researcher was assigned to the Philippines from October, 1979 to September, 1981 as an associate expert for agricultural economics and cooperative development with the FAO cooperative development and marketing project in Benguet. In Indonesia the researcher worked from October, 1981 to November, 1986 as an adviser for cooperative development and small scale irrigation development with the GTZ area development project in West Sumatra.

The cooperative development and marketing project in the Philippines aimed at the development and implementation of cooperative marketing strategies for perishable farm produce.

The cooperative section of the area development project in Indonesia had, as its major objectives: the development of a strategy for the promotion of village-level cooperatives, the provision of technical assistance to the organization, and management of a cooperative farm input supply and rice marketing program.
1.2. Problem Definition

Promotion and development of village-level cooperatives in the context of rural development poses two major dilemmas:

A: The Growth-Equity Dilemma

There is a conflict between the objective of growth in the short run versus that of growth with broad based income distribution and participation in the long run. For a variety of reasons, the cost of providing services to the rural poor is greater than to the rich. "A faster growth in the short run does not necessarily imply a more rapid growth in the long run, as the savings constraint to growth in the short run may over time be replaced by an effective demand constraint, if domestic income disparities worsen with growth." (Lele, 1980, p.30).

Programs targeted towards the poor are needed, but these are also costly and administratively demanding. Most important, subsidies frequently hamper self help and local resource mobilization, thus paving the way for perpetual dependence on external assistance.

B: The Decentralization-Equity Dilemma

Shifting political power for development from the urban centers to the rural areas conflicts with the control of local organizations by the rural political elite. Ownership of land is frequently associated with social status and political power. In
such situations, emphasis on rural self help and grass root participation frequently leads to the control of local development activities by the local elite, and this results in a disproportionate allocation of scarce resources in their favor. An attempt to shift power from urban to rural areas may worsen the socio-political class differentiation. Improvement in the welfare of the rural poor is in much more direct in conflict with the interests of the rural elite than those of the urban elite.

In the two countries under study, cooperatives have a redistributive task - they are often viewed as a means of redistributing economic power to the poor. Conflicts and problems arise from the need to balance this goal with that of efficiently providing input supply, marketing and credit services to farmers.

The role of the government in cooperative development is often seen as contradictory to the development of autonomous farmer based cooperatives. Government training and education programs, as well as management and financial assistance, are provided to speed up cooperative development and to facilitate effective cooperative marketing transactions. However, government involvement in cooperatives may hamper the development of cooperatives if it creates an atmosphere of "government cooperatives", where farmers are beneficiaries, while the government takes care of the management and is the biggest financial risk taker in the cooperative enterprise. Such government organized and controlled farmer organizations give the state a powerful instrument for
deterring unorganized or unexpected farmer action against the
government.

1.3. Purpose of the Study

This study is an attempt to examine the role of agricultural
marketing cooperatives as a component of rural development
strategy. Emphasis is placed on the role of marketing
cooperatives in the wider scope of food system development,
because of the interdependence of the various economic activities
such as production and distribution of farm inputs, farm
production and the distribution of consumer goods.

Moreover, this study will provide a descriptive-diagnostic
analysis of major bottlenecks in the cooperative marketing
systems, and will evaluate the performance of agricultural
marketing cooperatives. Such an analysis requires that particular
attention be paid to vertical coordination problems within the
cooperative marketing structures of the two countries, and the
identification of criteria for performance evaluation.

The operational objectives of the study are as follows:

1. To review the literature on the role of cooperatives, in
rural development and within the wider context of a food
system approach.

2. To describe and assess the experiences of the Philippines
and Indonesia, in promoting the development of agricultural
marketing cooperatives in two countries.
3. To describe and assess government policies towards cooperative development on the national and regional levels in these two countries.

4. To identify implementation problems in government efforts to develop agricultural marketing cooperatives.

5. To evaluate the performance of these marketing cooperatives according to a given set of performance criteria.

6. To advance some recommendations for the design and implementation of cooperative development programs.

1.4. Research Questions

1. What types of functional and area programs for rural development were proposed in the Philippines and Indonesia, and how were they implemented?

2. What institutional support was made available to assist the chosen rural development strategy, and especially its cooperative component in each of the two countries?

3. What coordination problems are experienced in cooperative marketing systems in the two countries and what mechanisms were available to improve coordination in the food system?

4. What alternative marketing channels could be available to purchase farm inputs, market farm produce and provide credit in each of the two countries?

5. What roles and functions have agricultural marketing cooperatives performed in the rural development and in the food system development of the two countries?
6. How did the government's cooperative development program affect the performance of the agricultural marketing cooperatives in each of the countries?

7. What were the demographic, socio-economic, agricultural, infrastructural and political factors that influenced the performance of marketing cooperatives in each country?

8. How have cooperatives developed in terms of membership, organization, capital accumulation and management?

9. What implementation problems were encountered by the cooperatives and what constraints were faced by the government cooperative development program in its effort to improve cooperative management, marketing and financing?

10. How can we evaluate the performance of agricultural marketing cooperatives and what performance criteria are available for such an evaluation?

11. What prescriptions for the improvement in cooperative marketing performance are suggested based on the descriptive and diagnostic analysis?

1.5. Methodology and Data Collection

Research Methodology

This study places agricultural marketing cooperatives in the framework of food system development and rural development strategies in the LDCs, focusing on marketing institutions for reaching the rural poor. It is based on an ex-post analysis and
concentrates on two project areas: Benguet Province in the Philippines and West Pasaman District in Indonesia.

This research aims at applying criteria from the Structure-Conduct-Performance (SCP) paradigm of the Industrial Organization Economics within the context of a Subsector Framework of analysis for evaluating the performance of the agricultural marketing cooperatives. Efficiency, equity, and progressiveness have been chosen as the major criteria for evaluating the performance of agricultural marketing cooperatives within the context of the national cooperative development goals and objectives in both research areas.

This study attempts to identify major bottlenecks in the cooperative marketing systems; therefore attention is given to the sub-sector of analysis and the vertical coordination problems within the food system of the two countries. The sub-sector framework of analysis provides insights on problems in vertical coordination within the perishable sub-sector in the Philippines and the rice sub-sector in Indonesia, where marketing cooperatives have been active.

To understand the institutional aspects of cooperative development, and the effect of environmental factors on the performance of cooperatives, this study utilizes Shaffer's Environment-Behavior-Performance (EBP) paradigm, which is based on an extension of the S-C-P model (Shaffer, 1980).
Data Collection and Analysis

Primary data were collected by the researcher during his assignments in the two countries from 1979-1986. In addition, several government documents as well as regional planning and cooperative evaluation studies were utilized. A list of these project documents and research publications is provided in the appendix.

Secondary data on rural development strategies and cooperative development programs in Philippines and Indonesia were collected during visits to those countries' National Planning Agencies and Departments of Agriculture, the Department for Cooperatives in Indonesia and the Ministry of Local Government and Community Development (MLGCD) in the Philippines. The MLGCD handled the Bureau of Cooperative Development to December 1980, after which it was transferred to the Department of Agriculture. A list of the government documents utilized in the study is given in the bibliography.

Additional data were obtained from the Michigan State University library or requested from former project colleagues and/or counterparts.

1.6. Structure of the Study

This report is composed of five (5) chapters:

Chapter 1 provides the background and problem definition of the study, states the purpose and objectives as well as the research questions, and explains the research methodology.
Chapter 2 reviews the literature concerning concepts of cooperation, the role of cooperatives in rural development in developing countries, the role of cooperatives in the broader context of developing a food system, and the vertical coordination problems within the subsector.

Chapter 3 provides a descriptive-diagnostic assessment of cooperative development and the role of the government in the Philippines, with special reference to Benguet Province. It includes a performance evaluation of the cooperatives.

Chapter 4 provides a similar assessment for the Indonesian cooperative development program with special attention given to the West Pasaman District. Also, the performance of the village-level cooperatives is evaluated.

Chapter 5 summarizes and makes conclusions about the role of cooperatives in rural development, the role governments play in promoting of cooperatives and the role of cooperatives in food system development. Finally, the policy implications of this study are raised and some operational and organizational recommendations for the development of marketing cooperatives are suggested.
CHAPTER 2: CONCEPTUAL FRAMEWORK AND LITERATURE REVIEW

2.1. Two Concepts of Cooperation

Two essentially different concepts of cooperation have developed. The first describes cooperative development in 19th century Europe, and the second describes cooperative development in late 20th century developing countries. These concepts are discussed below.

A: The European Concept of Cooperatives

The narrow "pragmatic European view" perceives a cooperative as an entirely voluntary organization formed to obtain economic benefits for its members through a common enterprise based on mutual cooperation and self help (Munkner, 1976).

In Europe, agricultural cooperatives sprang from private initiative. They were founded by the members themselves or by local (church) leaders without any government support. The major incentive for collaboration by farmers in cooperatives was the weak position of the farmer in the market. By cooperating, the individual farmer could increase his bargaining power and realize the economies of size which the cooperative institution could reach through lower fixed and variable unit costs.

European cooperatives became specialized as a consequence of the fact that cooperation was not an aim in itself, but an economic instrument for shifting the balance of power in the market in favor of the members (Terlouw, 1979). Benefits arising from cooperative activities were then distributed to the
individual members in proportion of their contributions. This was done without any attempt to bring about equality in income distribution through the cooperative organization (Lele, 1980).

B: The Developmental Concept of Cooperatives

The broader "developmental concept" of cooperation acknowledges the interaction between economic and socio-political power and, therefore, recognizes the frequent need either for structural change or political mobilization, if cooperatives are to benefit the poor (Lele, 1980). According to Uma Lele, paternalism and external assistance in the form of leadership, management and financial assistance are often seen as an essential step for achieving voluntary and self-reliant cooperatives in the long run. Today, however, the creation of cooperatives in developing countries is far more difficult than in the western world a century ago. This is due to great differences between 19th Century Europe and 20th Century LDCs in terms of literacy levels, agricultural techniques, and income disparities between rich and poor. Also, as the world market penetrates further into the domestic economies of LDCs, their dependence on world markets grows, thus increasing uncertainties for national, rural and cooperative development in many LDCs.

Choice of Marketing Institution

The appeal of cooperatives has been the greatest in the
removal of perceived exploitation in the marketing of agricultural products. Small farmers are seen to be the greatest victims of market exploitation because of their small marketed surpluses and poor bargaining position. Introduction of marketing cooperatives is, therefore, considered an effective way of reducing marketing margins and improving the price received by farmers. An easily accessible cooperative marketing channel is also seen to be an effective incentive for farmers to increase production for the market.

However, agricultural markets frequently do not conform to this stereotypical view of the oligopolistic tendencies of rural markets (Lele, 1980). Most studies show that rural traders have low overhead cost, work on low margins and earn a modest and often risk-dependent income (Holtzman, 1982; Morris, 1986; Tschirley, 1988). Therefore, there is little justification for blaming small traders for spatial and seasonal price differences.

2.2. The Role of Cooperatives in Rural Development in Developing Countries.

Rural development is defined as "improving living standards of the masses of the low income population residing in rural areas and making the process of their development self-sustaining." (Lele, 1979). Cooperatives may have a positive contribution to make toward such development.

In a rural development strategy, cooperatives are an alternative, or a complementary approach, to other marketing
efforts to provide effective marketing, credit and extension services in the rural areas (personal note Mittendorf, 1981).

In many developing countries cooperatives can serve the credit, farm input and product marketing needs of the community. At the village and farm household level the need for credit, marketing and extension services often go hand in hand (personal note, C.Y. Lee, 1981).

Cooperatives can help farm families in farm planning, production programs, purchase of equipment and takeover some of processing and storage functions where there are significant economies of size. Cooperatives can also be developed in the rural areas as an alternative market outlet to force competition between traders and mitigate oligopolistic market conditions.

The Indonesian government explicitly mentioned in its Cooperative Law No. 12, 1967, that the role of cooperative is:

"1. to unite, mobilize, promote and develop the potential of the people's efforts to increase production and to create a just distribution of income and welfare.

2. to uplift the quality of life and intelligence of the people.

3. to foster the continuity and development of economic democracy" (DEPKOP, 1977).

In the Philippines, Presidential Decree 175, 1973, mentioned that the role of cooperatives in rural development is:

"to foster farmers' participation in the development process. For the many requirements in farming, a group action by farmers through cooperatives is a source of control over their own destiny." (BCOD, 1980).
Hence cooperatives can fill three voids:

1. An association of members can be the source of credit, supplies, equipment, marketing and management services.

2. An institution of the rural population can assist in encouraging local participation in small farmer development and raising rural incomes.

3. The cooperative can serve as a means of redistributing economic power to the poor.

Cooperative development in the rural areas can also assist the government by discouraging migration of the rural population to the cities. In other countries, economic development in the countryside with the help of cooperatives has been viewed as a method to reduce the possibility of an uprising in the rural areas, by encouraging farmers to participate in a government controlled farmers' organization.

Over the past 30 years, many western development specialists have felt that cooperatives were "good" for developing countries. This theme was conveyed in the papers contained in a volume edited by Anschel, Brannon and Smith (1969). It was widely thought that cooperatives could be established by building on traditional institutions or extended families and communal support systems. This view is not supported by the facts as reported by Lele (1975) and Eicher and Baker (1982). Nevertheless, several governments have enthusiastically launched
major campaigns to develop cooperatives as a cornerstone of the governmental rural development programs (Widstrand, 1970).

A simple transplant of modern marketing organizations into the traditional sector is unlikely to be viable. This problem exists not only because of the shortage of skills, financial capital, and infrastructure and communication facilities, but also because of the existence of interest groups that stand in the way of a viable market development in the subsistence sector. (Uma Lele, 1979). In fact, one of the most consistent criticisms of cooperatives has been that government initiated cooperatives tend to reinforce existing social structures or even to aggravate class division rather than act as a vehicle for equitable change (Eicher and Baker, 1982).

In order to make cooperative development successful, Uma Lele (1980) identifies two prerequisites that must be satisfied:

1. The constraints in the society that block the way towards improving the living standard must be identified.

2. A critical examination must determine whether cooperative institutions are necessarily the best suited for removing these constraints.

Especially in rural areas marketing cooperatives can assist as follows:

1. By countervailing oligopolistic market conditions, agricultural marketing cooperatives can help increase competition provided that the size of the market is large. Cooperatives are encouraged to operate simultaneously with private traders and to offer a service that is comparable
with that offered by traders.

2. By reducing excessive price differences among markets. These differences can be caused by poor dissemination of price information, inadequate and unreliable transport, poor handling, lack of use of standard weights, and lack of enforcement of an open bidding system.

3. By providing effective farm input services such as selling fertilizers, chemicals and seeds. Marketing cooperatives can help stop adulteration of inputs, as is commonly done by private traders, and can assure input supply in the more remote rural areas; by being a reliable supplier of inputs a cooperative can encourage input use and innovation in the agricultural sector.

4. By providing an alternative source of storage services seasonal price fluctuations may be reduced. This can improve the bargaining position of farmers. Occasionally credit can be provided to farmers based on their crop held in the cooperative storage facility.

5. By establishing a system of grades and standards and encouraging farmers to use standard weights, as well as promoting the use of suitable containers that provide adequate protection for their products and by guaranteeing high quality produce during transport.

6. By providing effective product marketing services for export crops as well as for food crops. A central marketing organization for export crops makes the procurement and
marketing of the raw materials an easier task. The perishability of food crops makes it much more difficult for a marketing cooperative to deal with these commodities and to assure its members that a market exists.

7. By providing adequate processing facilities for farm produce (rice threshers, dryers and mills; palm oil presses; ground-nut shellers; tobacco flue-curing, cocoa fumigation and rubber coagulation facilities). Processing provides an unique opportunity for cooperatives to capture economies of size and increase value added.

The cooperative form of business is no panacea, but it can help even the poorer farmers meet their production-related needs. According to McGrath (1969), cooperatives can (1) give the farmers some leverage in the market place; (2) keep the economic proceeds of a region invested locally; (3) provide experience in management and democratic decision making; and (4) supply incentives to the farmer to stay on his land instead of drifting into the ranks of the urban unemployed.

Perhaps the strongest reason for support of cooperatives in developing countries is that they encourage people to solve their own problems instead of looking to the government for solutions. However, when government provides most of the capital and loan funds, it feels the need to control the marketing and lending operations and sometimes even provide the manager to assure
collection of loans (Ward, 1969). Such control may substantial
limit the benefit of cooperatives.

The United States Agency for International Development, with
long time experience in cooperative development in developing
countries, reported the following major prerequisites for
successful start of cooperatives (USAID, 1961):

1. feasibility and adaptability of the proposed cooperative
   program,
2. sound cooperative legislation,
3. membership understanding of cooperatives and how they
   function,
4. trained management and personnel,
5. adequate supervision,
6. adequate financing,
7. trained and dedicated leadership

As a rule, cooperatives in countries with relatively low literacy
levels, need solid support for cooperative leadership, which
makes the establishing of cooperatives at the local level
difficult. Therefore, if cooperatives are to grow without an
extremely long development period, some form of government
assistance is necessary. Another factor favoring government
participation in the operations of cooperatives in developing
countries is the protection of the cooperative. The low literacy
rate in the rural areas and the limited in-depth leadership would
make them vulnerable to dishonest traders and other business
connections (Heckman, 1969).
2.3. The Role of Cooperatives in the Context of Food System Development

The underlying framework for food system approach was developed and elaborated by researchers at Michigan State University (Harrison et al., 1974; Shaffer, 1980; Riley and Weber, 1983).

A food system is a set of interrelated and interdependent vertical and horizontally coordinated economic activities. Horizontal coordination refers to harmonizing activities between firms within the same stage of production or distribution (such as between different wholesalers); and vertical coordination refers to harmonizing the various stages of production and distribution (such as between assembly traders, wholesalers and retailers).

The system approach is an orientation which emphasizes the systematic interdependence of related activities and is concerned with the coordination of economic activity within a system. Thus, due to their interdependence, the production and distribution of farm inputs, farm production, the distribution of food and the production and distribution of consumer goods are viewed as parts of a single system (Shaffer, 1972).

Increasing the productivity in one part of the system improves the potential for the whole system. Similarly, failure in any of the functions in the system may cause stagnation in the system. The fundamental concept of a food system provides the analytical framework for diagnosing problems and formulating
strategies for improving food system performance, taking into consideration the dynamic interactions that will occur in response to changes in policies, institutional arrangements and technology utilization (Riley, 1987).

In most developing countries, agricultural product marketing systems can be developed to play a dynamic role in accelerating economic development in the rural areas. Performance of food systems can be improved by improving coordination between production and consumption, stimulating greater productivity or progressiveness in the production-distribution system, improved quality of products and reduced costs to the total system for performing necessary functions (Shaffer, 1972).

Cooperatives can assist the coordination of the food system in two ways. First, cooperatives play a role as an institutional mechanism for market exchange and price formation in a competitive market. Secondly, cooperatives can coordinate markets through administrative linkages, especially by providing vertical connections between producers, wholesalers, retailers and the urban public market.

A number of areas where cooperatives can provide a special contribution in the vertical coordination of the food system were identified by Shaffer (1987).

1. Cooperatives can have formal contracts specifying future purchases from, or delivery to their members.
2. Cooperatives can influence production plans by providing information to members and contracting with members.

3. Cooperatives could improve coordination in thin markets by providing information about private treaty transactions to their members.

4. Cooperatives can provide information services where transparency is lacking. Bargaining cooperatives may be used to counteract the lack of open information on private treaties.

5. Cooperatives can help in communicating product characteristic information to its members.

6. Cooperatives can enter into contingency contracts, thereby reducing uncertainty for the members.

7. A cooperative can be a desirable alternative for farmers in a market with infrequent but repeated transactions.

8. Cooperatives have an unique potential to deal with problems of asset fixity and externality problems.

9. Cooperatives can reduce concentration in markets of a farm commodity subsector by entry. Even the threat of entry may change the behavior of firms in concentrated markets.

10. Cooperatives with close links to the supply side are better able to match supply and demand than other forms of coordination.

Shaffer and Staatz (1985) have identified at least four levels in the food system where cooperatives or firms need to coordinate effectively:
1. Coordination within firms (micro-micro coordination).
2. Coordination between firms (micro coordination).
3. Coordination of total supply with total demand for commodities for industries at each step in the production-distribution process (macro coordination).
4. Coordination of aggregate demand with aggregate supply for the economy as a whole (macro-macro coordination).

In this study we are mainly interested in coordination between the different levels in the cooperative production-distribution system, which means on level 2 and 3. Village cooperatives need to coordinate the supply from their members with the potential outlets organized by its apex organization.

Market development depends on the appropriate mix of market-price coordination and administrative coordination to achieve effective overall coordination and desired economic and social performance of the food system (Shaffer, 1972).

The potential for farmer cooperatives to improve the food system in developing countries exists at both the micro level (the coordination among members and their cooperative), and the macro level (the coordination of supply and demand for individual commodities).

At the micro level cooperatives can improve coordination through improved coordination of input supply, reduced uncertainty in demand, and by introducing "niche"-marketing.
At the macro level cooperatives should contribute improvements in at least four areas, by (Shaffer and Staatz, 1985):

1. Organizing cooperative farm credit services
2. Providing cooperative marketing, bargaining and planning services
3. Introducing "contract"-farming with members
4. Engaging in political action to reduce uncertainty from regulatory and monetary decisions.

Food system development requires a reasonable matching of supply and demand, given biological uncertainties and institutional complexities, through a reliable food supply. Furthermore, it requires a distribution system that reflects consumer preferences and an organizational arrangement that leads to increased resource productivity.

If the food system is well coordinated, prices will move up and down with production variation and other market forces. Moreover, price differences between locations should reflect the actual transfer cost and seasonal prices variation should be related to storage cost and for perishables to seasonal differences in cost of production (Riley, 1987).

2.4. The Industrial Organization Framework: Structure-Conduct-Performance

The industrial organization framework as developed by Bain (1959) Caves (1964) Sosnick (1964) and Scherer (1970), describes linkages between market structure, market conduct, and market performance of firms. Moreover, this theory recognizes that market structure and conduct are also influenced by various basic conditions of the economy.
The S-C-P paradigm indicates that the structure of an economic system (e.g., the types of marketing functions at each stage of the sub-sector, number of stages, number of parallel channels, structure of authority and control) strongly influences the conduct of system participants (e.g., types of coordination chosen, types of exchange utilized, collusive and other opportunistic practices, technological and institutional innovation). The conduct of firms has an important influence on system performance. Changes in performance may, in turn, change the basic conditions and the structure of the system, and these changes will work their way through, once again affecting performance.

In the NC 117 food marketing systems studies, basic conditions of the S-C-P paradigm are defined as production trends and geographical distribution; consumption characteristics including growth or decline trends, price, income and cross elasticities of demand; time characteristics of production and marketing cycles; type and degree of uncertainties of commodity price patterns; trade issues and world markets; and laws and government policies (NC 117, Monograph 6, 1978).

The basic conditions on the supply side include such things as the location and ownership of essential raw materials, the character of available technology, the degree of work force unionization, the durability of the product, the time pattern of production, and the value/weight characteristics of the product (Scherer, 1070, p.4)
Basic conditions on the demand side include the price elasticity of demand at various prices, the availability of substitute products, the rate of growth and variability of demand over time, and the methods employed by buyers in purchasing and marketing characteristics of product sold. Also important, are the laws and government policies within which industries operate and socio-economic values of the business community (Scherer, 1970, p. 5).

The S-C-P Paradigm consists of three components which are described below.

a. **Market Structure** consists of the relatively stable features of the market environment that influence the rivalry among buyers and sellers operating within it. The market structure has three key elements: sellers’ market concentration, product differentiation, and conditions of entry (Connor, et al., 1985).

b. **Market Conduct** consists of the policies that participants adopt toward the market with regard to price, the characteristics of their product, and other terms that influence market transactions. Key elements of market conduct are branding of products, advertising, product proliferation, commodity bundling and predatory conduct (ibid.).

c. **Market Performance** is the normative appraisal of the society in evaluating how firms’ behavior satisfy society’s demands. Key dimensions of market performance are profits, prices, and operational efficiency, all of which relates to the static
allocation efficiency of resources. Other elements are technical progressiveness and redistribution (equity) effects (ibid.).

According to Caves (1987, p.66) an economy would maximize the economic welfare of its citizens if it achieved four goals:

1. It should be **efficient**, employing its scarce resources of production so that they yield the highest possible real production.

2. It should be **progressive**, adding to the stock of factors of production, raising the quality and variety of the goods it makes available, and improving the techniques with which it organizes factors of production.

3. It should achieve **full employment**. Scarce factors of production, especially labor, are wasted more by leaving them idle than by using them inefficiently.

4. It should be **equitable**, distributing its real output among its members to provide for their essential needs and reasonable expectations as well as rewarding their productive efforts.

Given this list, market performance is defined in terms of how far an industry’s behavior falls short of achieving these goals.

Despite its usefulness as a basic analytical tool, the original S-C-P model is rather static, industry-oriented model of approaching behavior and performance of firms. The paradigm
was not designed to explicitly consider the fundamental research issue within the sub-sectors, that of vertical coordination. Therefore, if the paradigm is to be used for analysing such issues, it must be modified.

2.5. The Sub-Sector Approach: A modified S-C-P Model

The S-C-P Model is used in a dynamic setting by applying it to the analysis of the subsector. A subsector is the vertical set of activities in the production and distribution of a closely related set of commodities (Shaffer 1968).

Sub-sector studies, cut down through different levels of the food system and analyze the vertical coordination mechanisms between the levels (Shaffer, 1968; Boomgaard et al., 1985; Tschirley, 1988).

Sub-sector studies are diagnostic and prescriptive in nature and emphasize on barriers to improved performance and their removal through reform and education (Shaffer, 1968). The subsector approach shifts the emphasis of the analysis from the concept of static allocative efficiency to the concepts of dynamic systems and performance (Shaffer, 1973). This approach also focuses on the coordination process among various stages in commodity systems. Attention is given to the institutional arrangements that facilitate physical transformations and exchange functions.

The descriptive-diagnostic investigation incorporated in the subsector approach attempts to identify problems in existing
coordination arrangements. It then attempts to improve system performance by aligning the production-distribution processes with new product markets and by increasing efficiency (Riley, 1987).

**Vertical Coordination of Commodity Sub-Sectors**

Vertical coordination is the system of linkages between different levels of the food system. Vertical coordination in a subsector is critical because firms have more than horizontal linkages. Coordination takes place through administrative and exchange processes. Administrative coordination takes place within the firm or by government authority, while exchange coordination involves markets.

Comprehensive information on a subsector which identifies trends, forces of change, unexploited opportunities, anticipated problems and performance evaluation, is of major value to all participants in the sub-sector (Shaffer, 1973). Moreover, improved information will foster further cooperation in the commodity sub-sector.

Mechanisms for vertical coordination are open markets, regulated markets and various forms of contract production. All such forms of coordination between the different levels in the sub-sector are designed to reduce the risks and lower transactions costs (Minot, 1986). For example, contract farming is one of the intermediates between spot market and vertical integration (Minot, 1986).
Cooperatives are an institutional mechanism with excellent capabilities for bringing about vertical coordination in the food system. They connect producers directly with assembly-wholesalers and sometimes with retail markets and consumers, and are often specialized in one commodity sub-sector, for example vegetables, rice, beef, fish and marine products.

Effective (vertical) coordination in the food system will create the conditions where traders give production incentives to the farmers, while food costs remain at a relatively low level due to competition from other sources of supply.

2.6. The Environment-Behavior-Performance Model

The E-B-P model is a modified S-C-P paradigm that emphasizes sequential, behavioral patterns as the environment changes and is changed by the E-B-P process. The E-B-P approach has been developed by Shaffer as a conceptual framework for the analysis of food system organization and performance. (Shaffer, 1980).

The goal of this framework was originally to organize the knowledge about the relationships between the political-economic organization and the performance of the U.S. food system. The approach classifies strategic characteristics of the environment, classifies participants and their behavioral modes, and classifies outcomes. Hypotheses about their relationships between these characteristics are then developed. As Shaffer notes, the E-B-P approach is a 'generic model' and can be applied in the context of developing countries (personal note: AEC 809).
What is the E-B-P Approach?

At any point in time, participants in a political economy exist in an *Environment* consisting of *overlapping opportunity sets*. The environment of organizations include: (a) factor and product markets, (b) the system of rights and regulations, (c) the perceived social and political pressures and expected market organizations respond to perceptions of the future— the influence of ideology (acceptable influence), and (d) the limitations of technical transformation functions.

*Performance* is measured as the sum of the outcome of behavior of the participants acting within the constraints of their perceived individual opportunity sets. The aggregate consequences of performance are the changes in the environment. Performance outcomes contain the distribution of costs and benefits to participants. The expected distribution of benefits and costs along with the combination of market and regulatory structure are taken into account by market participants and provide incentives for certain types of behavior.

*Behavior* is the link between political-economic organization and *performance*. It is assumed that individuals search narrow portions of the environment and identify patterns of behavior consistent with the perceptions of their opportunity set that will satisfy them.
With regard to institutions, the E-B-P conceptual framework identifies four classes of variables that influence the behavior of firms/organizations: (1) the external environment, which represents the opportunity set for the organization; (2) the organizational structure, which defines the roles of participants and resources available to carry out tasks identified with the roles; (3) individual perceptions and preferences use of standard operating procedures in order to reduce transaction costs in decision making adopted and (4) the control system, which consists of the rewards and punishments associated with decisions and efforts.

2.7. Actors in the Cooperative System

Shaffer's E-B-P paradigm is used to identify a cooperative organization's opportunity set, which influences the behavior of the board of directors, hired managers and employees, supervisory committee members, and cooperative members. These key actors determine the performance of the cooperative. Uncertainty from the environment enters the E-B-P paradigm as it affects the behavior and performance of the main actors.

The cooperative members look for the best service they can receive from the cooperative. In some cases, poor past performance of the cooperative has caused members to shy away from the cooperative's meetings or activities and not voice their dissatisfaction with the current level of cooperative organization and services (Hirschman, 1978).
The elected board of directors often lack sufficient education to do their job well. They are faced with uncertainty about how to satisfy their members' preferences. In their efforts to strengthen the cooperative, they are often faced with bureaucratic behavior of government officials.

The manager and employees of the cooperative take care of the daily operation of the cooperative. They are supposed to follow recommendations from the board of directors, but often their self interest and bounded rationality create conflicts between the manager's implementation strategies and the directors' policy guidelines (Williamson, 1975; Shaffer, 1980).

The government, in its efforts to promote rural development through a cooperative development program, has adopted a large number of standard operating procedures to guarantee control over and a regular flow of information from cooperatives to the authorities. Government rules and regulations more often restrict rather than promote cooperative enterprises. The cooperative extension and audit service of the government is another way of keeping track of what happens within the cooperative organization.

The action of the government influence the distribution of wealth and income, and the distribution of wealth and income influences the actions of the government. Most government action tends to protect the status quo in terms of distribution of wealth and property in a society.
2.8. Performance Criteria for Cooperatives in LDCs

One of the main objectives of this study on cooperatives is to develop criteria for evaluating the performance of agricultural marketing cooperatives in LDCs. Market performance of firms has been studied in the field of industrial organization (Caves 1964, Sosnick 1964, Scherer, 1970) and this methodology has been applied to the organization of food systems by Brandow, (1977), and Marion (1976, 1986).

Jesse and Shaffer (1978) investigated measurements of market performance. They propose to think in terms of a semantic differential and classify performance between relatively good and relatively bad in each of the performance criteria groups. However, many performance criteria cannot be quantified as desired.

Ultimately, we are looking for a member-oriented marketing performance measure for agricultural marketing cooperatives. The following performance criteria are relevant to the study of cooperative organizations in LDCs within the framework of food system development as well as within the objectives of rural development. They provide the basis for analysis conducted in the later chapters.

**Efficiency** measures the ability to carry out the physical transformation, handling and delivery of commodities as well as in arranging and carrying out transactions. Efficiency consists of two dimensions. Technical efficiency relates to physical
input/output relationships, such as optimal fuel use of vehicles, minimal loss from rice thresher, and optimal recovery rate from rice mills. Economic efficiency, on the other hand, looks for the optimal size of operations (where marginal factor cost equals marginal revenue), the location of cooperative fertilizer warehouses and rice mills which minimizes transport cost, and the best technology for a certain scale of production.

**Equity** is the return subsector participants receive, in relation to the value added to the final product, and the costs and risks the participants incur. Within a cooperative framework equity relates to the fair treatment of the cooperative members and how the benefits of the agricultural marketing cooperative are shared by its participants (members, board of directors, manager and employees). Furthermore, equity implies the fair treatment of members in the distribution of cooperative patronage refunds. It should be noted that, fair treatment of members often implies unfair treatment of non-members, who are assessed a surcharge for their fertilizer and other cooperative services. Moreover, priority for use of a cooperative owned rice thresher or rice mill may discriminate against non-members.

**Progressiveness** is the ability of a system to develop and adopt more productive technologies, management methods and institutional arrangements. This aspect relates to investment in research and development to promote widespread adoption of
technical innovations, such as improved rice milling and marketing, advanced forms of accounting, new methods of reducing postharvest losses of commodities, improved means of storing of fertilizers and pesticides, and the introduction of market intelligence. Progressiveness also involves improving support services, such as packaging, provision of credit, data collection and dissemination, and introduction of grades and standards. It includes the conduct of feasibility studies aimed at improving production technology, management methods and institutional arrangements.

Even with these criteria, it will remain difficult to evaluate cooperatives' performance in a dynamic context. Many criteria are impossible to measure empirically and are difficult to combine into a single overall index of performance. Moreover, these criteria concentrate only on limited dimensions of performance, they are historical in nature and not particularly useful for prediction, and they can be misleading with respect to causal relationships. (Marion and Handy, 1973)

At the end of chapter 3 and 4 we return to the evaluation of the agricultural marketing cooperatives in each of the research areas in the two countries according to the above performance criteria. Other criteria can also be used. I refer to the debate in the cooperative theory literature about what cooperatives should or do seek to maximize (Cooperative Theory, USDA/ACS No.18, 1987).
CHAPTER 3: THE PHILIPPINE CASE

3.1 Rural Development Policies and Programs in the Philippines

3.1.1 Introduction

Under the administration of President Marcos (1966-1985), a policy was started to activate the rural sector.

The first five-year development plan (1973-1977) focused on expanding agricultural production and increasing the number of nonfarm jobs. In the second five-year development plan (1978-1982) the stated objectives emphasized expansion of employment, economic growth, equitable income distribution and development of social services. The third five-year development plan (1983-1987) identified as its major thrust sustainable economic growth, equitable income distribution and the development of human resources. It was disrupted by the transfer of power from the Marcos Administration (1966-1985) to the Aquino Government.

Many authors have disputed that the real aim under the Marcos administration was to achieve a more equitable income distribution.

Rural development has focused on creating opportunities for productive employment in the countryside as an effort to try to reduce the rapidly increasing rural urban migration and to counter a growing imbalance in income distribution.

A major impact on Philippine rural development has been the successes of the Green Revolution, especially the development and widespread application of high-yielding rice varieties from the International Rice Research Institute (IRRI).
A land reform program to support the creation of rural employment opportunities began to take off in the early 1970s: first for the food crop sector (rice and corn), later for the production of export commodities (coconut and sugar). Landowners have been compensated by the government-owned Land Bank which paid previous landowners and provided 5 years' credit to new landholders. Presidential Decree 23 states that all rice areas above 7 hectares shall be "reformed" and given in small units to individual landowners, who were to be the former sharecroppers, provided that they were organized into village cooperatives (Samahang Nayon).

Investment in irrigation and rice technology have been applied to raise food production. The Philippines has turned from a rice-importing country in the 1960s to a level of rice self-sufficiency in 1977 and reached a commercial rice export status in the early 1980s through the nationwide rice intensification programme (Masagana 99). Large tracks of new lands were developed in Mindanao and in North East Luzon (Cagayan Valley).

3.1.2. Goals and Objectives of Rural Development

The Philippine Government has adopted the Integrated Area Development (IAD) approach as a major strategy for rural development in the poorest regions in the country. The major objectives of the IAD program are as follows:

1. Increase agricultural productivity to promote national self-sufficiency in food.
2. Generate more employment opportunities through the development of non-farm activities, including the establishment of rural industries.

3. Provide effective delivery systems for social services such as education, health and social infrastructure facilities.

4. Promote greater local participation in planning and implementing IAD programs.

3.1.3. Functional Programs

The following programs are emphasized under the integrated rural development program in the Philippines:

1. Active Participation of Rural Population

   The central idea is to increase participation of rural people in the decision making and implementation of developments in their community. Since 1978, local government has become more participatory through the creation of the provincial development assistance program on the village, municipal and provincial levels. At the village level, a "pre-cooperative" organization (Samahang Nayon) was established to help implement the land reform, marketing and input supply programs.

2. Agricultural Production Intensification

   Here the major attention is given to irrigation, biological research and diffusion, use of modern inputs, and land settlement.

3. Expansion of Productive Non-Agricultural Activities

   This component stresses establishment of small rural
industries that are complementary to urban industries. Institutional support for development of cottage industries comes from the government and a number of government-supported rural banks.

4. Agrarian Reform

Here the key features is the national expectation for redistributive justice through redistribution of large landholdings under food crops among former tenants. However some caution is needed in terms of reasonableness of expectations as there is a relatively poor historical record of Philippine land reforms. The agrarian reform program also endorses the development of village associations to strengthen communal decision making at the municipal and village levels. These pre-cooperatives have the task to assist in amortization of land reform payments of the farmer-members.

5. Prices and Marketing

Price formation and marketing decisions are basically set by private traders in a relatively competitive open market. Farm input manufacturing is organized through a number of private fertilizer factories, and most of the pesticides are imported. Distribution of fertilizers and pesticides is organized through a network of private and cooperative wholesalers and retailers licensed by the Fertilizer and Pesticide Authority (FPA). The National Food Authority (NFA) purchases surpluses of rice and corn in the country at a guaranteed support price, often 15-25% above the market price, but only at government buying stations.
It releases these stocks in pre-harvest periods of relative scarcity when market prices tend to be higher.

3.2 Cooperative Development in the Philippines

3.2.1 Short History, Goals, Program and Structure

The present cooperative development program dates back to 1973, when President Marcos signed the Presidential Decree No. 175 entitled "Strengthening the Cooperative Movement".

This decree was an initial effort to consolidate the different cooperative laws into one. The new cooperative law sets the tone of cooperative development by declaring it a "policy of the state to foster the creation and growth of cooperatives as a means of increasing the income and purchasing power of the low income sector of the population in order to attain a more equitable distribution of income and wealth" (BCOD, 1979, p.2).

The goals of cooperative development were to:

1. increase income and purchasing power of the members through efficient and effective marketing of produce and the supply of production inputs,
2. stimulate capital formation for development activities, and
3. institutionalize cooperation as a technique for improving the social and economic status of the members (BCOD, 1979, p.2).
The Philippine cooperative development program stands on three premises:
A: Cooperatives are a means of effecting income redistribution.  
B: Cooperatives should be built from the bottom.  
C: Cooperatives shall be developed into an integrated system.

The program has been pursued in four stages:  
Stage I - Organization and development of the pre-cooperative (Samahang Nayon), a village organization with 25-200 farmers.  
Stage II - Organization and development of full-fledged cooperatives, such Area Marketing Cooperatives (AMC) and Cooperative Rural Banks (CRB).  
Stage III - Organization of public retail markets in key urban centers of the country as outlets for agricultural produce.  
Stage IV - Integration of the cooperatives into a whole system.  
This consists of establishing the horizontal contacts and vertical coordination between the different types of cooperatives.  
The eventual result was to organize the Cooperative Union of the Philippines (CUP), which was envisaged to take over several of the current functions and activities of the government (BCOD, 1979).

A special relationship exists between the Cooperative Department and the land reform program, as Presidential Decree No. 27 requires that farmers in the "Operation Land Transfer" pay for their newly acquired land in 15 years installments; that they
are members of cooperatives; and that their cooperative should
guarantee their land payment amortization.

The major types of cooperatives to be developed in the
Philippines were as follow:
1. The village level pre-cooperative (Samahang Nayon)

The Samahang Nayons are the foundation of a cooperative
network. At the start, SNs were not planned to engage in any
business activities, but were planned as farmers associations to
solve social and economic problems collectively in the village.
2. The full fledged cooperatives (Kilusang Bayan)

Each Area Marketing Cooperative (AMC) is a multi-product
cooperative that serves for at least 10 Samahang Nayon, handling
their procurement and marketing needs. The AMCs tend to the
acquisition of production equipment, supplies and inputs needed
by the SNs. They take charge of processing, transportation and
selling of farm produce. They are supposed to maintain audit and
extension services to the SNs. AMCs are organized on the
provincial level.

The Cooperative Rural Banks (CRB) are organized by a group
of Samahang Nayon and other viable cooperatives. They are a rural
bank primarily owned by common farmers through their Samahang
Nayon. Their main function is to administer to the financial
needs of the members. CRBs may operate on a municipal or
provincial level. AMCs and CRBs can be considered the marketing
and financing arms of the Samahang Nayon.
Figure 3: Philippine Cooperative Structure

National Cooperative Union of the Philippines

Cooperative Marketing System of the Philippines

Cooperative Rural Bank Assoc. of the Phil.

Area Marketing Cooperative

Cooperative Rural Bank

Marketing Coop Collection Point

Village Associations

National Level

Provincial Level

Municipal Level

Village Level
3. The national cooperatives

The Cooperative Marketing System of the Philippines (CMSP). The CMSP main purpose has been to market products produced by its members as well as tend to their input needs. It acquires equipment, machinery and supplies for its members. The CMSP is the national marketing arm of the AMCs and assists in the management of AMCs, and completely takes over in case of distress.

4. The regional cooperatives:

The Metro Manila Consumer Cooperative (MMCC) operates five supermarkets for AMC produce in Manila in the Cagayan Valley. The MMCC has been the major retail outlet for SN-AMC-CMSP marketing operations.

The National Market Vendors Service Cooperative (NAMVESCO) had as its main objective to establish market vendors' cooperatives throughout the country. It aims at procurement of merchandise in order to stabilize prices of market commodities. The NAMVESCO is the major potential retail outlet for SN-AMC-CMSP.

3.2.2. Objectives of the Cooperative Department

The primary goal of the Philippine Bureau of Cooperative Development has been to develop the capabilities of cooperatives for capital formation, credit utilization, production and marketing through technology transfer, human resource development and institution building.
The main functions of the Government's Cooperative Development Program are:

1. Establishment of an integrated system for the promotion and organization of cooperatives in the country.
2. Registration, monitoring, and evaluation of cooperatives.
3. Education and training of cooperative leaders and members.
4. Development of local and foreign-assisted programs and special projects that would benefit cooperatives.
5. Support of cooperatives federations and unions such as the Cooperative Union of the Philippines to upgrade their management and organizational skills.

During the first years of the program (1973-1976), all attention was centered on the development of local Samahang Nayons. From 1976-1983, SN-based Area Marketing Cooperatives and Cooperative Rural Banks became established, to provide farmers with credit and marketing facilities.

In the next paragraphs we shift from description of national cooperative policies to the cooperative development experience in one Province - Benguet.
Figure 4

MAP OF BENGUET PROVINCE
ADMINISTRATIVE AREAS

ILOCOS SUR PROVINCE

LA UNION PROVINCE

PANGASINAN PROVINCE

1: 500,000
0 5 10 15 20 25 KM
3.3. The Environment for the Development of Cooperatives

3.3.1. Characteristics of Benguet Province

Benguet is located in the northern highlands of Luzon Island in the Philippines, with a land area of 2.556 km². The province counted a 1980 population of 116,623, which results in a population density of 45.6 persons per km². (1980 census).

Benguet lies southernmost in the region of the mountain provinces and is relatively isolated, having only one major highway and some secondary provincial roads (see figure 4). Benguet is connected with Manila over a 240 km all-weather road, however heavy trucks have to take a longer route due to steep and sharp curves in the mountains south of Baguio City.

3.3.2. Demographic Situation

The native inhabitants of Benguet are of two ethnic groups, the Ibaloy and the Kankanaeys. The existence of these different ethnic groups, spread out over several mountain ranges, explain some of the difficulties of building up a common farmers' organization. This is more of a problem for the provincial AMC than for SN, which is organized on a village level.

The total Benguet population increased 2.2 percent per annum from 1960 to 1980. The average age of most members of SN and AMC boards of directors reflects the older farming population in the rural areas.

In 1975, by employment category, 61% of Benguet's labor force was employed in agriculture, 23% are in trade and industry,
4% in transport and communication and 11% in services. (Provincial Development Plan, 1980).

The seasonal labor shortage in farming and the attraction of employment in the mines sometimes pull away capable community leaders from the cooperative.

3.3.3. Socio Economic Conditions

Sixty percent of Benguet household income is derived from farming, while twenty percent comes from mining and another twenty percent from transportation, communication and services. Agriculture in Benguet in the mountains is concentrated in vegetable production, while in the valleys rice production is dominant.

In Benguet, where land is inherited or acquired from the forefathers, most farmers consider themselves owner cultivators. Commercial land transactions are still rare except in Baguio City and in the densely populated Trinidad and Loo valleys. However, few farmers possess official land titles.

In 1980, a survey among 557 vegetable farmers in Benguet was held by the Marketing Assistance Center of the Bureau of Agricultural Economics. Analysis made on the basis of this survey shows that the average Benguet farms range from 0.5 to 1.5 hectare for irrigated vegetable or rice lands and 1-5 hectare for uplands. One-third of the farms are below 0.5 hectare, while only twelve percent of the farms above 2.0 hectare (Vergroesen, 1980d, Production Planning and Farm Economic Analysis in Atok, Benguet).
Table 1: Distribution of Farms According to Farm Size Classification in Atok, Benguet, 1980

<table>
<thead>
<tr>
<th>Farm Size (hectares)</th>
<th>Farm Size Class</th>
<th>Distribution of Farms (percentage of holdings)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.1-0.5</td>
<td>I</td>
<td>34.1</td>
</tr>
<tr>
<td>0.6-1.0</td>
<td>II</td>
<td>30.5</td>
</tr>
<tr>
<td>1.1-2.0</td>
<td>III</td>
<td>23.0</td>
</tr>
<tr>
<td>2.1-5.0</td>
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<td>12.4</td>
</tr>
<tr>
<td>Total</td>
<td>I-IV</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Vergroesen: Production Planning and Farm Economic Analysis in Atok, Benguet, 1980d. (based on BAECON/MAC Survey 1980)

There is evidence that members and leaders of SN and AMC are often local leaders with above-average farm sizes. It is also noticed that AMC and SN services more often reach the more accessible medium size and larger farmers in the area.

Most Benguet farmers get their cash income from highland vegetable production and use their rice fields to produce for home consumption. The average household income in Benguet amounted to P 4,755 in 1975. The average household spent 70 percent of their total expenditures on food, beverage and tobacco. (Provincial Development Plan, 1980)

The high degree of literacy (79%) in Benguet is a favorable factor for cooperative development. No problems were encountered in making minutes of meetings or resolutions on the SN and AMC level. The high standard of education is the reason why several farmer leaders are familiar with the concept of cooperatives.
Figure 5

MAP OF BENGuet PROVINCE

HOMOGENEOUS AGRICULTURAL ZONES

[Map showing various regions and cities including Mountain Trail, East and West Benguet, Baguio City, etc.]

1:500,000

0 5 10 15 20 25 KM
3.3.4 Agricultural Structure

A wide range of crops are cultivated in Benguet. Four homogeneous agricultural zones are identified according to crops, altitude and accessibility (see figure 5):

1. Mountain Trail area is oriented towards the production of cash crops such as potatoes, cabbage, chinese cabbage and carrots.
2. Western Benguet is oriented to subsistence production of rice and root crops, with some vegetables in addition.
3. Eastern Benguet is also oriented towards the subsistence production of rice and vegetables.
4. The la Trinidad valley and surrounding areas are oriented towards the commercial production of vegetables and flowers.

The Area Marketing Cooperative is most active in the Mountain Trail area, where the largest amount of marketable farm surplus is concentrated. Samahang Nayons are organized throughout the province but are most active in the Mountain Trail area of Benguet.

Food Crop Production

There was a decline in food crop production in terms of area planted and volume produced from 1970 to 1980, mainly due to lack of an organized marketing system, lack of marketing facilities such as trading posts, increased competition from the lowlands and lack of farm-to-market roads in Benguet.

Rice and corn have always played a minor role in the agricultural economy of the province, although rice is the major
staple food which can be produced more cost effectively in the lowlands. The area planted to rice and corn has declined, although significant yield improvements have increased the production.

The major problems in the production of food crops are the lack of improved varieties suitable for higher elevations and the lack of sufficient irrigation systems.

**Plantation Crops**

Only the production of coffee can be considered a plantation crop, although most farmers grow it as a smallholder crop. Coffee production increased from 467 ha in 1970 to 560 ha in 1980 (Provincial Development Plan, 1980). The major problem is the susceptibility of tree crops to frost and typhoons; therefore medium elevations are more suitable.

**Livestock and Poultry**

The total livestock population, excluding chicken and poultry, for Benguet in 1970 was estimated at 85,063. A decline of stock took place between 1970 and 1975, but since 1976 there has been an increase to 74,272 animals in 1980 (Provincial Development Plan, 1980). The livestock consists mainly of water buffalo, cattle, goats, hogs, sheep and some horses. Chicken numbers are on the increase as they can be easily managed by smallholders and do not require large investment.

Major problems in the animal husbandry sector are the
prevalence of animal pests and diseases, the inadequacy of superior quality of stock and poor herd management. A traditional marketing system characterized by the lack of organized livestock supply and marketing channels resulting in high cost of animal feeds and a high level of spoilage and damage that hinder further expansion of this sector.

Most agricultural problems reported by cooperative members and leaders are related to marketing, financing and transportation of farm inputs and farm produce. Crop production and livestock raising problems are often of secondary order; however, lack of irrigation water is for many farmers a real problem (Vergroesen, 1980a, An Evaluation of 20 Samahang Nayons in Benguet, Appendix A, No.14).

3.3.5. Marketing (Input Supply; Product Marketing) and Credit

Most produce is transported to the roadside by laborers using bamboo back carriers. Unloading, selection and repacking take place along the road. Produce is often packed in big containers, resulting in rough handling and crushing of the crop on the trucks.

Along Mountain Trail there are no collection centers bordering the national highway. Selection and classification of the produce by the farmer depend on the request of the trader. Provisional collection centers are established along the main road in Kapangan. Many localities lack regular transportation, causing irregular collection of agricultural produce that results
in decay of produce and loss of farm income.

Marketing Channels

Two types of marketing channels operate simultaneously:

1. Produce is delivered to traders. Often times the agents who supply the farmer with needed farm inputs on credit, collect the farmers' produce and pay cash after deducting the advance payments made or pays upon return from the market where he sold the produce.

2. Produce is marketed by the farmers, who hire trucks from Baguio and ship their produce to the wholesale market in Baguio. Produce is also bagged in marked containers and delivered by public bus to an agent in the wholesale market. This is a common practice for small quantities of produce.

Shortage of transportation and high cost of fuel and renting or operating trucks due to poor road conditions is a major problem in the marketing of agricultural produce. This problem is aggravated during the rainy season.

Along Mountain Trail, farmers are not only better supplied with farm inputs, but also have better access to market outlets than farmers in the west and east of Benguet.

In this central area many farmers are tied to supplier agents who provide them with inputs on credit and cash to hire laborers, so they are bound to contract deliveries. The agent visits the farm and collects "his" produce. No quantitative data
is available on the percentage of farmers tied to middlemen.

Since 1977 the Benguet Area Marketing Cooperative has been active in making fertilizer and pesticides available at wholesale prices to members of Samahang Nayons through its main office in La Trinidad and since 1980 through trading posts along Mountain Trail besides to Samahang Nayons who could pay cash on delivery.

Recently some local communities have set up their own farm supply shops in a kind a quasi-cooperative way.

Price and market information is mainly provided by traders. Since 1979 the Marketing Assistance Center of the Bureau of Agricultural Economics in cooperation with Benguet AMC has started with posting vegetable wholesale and retail prices of Baguio and Manila in field locations in Benguet.

Credit

Four sources of credit available to farmers can be distinguished: traders, banks, credit unions and fellow farmers.

1. Credit from traders is the most common form of financing commercial agricultural production in Benguet. In spite of the low prices paid to the farmers by these agents, farmers still like to be financed by these traders because they offer loans without many requirements (collateral) and without delays.

2. Banks such as DBP, PNB and rural banks can extend large amounts (up to ₱ 20,000; US$ 1428) of credit, but this is limited to titled landholders or reputable businessmen. Many
small farmers find it difficult to get loans from institutional lenders. Many bank loans are short term loans, which do not really fit the credit needs for agricultural production or investment.

3. Credit Unions are established in only 2 municipalities, with the help of church organizations. The maximum amount the farmer can borrow is P 5,000 (usually two or three times his deposit). The usual granting period is one week and interest charged is 12% per annum. This is sufficient to cover the cost of borrowing money (8%) and administrative cost (4%). However the 12 percent interest may not be sufficient to cover losses of unpaid loans in these credit unions.

4. The last type of credit is the credit arrangement made with fellow farmers in the same community. No details are known on interest rates and terms of these loans which are mainly used for consumption purposes such as family occasions.

Most traders rely on wholesalers' credit, while most producers rely on traders' credit. Only a few receive loans from rural banks or local credit unions. The difficulty of getting access to institutional credit and the small volume of credit available from other sources compared to the high investment needs in intensive vegetable production (up to P 10,000 per ha) lead to the conclusion that there is a need for improving access and expanding rural financing in Benguet.

The most remarkable observation is that the provincial government is not allowed to modify the national cooperative policies. The objective of the provincial cooperative development has been to organize and develop Samahang Nayons (SN) in every village. A second objective is the organization of Samahang Nayons into an Area Marketing Cooperative (AMC) for the purpose of providing farmers with production inputs and supplies and assisting them in the marketing of their products.

As of May, 1976, there were 83 registered Samahang Nayons (village level pre-co-operatives) with a total membership of 3,832 in the province of Benguet. In the period 1976-1981 the number of Samahang Nayons was targeted to increase to 120.

One Area Marketing Cooperative, the Benguet AMC, was organized on November 1975 and became operational in May 1976 with a membership of 41 Samahang Nayons and a total farmer membership of 2,141 farmers. For the period 1976 to 1981, the expected number of SNs that would become members of the Benguet AMC was expected to increase to 67. (BCOD, A Feasibility Study for Benguet Area Marketing Cooperative, 1976).

3.4.1. Training and Education Efforts

Benguet received assistance from two kinds of national support institutions: The Cooperative Education and Training Fund (CETF) and the Management Training and Assistance Program (MTAP).
In Benguet, the government focused its training schools on SN farmers, AMC technical and management staff and on future cooperative managers. Training activities were held at SN and AMC level. The response of the participants was, in general, positive. There appears to exist a keen interest on the part of the farmer and local field extension worker about the techniques of cooperative agricultural marketing. Special on-the-job training programs were carried out for a group of young professionals, to become understudy managers of AMCs. Printed leaflets, audio-visual filmstrips and a training manual were prepared for the cooperative management on the cooperative marketing of the different farm commodities.

3.4.2. Marketing Support Services

Cooperative Marketing System of the Philippines (CMSP).

The CMSP was organized in 1975 to conduct studies and prepare plans of operations for the marketing of all products and the supply of all inputs by the Area Marketing Cooperatives. It would also establish a unified managerial and financial control system.

The CMSP had only limited capability to deal with all the AMC farm produce and/or input requirements for the following reasons:

1. Limited fruit and vegetable marketing infrastructure.

2. Limited marketing services. The only service provided by
CMSP to the AMC was the use of transport and the FAO installed radio transmitters/market info and order system.

3. Limited market outlets. The only existing marketing outlet provided by the CMSP for the Benguet AMC was the MMCC Supermarket in Metro Manila, with an average weekly delivery of 1,500 kg of vegetables, while the AMC could easily send 5,000 kg per day, if procurement funds were sufficient.

Market Information

The Bureau of Agricultural Economics (BAECON) of the Ministry of Agriculture made daily surveys of fruit and vegetable prices in major wholesale and retail markets at the national level. The dissemination and use of the collected price information was limited to a few marketing institutions dealing in agricultural commodities. The objective of BAECON in collecting the price information was mainly for price analysis on agricultural commodities and not so much for public information.

Marketing Assistance Center

In 1977, the Bureau of Agricultural Economics (BAECON) started a special inter-agency marketing project. The strategy of the Marketing Assistance Center project was to establish pilot marketing projects with the objective of integrating production and marketing between small farmers and traders in the major production areas. The first pilot project started in 1978 in
Benguet Province.

The Benguet Area Marketing Cooperative is among the group of active participants under the MAC Inter Agency Action Committee, which is composed of government agencies, finance institutions, traders organizations and farmer organizations. Under this program, the accredited farmers received production planning and extension services from the Ministry of Agriculture, agricultural loans from local banking institutions, while marketing facilities were to be offered by registered traders, the Benguet Area Marketing Cooperative, and other registered market outlets.

Foreign Technical Assistance

Practical assistance in cooperative management and cooperative marketing was provided by the FAO Fruit and Vegetable Marketing Project team (1976-1981). In Benguet, the major focus was on improving the marketing linkages between SN-AMC-CMSP-MMCC and other outlets. An improved vertical coordination though improved communication and marketing contracts would assure SN farmers and the Benguet AMC a market for their produce.

Training held at each of the levels in the marketing chain created an awareness of the interdependencies (vertical coordination) within the cooperative marketing system and the need to maintain quality standards. Trial shipments were carried out under the name of Samahang Nayon Sales Center, a division of CMSP, later under the direct responsibility of the reorganized CMSP. (FAO Final Report by Franchetti and Ooyen, 1980, Appendix
Production planning surveys were conducted among members of the Samahang Nayon and an updated marketing plan for Benguet Area Marketing Cooperative was prepared for the period 1981-1986. (Vergroesen, 1980d, Production Planning and Farm Economic Analysis in Benguet Province, Appendix A, No.20 and Vergroesen, 1980e, A Marketing Plan for Benguet Area Marketing Cooperative, Appendix A, No 21).

Expansion of the cooperative marketing system for fruits and vegetables with closer ties to private marketing channels was proposed by the FAO team for the period 1981-1985.

3.4.4. Financial Support Services

Cooperative Development Loan Fund

The CDLF was created by Presidential Decree 175, in 1973, with the purpose of providing and guaranteeing loans to cooperatives, and of providing a source of advances to cooperatives to purchase equity in rural banks or to establish a Cooperative Rural Bank.

In 1977, Benguet AMC received its first CDLF loan, totaling P 200,000 (US$ 28,571), on the basis of a project feasibility study conducted by the Bureau of Cooperative Development (BCOD). At that time the Benguet AMC had accumulated a membership capital of P 100,000. As the AMC incurred a deficit of P 57,000 and had accounts receivable of around P 150,000, a complete management reorganization was demanded by the BCOD before a second CDLF loan
of P 300,000 could be released in 1979 to recover from the incurred losses.

As of April 1981, the Benguet AMC had borrowed P 500,000 from the CDLF. This was 40% of its total liabilities. The Benguet AMC made a net loss of P 80,000 in the first four months of 1981, mainly due to excessive expenditures by the manager and high overhead costs. The volume of trade (cost of goods sold) was also relatively low with only P 50,000 per month (see balance sheet and profit and loss statement of Benguet AMC in Appendix C).

The Benguet AMC did not qualify for funds from the USAID supported Cooperative Marketing Project, as the past performance had shown that fruit and vegetables are perishable commodities that are difficult to market, with high marketing risks involved.

Cooperative Rural Bank

Plans for a CRB were first announced in the general assembly meeting of the SN members of the Benguet AMC in May/June 1980. However, with the AMC paid-up capital of only P 100,000, the AMC would have barely enough capital to conduct marketing business and could not meet the minimum requirement of P 300,000 (later to be raised to P 500,000) for a Cooperative Rural Bank.
3.5. The Outcomes: Growth and Development of Agricultural Marketing Cooperatives in Benguet

3.5.1. Growth and Development of Pre-Cooperative (Samahang Nayon)

Most Samahang Nayons in Benguet were founded in 1973 and 1974. SN members expected that the new program for cooperative development would help them in the marketing of their products and in the supply of farm inputs. Some farmers even expected that by joining the SN organization the government would assist them in titling their lands and would provide irrigation facilities. (Oosterhout/Vergroesen, A Comparative Analysis of Two Samahang Nayons in Buguias, Benguet, 1981, Appendix A: No.26).

As of 1976, there were 83 registered Samahang Nayons with a membership of 3,832 in the whole province of Benguet, 41 of which were registered with the Benguet Area Marketing Cooperative. Most Samahang Nayons were founded on the initiative of the municipal development officer (MDO) of the Ministry of Local Government and Community Development (MLGCD), or a local teacher recruited as volunteer barrio worker (VEW), who had explained the objectives of the organization. Often times, SN officers were selected without being sufficiently prepared for the job. In most Samahang Nayons, neither an audit and inventory nor a finance and development committee was established. In some Samahang Nayons, members of the education and training committee were elected.

A 1980 survey among 20 Samahang Nayons revealed that only 6 (30%) were considered active, with regular meetings and some business activities, usually the sale of consumer goods, while 14
<table>
<thead>
<tr>
<th>Samahang Nayons per region</th>
<th>Number of Members 1973-74</th>
<th>Number of Active Members in 1980</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mountain Trail</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambassador</td>
<td>100</td>
<td>5</td>
</tr>
<tr>
<td>Paoay</td>
<td>40</td>
<td>86PM</td>
</tr>
<tr>
<td>Cattubo</td>
<td>30</td>
<td>15</td>
</tr>
<tr>
<td>Natubleng</td>
<td>68</td>
<td>-</td>
</tr>
<tr>
<td>Madaymen</td>
<td>30</td>
<td>-</td>
</tr>
<tr>
<td>Sinipsip</td>
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<td>-</td>
</tr>
<tr>
<td>Bambang</td>
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<td>-</td>
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<tr>
<td>Loo</td>
<td>46</td>
<td>-</td>
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<tr>
<td>Balili</td>
<td>25</td>
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<tr>
<td><strong>West Benguet</strong></td>
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<td></td>
</tr>
<tr>
<td>San Pascual</td>
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</tr>
<tr>
<td>Bangho, Daclan</td>
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<td>140PM</td>
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<td></td>
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<tr>
<td>Beckel</td>
<td>31</td>
<td>29</td>
</tr>
<tr>
<td>Puguias</td>
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<td>-</td>
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<tr>
<td>Irisan</td>
<td>N/A</td>
<td>-</td>
</tr>
</tbody>
</table>

PM: this figure represents membership in 1980

### Table 3: Capital Formation of Samahang Nayons in Benguet 1974-1980 (in Phil. Pesos: P) (1US$=P 14)

<table>
<thead>
<tr>
<th>Samahang Nayons per region</th>
<th>Barrio Savings Fund</th>
<th>Barrio Guarantee Fund</th>
<th>General Fund</th>
<th>Contribution to AMC</th>
<th>Total</th>
</tr>
</thead>
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<tr>
<td><strong>Mountain trail</strong></td>
<td></td>
<td></td>
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<td><strong>East Benguet</strong></td>
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<td>-</td>
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<td>Beckel</td>
<td>300</td>
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<td>Puguias</td>
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</table>

N/A: data not available or not known

(70%) reported inactivity. The same survey showed that four (20 percent) of the twenty Samahang Nayons had lost all their active members, while another eight (40 percent) had not had any meetings for the last three years. (table 2). (Vergroesen, An Evaluation of 20 Samahang Nayons in Benguet, 1980a, Appendix A, No.14).

Reasons for the poor functioning of many Samahang Nayons can be attributed due to the lack of marketing support services from the AMC, inactivity of SN officers and lack of business activities partly caused by lack of operational funds and partly caused by poor management and leadership in the SNs.

Capital Accumulation.

Out of twenty SNs, thirteen (65 percent) had set up a Barrio Savings Fund(BSF), twelve (60 percent) had created a General Fund(GF) and eleven (55 percent) had contributed to the Benguet AMC. (table 3). None of the Samahang Nayons has formed a Barrio Guarantee fund(BGF) as the members considered this fund, intended to guarantee the amortization of land under the land reform program, not applicable to the land ownership status in Benguet. (Vergroesen, An Evaluation of 20 Samahang Nayons in Benguet, 1980a, Appendix A, No.14).

In 1980 the average amount of SN savings and annual savings per Samahang Nayon were shown in table 4.
Table 4: Total Samahang Nayon Savings Accumulation per Type of Savings Fund for the period 1975-1980 and per Year in Benguet

<table>
<thead>
<tr>
<th>Source of Fund</th>
<th>Savings per Samahang Nayon</th>
<th>Savings per Samahang Nayon/Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSF</td>
<td>P 1,312</td>
<td>P 187</td>
</tr>
<tr>
<td>EGF</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>GF</td>
<td>P 269</td>
<td>P 38</td>
</tr>
<tr>
<td>Contribution AMC</td>
<td>P 876</td>
<td>P 125</td>
</tr>
<tr>
<td>Total Accumulated</td>
<td>P 2,457</td>
<td>P 351</td>
</tr>
</tbody>
</table>


In some cases, SN members stopped contributing as they were afraid that the collected money might be used for personal loans to the SN officers. Initial contributions to the Benguet AMC were made, but when the promised services were never delivered, no additional shares were purchased.

Most Samahang Nayons had bad experiences with the Benguet AMC. Several Samahang Nayons along Mountain Trail reported that previous deliveries were never paid even though the SNs had subscribed capital stock of P 1000 or more in the Benguet AMC.

Another reason for failing Samahang Nayons can be found in the overly optimistic planning of SN activities, many unfulfilled promises from the government side, high expectations for the Benguet Area Marketing Cooperative and inadequate feasibility studies for the development of SNs and AMCs.

3.5.2 Growth and Development of Benguet Area Marketing Cooperative

The Benguet Area Marketing Cooperative was organized in November 1975 and registered in September 1976 with the Bureau of
Cooperative Development. Out of the 83 registered SNs in Benguet only 41 Samahang Nayons were registered with the AMC. Those SNs accounted for a total of 2,141 SN farmer members and a capital payment of P 210,000. All the AMC board members were full-time farmers. The office of the Benguet AMC is located in La Trinidad, the major trading center and provincial capital of Benguet.

In May 1977, the first CDLF loan totalling P 200,000 was extended to the AMC. In July, 1977, the second manager was appointed by the regional MLGCD Office, after a disappointing result from the first manager, who had been elected by the Board of Directors. At the beginning of 1978, the AMC incurred a deficit of P 57,000 and accounts receivable of around P 150,000.

In January, 1980 the cooperative cash position was close to zero, while the amount of receivables amounted to P 148,146. Most of the equity capital and CDLF funds of the Benguet AMC were used in the purchase of fertilizers which was sold on credit that was never repaid by the SN members. Some marketing funds were used by the board members and managers for personal transactions. Credits extended were poorly recorded and not properly documented, which made it difficult to collect.

Business operation of the Benguet AMC was on a irregular basis due to lack of funds for purchase of SN members' produce, as well as irregular demand, and the speedy turnover of management, which affected the confidence of the farmers in the AMC.

In May 1980 a major reorganization of the Benguet AMC was accomplished by the fifth manager. The FAO-prepared marketing
plan gave the major strategies for the further development of the AMC. The new marketing operations concentrated on the two major services in demand by Samahang Nayon members:

1. Procurement of vegetable and fruit at $0.10/kg above the prevalent farm gate price for graded produce; subsidized hauling from the farm to the collection center; payment on pick up and/or delivery to the village collection center.

2. Delivery of fertilizers, chicken manure, rice and other consumer goods at wholesale prices; subsidized transportation on credit terms for Samahang Nayons that had established a trading post in their village, but an on-cash basis to all non-members of the marketing cooperative.

The 1980 rehabilitation included organization, operation, transportation and finance aspects:

a: The general assembly elected their most capable men to board of directors. This policy-making body provided guidelines for the AMC manager and formed special committees for auditing and finance, training and education (see figure 6).

The general manager, responsible for all transactions to the board of director, was assisted by three departments: operations; finance and administration and cooperative extension and market research (see figure 7).

b: In the operational set up, organized collection and distribution centers were set up along the major highway in the form of AMC branch offices and SN trading posts to
BENGUET AREA MARKETING COOPERATIVE

FLOW CHART OF FARM PRODUCE
FARM INPUTS, CONS. GOODS AND MARKET INFORMATION

EXTERNAL SUPPLY/DEMAND

Supply Projection
Vegetable Produce

BENGUET
AHC

Price Info
Monitor
Shipment

Municipal Collection
Center

Price Info
Monitor
Shipment

SN Trading
Post

Price Info
Monitor
Shipment

SN Members

Demand Projection
(Farm Inputs)
(Cons. Goods)

Figure 8
facilitate grading and packing of produce, lower cost and margins of farm produce and farm inputs and to reduce postharvest losses (see figure 8). The AMC paid for its branch offices, while SNs were encouraged to set up their own trading posts/collection centers.

c: Transportation shortages in certain periods of the year were solved by hiring privately owned vehicles. Some additional hauling trucks were also needed, as the available transportation capacity of the AMC was insufficient.

d: Financial constraints were not tackled through increased capital contribution from the members. Based solely on improved performance, the government agreed to assist the AMC through the Cooperative Development Loan Fund to provide additional operational and investment credit. (see balance sheet in Appendix C).

A marketing plan for Benguet AMC was prepared by the FAO team in 1980. It provided information about:

1. Volume, type and location of produce available.
2. Capacity, timing and availability of transportation.
3. Farm inputs and consumer good items to be distributed.
4. Required capital for procurement and distributive services.

A production planning proposal was prepared as a major efforts to solve part of Benguet’s marketing problems, as demand-driven marketing operations have to give the right signals to producers on what product when to plant.
Table 5: Marketing Cost and Margins of Potato and Cabbage according to average low and high wholesale prices from Atok, Benguet to Metro Manila (in Pesos per Kg)(1US$=P14)

<table>
<thead>
<tr>
<th>Farm-to-Baguio Cost</th>
<th>Potato</th>
<th>Potato</th>
<th>Cabbage</th>
<th>Cabbage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm Gate price</td>
<td>1.40</td>
<td>2.13</td>
<td>0.45</td>
<td>1.15</td>
</tr>
<tr>
<td>Handling</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>Packing</td>
<td>0.05</td>
<td>0.05</td>
<td>0.08</td>
<td>0.08</td>
</tr>
<tr>
<td>Transportation</td>
<td>0.30</td>
<td>0.30</td>
<td>0.30</td>
<td>0.30</td>
</tr>
<tr>
<td>Commision</td>
<td>0.20</td>
<td>0.25</td>
<td>0.15</td>
<td>0.20</td>
</tr>
<tr>
<td>Wholesale Price Baguio</td>
<td>2.00</td>
<td>2.75</td>
<td>1.00</td>
<td>1.75</td>
</tr>
<tr>
<td>-Margin</td>
<td>0.57</td>
<td>0.62</td>
<td>0.55</td>
<td>0.60</td>
</tr>
<tr>
<td>(% F.G.Price)</td>
<td>39.8%</td>
<td>29.1%</td>
<td>122%</td>
<td>52.1%</td>
</tr>
</tbody>
</table>

Baguio-to-Manila Cost

| Baguio Wholesale price | 2.00   | 2.75   | 1.00    | 1.75    |
| Handling               | 0.05   | 0.05   | 0.05    | 0.05    |
| Packing                | 0.05   | 0.05   | 0.08    | 0.08    |
| Transportation         | 0.20   | 0.20   | 0.20    | 0.20    |
| Commission             | 0.20   | 0.25   | 0.15    | 0.20    |
| Spoilage               | 0.40   | 0.55   | 0.35    | 0.61    |
| Wholesale Price Manila | 2.90   | 3.85   | 1.83    | 2.89    |
| -Margin                | 0.90   | 1.10   | 0.83    | 1.14    |
| (% F.G.Price)          | 62.9%  | 28.6%  | 184%    | 99.1%   |

Manila Retailing Cost

| Manila Wholesale Price | 2.90   | 3.85   | 1.83    | 2.89    |
| Manila Retail Price    | 4.00   | 5.00   | 2.75    | 4.00    |
| -Margin                | 1.10   | 1.15   | 0.92    | 1.11    |
| (% F.G.Price)          | 76.9%  | 53.95  | 204%    | 96.5%   |

Total Marketing Margin
(Absolute in Pesos)   2.57   2.87   2.35   2.85
(% F.G.Price)         179.7% 134.7% 520% 247%

Spoilage is estimated 20% for potato and 35% for cabbage
See FAO Consultation on Packaging for Fruit and Vegetables within the Cooperative Marketing System in the Philippines, Manila, 1980

Source: Vergroesen: Production Planning and Farm Economic Analysis in Atok, Benguet, 1980
Marketing cost and margins between the different stages in the marketing chain for the two major crops, potato and cabbage, based on low and high Baguio wholesale prices are shown in table 5. It reveals that the margin as a percentage of the farm gate price is higher on the more perishable cabbage than on potato, which is storable. Also that the margins increase when prices increase. Major emphasis was put on reduction of postharvest losses in an effort to reduce marketing cost though improved packaging, timing of harvesting and loading, and selection of produce.

The 1976 BCOD study was also far too optimistic about the potential membership growth and capital accumulation. The 1980 FAO evaluation of Samahang Nayons shows that there was virtually no membership growth and only a slight increase in capital build up in the Benguet AMC, while the previous BCOD feasibility study projected a 10 percent membership increase per year and a 15-20% annual increase in capital build up by the members.

In 1980 there were 45 registered SN members, an increase of four SN, which had contributed capital for the Benguet AMC. The average contribution per SN was P 875, although the minimal share capital was P 1000. Some SNs had paid up P 3500, but many SNs did not even complete the amount for 1 share. The total paid-up capital in 1980 amounted to P 100,309.

Cooperative Marketing Activities

The Benguet AMC had developed two market outlets:
a: The Cooperative Marketing System of the Philippines (CMSP) which absorbed a weekly delivery of 1,500 kg of vegetables for its supply to the Metro Manila Consumer Cooperative.

b: A private buyer in Laoag City (Ilocos Sur) in the bordering lowlands purchased on credit a weekly delivery of 300 kg. As no individual farmer could deliver these small lots of different kinds of vegetables, the Benguet AMC opened a buying station in the Baguio Market and through this channel purchased the needed quantities for delivery in Manila and elsewhere.

It should be no wonder that Samahang Nayons were not very impressed with the performance of the AMC, which did not serve them, but only served the few outlets from the local public market.

During the 1980 rehabilitation program new outlets were developed some with success, others with less success. In general it was more successful to deliver to institutional buyers, even if they paid after 5-7 days, than to sell to individual stallholder members of the Public Market Associations in Metro Manila, as it has repeatedly proven to be difficult to collect payments from individual stallholders.

The basic problem remained that the AMC did not have sufficient market outlets and it could not rely on the CMSP for searching out new market outlets. Another problem was that private wholesalers in Metro Manila refused to buy from the AMC due to their cartel formation in the capital wholesale market.
3.6 Implementation Problems in Benguet

Samahang Nayons

The main problems in the development of SNs can be summarized in the following categories (Vergroesen, Final Report, 1981e, Appendix A, No.28):

1. Institutional constraints: lack of transportation and marketing services and SN members with delivery contract to moneylenders resulting in low prices under imperfect market conditions.

2. Constraints in the supply of inputs for the production of farm products, notably for vegetables, resulting in high cost of farm inputs and a shortage of seeds.

In addition, in promotion and developing the SNs the following problems were frequently encountered:

3. Lack of education and training on cooperatives as regards the structure, the savings program, management, bookkeeping and accounting and membership rules and regulations.

4. Poor and irregular marketing services of the Benguet Area Marketing Cooperative, especially as regards the procurement of vegetables and supply of farm inputs and consumer goods.

5. Limited capital accumulation by the SN because of misunderstanding about the objectives of the savings program and the mistrust in the elected SN officers.

Most of the above problems can be attributed to the hierarchical, top down cooperative structure, leaving little room for local participation other than the compulsory savings component and the
attendance of meetings.

Benguet Area Marketing Cooperative

The management of the Benguet AMC encountered the following problems in the execution of the rehabilitation program of the marketing cooperative (Vergroesen, Final Report, 1981e, Appendix A, No. 28):

1. Poor membership participation due to non-payment for farmers' produce previously sold to the AMC; the fast turnover of AMC management; inability of past management to extend services expected by farmer members, and the lack of effective field personnel to conduct thorough training programs on cooperative development.

2. Zero growth of AMC capital accumulation since the Samahang Nayon discontinued their savings program. Most SN members only contributed one share since the organization of the AMC, as they noticed that their investment had not been profitable in terms of patronage refunds.

3. Marketing problems in terms of irregular supply, inaccessibility, poor collection of produce, absence of classification and grading, inadequate handling and packing, limited market outlets, absence of storage facilities, limited absorption capacity of CMSP, and insufficient transportation facilities.

4. The Board of Directors, personnel and officers of the AMC who lack technical and practical knowledge about the
cooperative management, specifically on cooperative education, business management, agricultural marketing and accounting.

5. Improper recording of accounts, as most old records of the AMC were not signed by creditors so that tracing receivables and collection of accounts is almost impossible.

Most of the poor participation problems are inherent to the structure, organization and management of the Benguet AMC. The limited loyalty and responsibility for the business aspects and the organization of the cooperative may well be explained out of the poor past performance and the farmers intuition that the cooperative is more of a government organized institution than a real farmers led organization.

Organizational Constraints MLGCD/BCOD:

The Bureau of Cooperative Development (BCOD) could only extend limited support due to scarcity of manpower and the diverse task of its community development and cooperative extension workers at the provincial and municipal levels.

The provincial office of the Ministry of Local Government and Community Development is coordinated by a provincial development officer, whose task is to implement three different programs of the MLGCD: local government-community development-cooperative development, often neglecting the difficult cooperative task. In the field, the MLGCD has one municipal
development officer (MDO) per municipality.

The CMSP has a limited number of personnel, does not have enough services and facilities and is plagued with frequent program and strategy changes that limit its effectiveness even more. The CMSP is more oriented towards buying and selling for the Metro Manila market than as an apex organization giving technical assistance and supervision for the AMC.

The second AMC manager was appointed by the regional MLGCD office, while the fifth manager was appointed by the BCOD director. These MLGCD managers were well-equipped in the task of cooperative extension and were able to correct some of the misunderstanding in the relation between the SN and AMC. However these "government" managers lacked the experience in cooperative management and especially in marketing of (perishable) farm products.

Manpower Constraints: BCOD Personnel/ AMC Managers

BCOD personnel did not have adequate background and experience in marketing activities and marketing cooperative management, but are specialized mainly in cooperative organization.

The CMSP/AMC understudy managers, a group of young, highly motivated future cooperative managers, received a cooperative management training with the Asian Institute of Management in Manila and on-the job training with the FAO project staff in
Benguet and other provinces in the Philippines. Few of these understudy managers stayed with the cooperative movement after their training because of disillusionment with the cooperative program and the prospect of better job opportunities in the private or government sector.

Cooperative Management

Many changes in the planning and strategies within the Cooperative System provoked delays in the assisted AMC's achievement of commercial programs. This situation was aggravated by the CMSI, CMSP, and CFPI, whose purpose was in training and assisting the cooperative managers with MTAP funds. Payment of salaries to the managers and the understudy managers assigned by these agencies to the Area Marketing Cooperative was delayed sometimes for several months. The apex organizational structure on the national level did not provide significant management and/or marketing assistance to the Benguet AMC.

The fast turnover of AMC managers did not favor cooperative business development and Samahang Nayon support for the AMC. It had a negative effect on the attitude of the farmers towards the motives of the Government and the cooperative movement. Even with the reorganization of the AMC in 1980, the inability of past managements in extending the services that farmers expected had affected the reputation of the AMC management and the role of board of directors to encourage SNs to cooperate with the AMC.
Cooperative Marketing

In the present SN-AMC-CMSP-MMCC cooperative marketing system, SN farmers members do not favor the idea of operating through the AMC since it cannot compete with the services, such as inputs on credit and cash advances, from the traditional buyers. The small scale producer depends largely on the local middleman, who nearly always buys the produce for third parties and who operates on a larger scale in the same marketing channel.

The AMC prices to the farmer-members are either the same or lower than those of the middleman. Also the CMSP continues its strategy of buying from SNs at the same price, or lower, than offered by the middlemen, with the result that the benefits to farmers are reduced. Due to the small volume of farm produce, the cost per unit was high in the bureaucratic SN-AMC-CMSP-MMCC cooperative marketing system.

The decrease in AMC commercial activities was due to CMSP's hesitation in the buying and selling operations in perishable produce. This derived from the fact that the CMSP was created as an apex cooperative with the objective of selling SN produce to MMCC's supermarkets in Manila. The CMSP was not ready or capable to find more market outlets for AMC produce and had not yet entered the field of market research in Metro Manila to contact public markets, and other retail outlets.

During the reorganization of the Benguet AMC (1980-1982), marketing operations were resumed in June 1980, after nine months of standstill. Two branch offices were established in Atok and
Buguias, each supported by two Samahang Nayons in the area. However, due to lack of operational capital, transportation facilities and outlets the volume of trading remained small.

Cooperative Financing

Three kinds of external working capital and/or goods were provided for the Benguet Area Marketing Cooperative:

1. CDLF marketing loan for procurement of vegetables from SN members. A total of P 500,000 was disbursed to the AMC.
2. Provision of fertilizer and pesticides from CMSP on 30 days credit. The Benguet AMC sold these goods at cash prices.
3. Provision of potato seeds on credit in cooperation with a foreign assisted seed project, which were sold for cash.

The major weakness of this external working capital was the lack of responsibility among the board of directors of the Benguet AMC and disagreement on the most economical use the funds. Within the Benguet AMC, there appeared to be a general opinion that credits originating from the Cooperative Development Loan Fund (CDLF) were treated as paternalistic support from the government, therefore did not need to be repaid until the original capital deposited by the SN in the AMC had been retrieved.

It was also very difficult to receive loans from private banks or from the government for the Benguet AMC rehabilitation program, which needed an estimated capital injection of P 1 mil-
lion and only P 300,000 was released on the presentation of the marketing plan and after the installment of a government-appointed manager.

3.7. Summary Evaluation regarding Performance Criteria

In evaluating the performance of the Benguet cooperatives, use will be made of the chosen efficiency (3.7.1.), equity (3.7.2) and progressiveness (3.7.3) performance criteria.

3.7.1.1. Efficient organization of marketing transactions

Benguet SNs had difficulties in organizing production planning and assembly of marketable surpluses of members, as only a few SNs have established collection centers or trading posts along the major highways.

With the establishment of two Benguet AMC Branch Offices in Atok and Buguias an attempt was made to improve the efficiency in the assembly stage. However, an irregular procurement schedule and the low purchasing capacity of the AMC did not encourage improved collection of the SN marketable surplus. The lack of market outlets also hampered the efficient organization of the procurement and transportation of the SN perishable produce.

3.7.1.2. Efficient use of available equity and borrowed capital

Seldom were SNs able to generate sufficient funds to do business on their own account. Most of SNs member savings in the Barrio Savings Fund (BSF) were used for the capitalization of the
Benguet Area Marketing Cooperative, as SN members had high expectations from the AMC.

Most of Benguet AMC equity capital and borrowed funds have been turned into accounts receivables as fertilizer has been delivered to members and farm produce delivered to outlet markets, while payment was not yet received. Part of the low recovery rate on loans is caused by the members impression that repayment can wait until effective collection of receivables will take place. Some members felt that they did not need to repay the credit up to their amount invested in the AMC, as they have never received a service for their member share capital.

3.7.1.3. Efficient use of installed cooperative equipment

Most SNs in Benguet did not have any equipment owned by the pre-cooperative. In some cases they rented a cooperative store and built a simple platform to load trucks or buses.

The Benguet AMC operated two hired trucks; however, due to lack of funds these vehicles did not have a load when returning from Manila after delivering SN farm produce.

The Benguet AMC did not make optimal use of its retail store and marketing equipment, as facilities were often idle or empty due to lack of supply.

3.7.1.4. Efficient use of available cooperative facilities

Only 2 SNs have small storage spaces for consumer goods fertilizers and seeds. Often times, farm inputs were stored in
the house of the SN officers, who supervised the distribution and were accountable for the stocks of the SN. The lack of trading posts was a severe handicap for cooperative marketing development.

The Benguet AMC rented warehouse space could have been more efficiently used if the AMC had the marketing funds, trucking capacity and marketing outlets for daily operations.

3.7.1.5. Efficient use of available marketing and management skills

With the new organizational structure of the AMC, the marketing cooperative has three divisions: marketing operations, finance and administration, cooperative extension and research. Through good coordination an effort was made to use the skills of the employees efficiently. The three departments are headed by one general manager, who is responsible to the board of directors. An executive business committee is formed by the board of directors, which can provide guidelines for the AMC manager. Marketing transactions are supervised by the chief of the operation division in cooperation with the board of director from the area of purchase or delivery.

3.7.2.1. Equitable use of cooperative funds and services

Perhaps the largest inequity is the fact that cooperative managers used cooperative funds for personal benefit. Also board members diverted services and funds to themselves in an effort to
take advantage of their position, thereby denying the equitable use of funds and services for the members.

3.7.2.2. Equitable representation of members in the cooperative organization

An equitable representation of members only occurs during the SN general assembly meeting once a year, but even there, seldom more than 50% of the registered members show an interest in electing a new board of directors. SN members are reluctant to become SN officers, which results in existing SN leaders being re-appointed, according to the by-laws. In general, the members are not satisfied with Board of Directors and their small amount of activities, if any (Oosterhout/Vergroesen, A Comparative Analysis of Two Samahang Nayons in Buguias, 1981, Appendix A, No.26).

The AMC Board of Directors are elected from the affiliated SNs at the Benguet AMC general assembly meeting, usually on the basis of one director for each municipality in which the AMC is active. This representation does not reflect the distribution of membership, or the participation of members in the volume of business in the AMC.

3.7.2.3. Equitable build up of cooperative working capital

Only 41 SNs paid at least one share (P 1,000) in the Benguet AMC. The amount of savings accumulated by each SN (average P 2,287) was not sufficient to establish any business or to
implement the intended program. Farmers-members lack interest in the savings program due to inactivity of the AMC and the SN. Working capital generated by the different savings programs was not optimally used because it was allocated to specific transactions and could not be used in the most profitable enterprise.

The 1980 AMC balance sheet showed that the government contributed five times the amount of working capital than the Samahang Nayons. Only 50% of the SNs in Benguet contributed to the capital formation of the AMC. In case of a bankruptcy, it is clear that the SN members are only liable for 15% of the risk bearing capital in the Benguet AMC, which is not sufficient for a motivated SN participation in the AMC management and operations.

3.7.2.4. Equitable access to cooperative goods and services

Two-third of the SN members mentioned that the SN did not meet their expectations, i.e. had not provided adequate goods and services to its members, while only 10% of the members were satisfied with the available goods and services provided. The best rated services provided by the SN were the credit services, then followed the farm input supply, and the provision of marketing services were the lowest rated.

Equitable access to AMC services also depended on location and infrastructure. SNs along Mountain Trail received more AMC support than in the other parts of Benguet, resulting in SN members receiving more goods and services from their SN.
SN members close to the trading posts in Atok and Loo received more SN goods and services than SN members in the other regions of Benguet.

Eight out of 20 surveyed SNs mentioned the lack of reliable AMC operations as major problem for their Samahang Nayon development. Fertilizer supply was often a better provided service than the procurement of farm produce. The provision of consumer goods such as sugar, lard, dried fish was especially neglected.

3.7.2.5. Equitable sharing in the cooperative patronage refund

The cooperative by-laws state that patronage refund will be paid according to volume of business conducted with the cooperative. As many SNs never made an actual payment to members due to high operational cost, which absorbed most of the net margin from transactions, the question of equitable patronage sharing was not immediately relevant in Benguet. Due to continuous losses in the previous years (1976-1981) no patronage refunds were paid by Benguet AMC to any of its member SNs.

3.7.3.1. Progressive introduction of agricultural innovations

Samahang Nayons have been only partially instrumental in the introduction of innovations such as distribution of new seeds, use of organic fertilizers, new cultivation methods, improved crop rotations and harvesting at the right maturity stage. SN farmers were acquainted with the advantages of production planning
through staggered planting and diversification.

The AMC Branch Offices/collection centers have been used for cooperative extension programs as well as the demonstration of new products technology and distribution of new farm inputs. The AMC has designed a strategy for production planning of SN produce to avoid periodic oversupply by taking advantage of seasonal market shortages and to facilitate more convenient but lower transportation cost to reach more profitable markets. Implementation of such a strategy needs the cooperation of all parties concerned.

3.7.3.2. Progressive implementation of postharvest technology

SNs have made few efforts to reduce postharvest losses through the use of new packing methods, loading procedures, use of selection and classification criteria, improved storage for non-perishables, proper handling, and direct delivery of perishables.

The AMC Branch Office/collection centers have been used for the demonstration of improved harvesting techniques, grading and classification standards, new packaging methods, introduction of sorting tables, use of loading platforms, and improved handling and storage methods for perishables. A feasibility study was prepared for an AMC crating facility to provide SNs with better quality packing materials.
3.7.3.3. Progressive establishment of modern communication and price information systems for market intelligence.

Only some SNs along Mountain Trail made use of the AMC-installed radio transmitters to acquire accurate market intelligence about wholesale prices and demand and supply. The installation by FAO of the CMSP-AMC radio receiver/transmission communication system allowed a close monitoring of shipments and prices on retail, wholesale and farm gate level. The limited use of this system was caused by the fact that only 2 units were available, both located along Mountain Trail in Atok and Buguias. Also farmers shied away from the price information system when they discovered that prices reported are not the actual prices received. This inaccuracy may be caused by sharply fluctuating prices as well as by the method of data collection in the field as well as in the wholesale market.

3.7.3.4. Progressive introduction of advanced levels of management, accounting and stock control.

Most of Benguet’s SNs have neither a business developmental plan nor a bookkeeping and accounting system. The SNs have an audit and inventory committee, but in most cases it has not made any contribution to the SN management. Stock control was usually done by SN leaders, but poorly supervised by the SN manager. Few SNs conducted monthly board of directors meeting, where members get informed about the operation of their SN.
Procurement of vegetables and distribution of farm inputs were coordinated in the central office of the Benguet AMC. Three departments were set up and headed by a general manager. The marketing operations division was responsible for all trading activities in the field as well to the major outlet markets in Manila. All trading transactions were documented by the finance and administration division. The extension division was in charge for market research and was also involved in promoting the AMC. Stock control and supervision of the AMC branch offices fall under the responsibility of the chief of the operations division.

The board of directors is the policy making body of the AMC and is elected from the general assembly meeting. Special committees were set up for education and training, audit and inventory, and election. The executive business committee was to provide guidelines to the general manager. Implementation of some of the tasks assigned to the different committees was neglected due to lack of funds, a poor incentive system and lack of motivation among the board of directors.
CHAPTER 4: THE INDONESIAN CASE

4.1 Rural Development Policies and Programs in Indonesia

4.1.1 Introduction

The administration of President Suharto (1967 to present) had to give priority to rehabilitation of infrastructure and production facilities because they had deteriorated as a result of political disruptions and uncertainties in the late 1950s up to the middle 1960s.

The first five-year development plan (1969-1973) had put emphasis on rehabilitation of the irrigation and transportation systems and the expansion of agriculture for both domestic and foreign markets. The second development plan (1974-1978) emphasized a more balanced agricultural production, combining rehabilitation with an expansion of the agricultural area, and identified a number of specific low-income target groups. In general it adopted a more employment oriented strategy. The third development plan (1979-1983) identified as its major thrust the development of industries supporting the agricultural sector. Also an export oriented agricultural sector was promoted. The latest of the development plans, REPELITA IV (1984-1988), has put the development of basic industries as its priority.

The promotion of food crops (especially rice) has been the government's priority since 1967. However, the introduction of high-yielding varieties came approximately 10 years after the introduction of HYVs in the Philippines. The first results from the Green Revolution came only in the late 1970s in Java and in
the 1980s on the Outer islands. This was caused by the late introduction of HYVs together with the shortage of agricultural fertilizers and because many irrigation schemes were in poor functioning condition. After the sharp drop in oil prices in the 1980s, the Indonesian Government showed a renewed interest in its agricultural export sector of mainly tree crop products.

Two rural development programs got the most national attention. The Presidential Instruction (INPRESS) program, which was created with the objective of providing short-term employment for the local population in construction activities, and a relatively new program since 1980, the BANGDA village development program. Both programs are implemented on the district (Kabupaten) level and administered by the Interior Ministry.

Land reform has received very little emphasis since the 1960s, as there was no political support for this program under the present administration.

Indonesia has turned from the biggest rice importer in the world in the 1960s to a level of self-sufficiency in 1983. This has been achieved through a nationwide rice intensification program with inputs on credit and intensive guidance (BIMAS).

Another approach to alleviating rural poverty has been the transmigration program of resettling farmers from overpopulated Java and Bali to new developed areas in the Outer islands.

4.1.2. Goals and Objectives of Rural Development

The Indonesian Government has recognized the need to attack
rural poverty. It has begun, especially since 1975, a variety of programs to help the rural poor. These include, for example providing villages subsidies to finance village development projects, the creation of public works projects, and introducing social projects such as public health centers, a family nutrition and improvement program, and family planning. Priority has been placed on expanding employment opportunities, increasing the skills of the private sector, distribution of the fruits of development more evenly, and increasing the people's participation in the development of the rural areas.

4.1.3. Functional Programs

The following themes for rural development are emphasized under the third and fourth development plans in Indonesia:

1. Employment and Income for the Rural Population

The decline in the rate of labor absorption in food production necessitates to give more priority to establishing labor-intensive rural industries and a further expansion of the agricultural export sector.

2. Agricultural Production

The food crop program includes an improved coordination of food crop agencies, acceleration of irrigation and tidal land development, organization of farm input supply, and marketing and price support policies for rice and the secondary crops.

The plantation crop program includes the rehabilitation and increase of smallholder and estate production of tree crops,
the modernization of agricultural processing, and the provision of marketing/port facilities for export.

3. Non-Agricultural Activities

The government attempts to promote small-scale rural industries. Several "mini industrial estates" have been set up to provide infrastructural facilities for small scale industries.

4. Provision of Education, Health and Nutrition Services

Education programs emphasize increasing enrollment, expanding construction of school buildings, and improving adult literacy. Public health programs gives attention to increasing physical health infrastructure and providing rural clinic health services. Nutrition programs attempt to improve protein-calorie intake, provide safe drinking water and improve nutritional education.

5. Population Policy and Family Planning

Transmigration and urbanization are key parts of the population policy. The family planning program, which was started in 1969, has been considered successful compared to several Asian countries. The fertility rate has declined by 15% in Java-Bali during the period 1969-76 (Repelita III, 1979).

6. Agrarian Reform

The New Order government of 1967 did not touch the issue of land reform until 10 years later, as it is one of the most sensitive government programs; even in 1980s progress has been slow.

7. Prices and Marketing

The government's price and marketing policy is basically to rely on the market to set prices for farm products. However,
fixed wholesale and retail prices (including a transportation cost component) are applicable for fertilizers and chemicals. The distribution of farm inputs is taken care of by cooperative and private traders. Purchasing, marketing and storage of rice and corn is done by the National Food Logistics Body (BULOG), which maintains a security of stocks that also serve as a price stabilizer. BULOG also guarantees the provision of adequate rice in the major urban areas. Cooperatives form a major channel for BULOG/DOLOG to acquire rice for the national buffer stock.

4.2. Cooperative Development Program in Indonesia

4.2.1. Short History, Goals, Program and Structure

The present cooperative development dates back to 1967, when President Suharto approved the nationwide promotion of village-level cooperatives (KUD) by signing Cooperative Law No 12.

Goals of the cooperative development program were to support the national five-year development plan objectives:
- increase production,
- increase employment opportunities,
- spread the production evenly, and
- a more equal income distribution.

The Indonesian cooperative development strategy has distinctive regional and sectoral dimensions to allow harmony between urban and rural development and a spread throughout Indonesia.

The present cooperative development program stands on seven premises/principles: open and voluntary membership, democratic
control, members contribution for the formation of working capital, the distribution of cooperative savings according to volume of business, cooperative education, collaboration between cooperatives and their members, horizontal and vertical coordination among cooperatives.

The program was pursued in three stages:


During these years Indonesia was in a political, social and economic chaos. The cooperatives in the country were hardly in a position of survival. Out of 64,000 cooperatives registered under the previous administration, only 12,000 survived the high inflation and political instability period.


With the first five-year development plan (1969-1974), more attention was given to integrate the experimental village-unit enterprises (BUUD) into village unit cooperatives (KUD) to achieve the goal of increased food crop production.

After a major shortfall in the rice harvest in 1972, BUUD and KUD were forced to assist the national food marketing organization (BULOG) to procure the target amount of rice for food distribution and price stabilization purposes.

During the cooperative rehabilitation period, education, training and extension activities were set up. A professional manager system was introduced and developed.

During the first and second five-year development plans priority was given to increasing food crop production, especially
rice. The cooperative’s major role was the provision of inputs, technology and the procurement of the rice harvest. To facilitate these major marketing functions, secondary input supply and marketing cooperatives (PUSKUD) were set up to coordinate these marketing functions for the primary cooperatives.


At the beginning of the third five-year development plan (1979), the Indonesian Government felt that objectives set for increased food crop production and rehabilitation of cooperatives had largely been achieved. However, to address the shortage of farm inputs in the rural areas, cooperative service centers (PPK) were established by the government to assist the provincial PUSKUD in the distribution of fertilizers and marketing of KUD produce.

In 1982/83, as a result of declining export incomes, rehabilitation of smallholder plantations and cooperative marketing of non-traditional food crops were encouraged.


During the fourth five-year development plan priority has been placed on developing audit cooperatives on a provincial level to support an independent audit and accounting consultation service to the primary cooperatives independent from the government.

The major types of cooperatives to be developed were the following: farmers cooperatives, fishery cooperatives, animal husbandry cooperatives, savings and loan societies, government
Figure 10: Indonesian Cooperative Structure

- **National Level**
  - NATURAL COOPERATIVE COUNCIL OF INDONESIA
    - INKUD
      - Nat. Coop.
    - BUKOPIN
      - Nat. Coop Bank

- **Provincial Level**
  - PUSKUD
    - Central Cooperative
    - PPK
      - Coop Service Center

- **Municipal Level**
  - KUD
  - RMU KUD
  - KUD

- **Village Level**
  - MULTI VILLAGE COOPERATIVES
    - Fertil Store
      - credit unit
    - Fertil Store
      - credit unit
    - Fertil Store
      - credit unit
    - Fertil Store
      - credit unit
employee cooperatives, smallholder estate crop cooperatives, handicraft cooperatives and consumers cooperatives.

The primary cooperatives have the following tasks: extension work, processing and marketing, distribution of production inputs, and provision of credit, so that all members in the rural areas may enjoy the benefits of the KUD.

On the secondary level, cooperatives were organized on the provincial level with branches at the district level to serve the primary KUD cooperatives. These secondary level cooperatives included the secondary input supply and marketing cooperative (PUSKUD), with its cooperative service center branches (PPK), and the audit service cooperative (KJA). Also a cooperative bank (BUKOPIN) was organized on the provincial level.

On the national level, a federation of primary and secondary cooperatives (INKUD) was created in Jakarta. Coordination between cooperatives was organized by the Indonesian Cooperative Council.

4.2.2. Objectives of the Cooperative Department

The primary goal of the Department of Cooperatives has been to rehabilitate and expand the primary cooperative organizations and to provide planning and evaluation services, business services, management and audit services by developing secondary service cooperatives and cooperative service centers.

The objectives of the Government's Cooperative Development Program are:

1. To improve the role of the KUD in the procurement and
distribution of food, fertilizer and basic consumer goods.

2. To improve KUD services, so that membership will increase.

3. To improve KUD/PUSKUD capacity to strengthen services from these organizations to attract more KUD members.

4. To create a sense of belonging among KUD members.

5. To increase membership participation in KUDs, and KUD participation in PUSKUD.

6. To improve the organizational, management and audit system of the KUD so that it can be developed further.

7. To create the coordination of cooperative organizations both horizontally and vertically.

Primary cooperatives will be further developed and promoted. More attention will be given to the cooperative sector as a channel for exporting agricultural cash crops. Increasingly the cooperative will be given the task of marketing of perishables.

Secondary PUSKUD input supply and marketing cooperatives will be financially and technically assisted. More rice mills will be made available for cooperative rice milling for those KUDs that do not have the capital to purchase their own.

Secondary KJA Audit Service Cooperatives will assist primary KUDs to improve their accounting and management systems. The KJAs will help to counsel managers, bookkeepers and board of directors in cooperative business management and accounting.

In the next paragraphs we shift from the description of national cooperative policies to the cooperative development experience in one District- West Pasaman.
4.3. The Environment for Development of Cooperatives

4.3.1. Characteristics of West Pasaman

West Pasaman is situated on the west side of the mountain range crossing the Sumatra Island with a land area of 4,467 km². In 1980, West Pasaman counted a population of 200,494, leading to a density of 44.9 inhabitants per square km (1980 census).

West Pasaman is situated in the extreme northwest part of the West Sumatra Province. It is fairly isolated from the main Sumatra highway that passes through the district's eastern side, while only two provincial roads connect the area to the provincial capital (see figure 11). Since the opening in 1984 of the West Pasaman connection road linking Simpang Empat with the Provincial Capital Padang, the distance to the capital was reduced from 272 km to 145 km.

4.3.2. Demographic Situation

The native inhabitants of West Sumatra and West Pasaman are the Minangkabau. The Javanese are transmigrants in West Pasaman and considered the masters of irrigated rice cultivation. The different ethnic origins have not led to serious difficulties in organizing cooperatives, as most KUDs are organized in ethnically "homogeneous" areas, including KUDs in Javanese transmigration sites.

The total Pasaman population grew 2.9 percent per annum from 1970 to 1980, consisting of 2.5% natural increase and .4% immigration (Regional Development Plan for West Pasaman, 1983,
Appendix B, No.11).

The age of the KUD board of directors often reflects whether a particular area has a lot of new local migrants or transmi-
grants, or whether the area is a net out-migration area, with mostly the senior village members left to manage the KUD.

Growth of the work force in the Pasaman District has increased from 154,034 (1979) to 176,656 (1983), a 15 percent increase in 5 years (Repelita IV, 1983).

The agricultural sector provides for at least 87% of the primary employment. The other 13% is made up by the service sector and a very small handicraft sector. (Regional Development Plan for West Pasaman, 1983, Appendix B, No.11).

There are growing rural employment opportunities on irrigation schemes and agro-industrial projects in Kecamatan Pasaman.

4.3.3 Socio Economic Conditions

Eighty percent of West Pasaman household income is derived from agriculture, while about twenty percent comes from fisheries, forestry and services.

In West Pasaman three forms of landownership are identified: Individual ownership (hak milik); Genealogical group ownership (hak suku); and territorial administrative ownership (state). Few farmers have an official land certificate.
Table 6: Distribution of Farms According to Farm Size Classification in West Pasaman, 1980

<table>
<thead>
<tr>
<th>Farm Size (hectares)</th>
<th>Farm Size Class</th>
<th>Distribution of Farms (percentage of holdings)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.1 - 0.25</td>
<td>I</td>
<td>25.6</td>
</tr>
<tr>
<td>0.25 - 0.5</td>
<td>II</td>
<td>34.6</td>
</tr>
<tr>
<td>above 0.5</td>
<td>III</td>
<td>39.8</td>
</tr>
<tr>
<td>Total</td>
<td>I-III</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Vergroesen: Regional Development Plan for West Pasaman, 1983 (based on Sensus Penduduk, 1980)

The average West Pasaman food crop farm is 0.5 hectare. One quarter of the farm holdings in West Pasaman are below 0.25 hectare, while almost forty percent are above 0.5 hectare.

Data from West Pasaman KUDs suggest that members and leaders of KUDs tend to have above-average farms and that KUD services reach the more accessible and medium size and larger farms.

Most West Pasaman farmers get their cash income from tree crop production, while some have a commercial rice surplus. Only in the newly irrigated areas are there specialized rice farmers.

The low degree of formal education and the high level of illiteracy (35%) is not a very supportive factor for cooperative development, even though most KUD leaders are literates.

4.3.4. Agricultural Structure

A wide range of annual and tree crops are cultivated in West Pasaman. Five homogeneous agricultural zones are identified
according to crops, altitude and accessibility (see figure 12):
1. Mountain Range: forest cover (slash-and burn crop farming)
2. Mountain valleys: agricultural land use (rice, other food crops)
   (some smallholder tree crops: rubber, coffee, cinnamon)
3. Lower foothills and footplains: agricultural land use
   (rice, other food crops, tree crops: coffee, pepper)
4. Coastal swamps: (swamp rice; after drainage: irrigated rice)
5. Coastal strip: agricultural use: (smallholder coconut plantation)

PUSKUD West Pasaman is most active in lower foothill area of the district, which is the most accessible area with the highest population density and where the largest marketable surplus production is concentrated. KUDs are organized throughout the district, but again mostly in the mountain valleys and foothills.

The cropping systems found in West Pasaman are:
irrigated rice farming; dry upland rice farming; secondary food crop production; plantation crops and house gardens.

Food Crop Production
There was an increase in irrigated rice production, but a decline in most of the other food crops. In recent years yields of irrigated rice have increased from 3.59 to 3.79 ton/ha from 1979 to 1983. The area of upland rice has declined, while yields have remained stable at around 1.2 ton/ha. (Regional Development Plan for West Pasaman, 1983, Appendix B, No. 11).

Other annual food crops (palawija) are of much lesser impor-
tance within the area. These crops are maize, cassava, sweet potatoes, peanuts, soybeans and mungo beans. Palawija production has decreased from 1976 to 1985, especially for corn, soybeans and mungo beans. The major reason for this development is the relative price advantage of rice cultivation, the provision of credit of farm inputs for rice production and the provision of agricultural extension service and pest control programs for rice intensification (BIMAS).

Plantation Crops
Since the early 1980s production of rubber, cinnamon, cloves, coffee, and coconut has received a new boost with the new efforts to produce export commodities to offset the loss of oil revenues in the country. In West Pasaman tree crop production is currently in a phase of rehabilitation. With planting of new cloned rootstock material (rubber), improved hybrid seeds (coconut) and proper maintenance of the growing crop, yields per tree and per hectare have increased dramatically. Most tree crop products need processing facilities. There is still a major shortage of such facilities in West Pasaman.

Livestock and Poultry
Animal husbandry is of rather minor importance in West Pasaman. Veterinary care is still very rudimentary. The major focus is placed on improving the animal feeds. The commercial production of chickens has been introduced to improve the
household diet and to provide cash income for the farm household.

Agricultural production problems of KUD members are often related to marketing, financing and transportation of farm inputs and farm products. Crop production and livestock raising problems are of a second order; however, some specific requests are made for improvement and/or expansion of irrigation facilities.

4.3.5 Marketing (Input Supply; Product Marketing) and Credit

After harvesting, paddy is sun dried to avoid deterioration caused by fungi and bacteria. Traditionally, farmers use drying mats which do not provide the same high energy efficiency as cement drying floors. PUSKUD is the only organization that has a mechanized rice dryer. Only Javanese farmers have formed communal rice storage (lumbung paceklik) in case of a poor harvest or for reserve during the shortage season before the next harvest.

Processing and storage facilities are poor in West Pasaman. Recently five village-level cooperatives (KUDs) received rice mills on credit and a major rice mill was built by the secondary cooperative PUSKUD with a credit guarantee from the Cooperative Guarantee Fund (LJKK). There are no modern processing and warehouse facilities for tree crop products in West Pasaman.

There are no collection centers, and most produce is shipped directly from the farm to a wholesaler by an itinerant trader. During the peak of the rainy season farmers experience a lack of farm inputs (especially fertilizers) and decay of farm produce
because of the bad road conditions and unpassable rivers.

Marketing Channels

Two types of marketing channels operate in West Pasaman:

1. Marketing of rice is done immediately after harvest. Often floor-dried rice is transported by small traders to local rice mills in East Pasaman along the Sumatra Highway. They may sell part of it to rice mill operators and transport part of the dried and hulled rice to Bukittinggi, Padang or even out of the province to Medan.

2. A second marketing channel is the National Marketing Agency (BULOG) with provincial and district offices (DOLOG). Farmers who supply to any of the DOLOG warehouses get the government floor price for rice, minus deductions for moisture content and physical impurities. As these warehouses are often more than 50-80 km away from the farmers in West Pasaman, they often sell to small traders or to the village cooperative, who in turn sell to (Sub)DOLOG. DOLOG reimburses the cost of loading/unloading, bags and transport for KUDs that procure produce for the national food reserve stock.

Recently DOLOG has started a procurement program for secondary food crops such as peanuts, soybeans and corn, with floor prices set by the national government.

Most tree crop products are handled exclusively by the private sector. Government and cooperatives are not involved in
the marketing of coconut, rubber, cinnamon, cloves, or coffee.

Farmers in West Pasaman sometimes face transportation problems due to shortage of vehicles. Poor road conditions and rough handling and use of unsuitable containers leading to crop damage during transport are a bigger cost factor than the actual transportation cost.

Poor provincial and district road conditions and inaccessible roads in the rainy season are a major problems in the marketing of agricultural produce. Construction and rehabilitation of roads and bridges have a high priority in the present development plan for West Pasaman.

Farmers in the central Pasaman and Talamau Sub-Districts are often better supplied with farm inputs and have better access to traders than those in the mountain and coastal regions. Almost in every village along the provincial road there is at least one fertilizer store where farmers can buy their farm inputs.

Since 1983 the West Pasaman Secondary Cooperative Branch PUSKUD has carried sufficient stocks of all major fertilizers and a number of agro chemicals are available in the province. It has rented a 30 ton capacity warehouse. KUD can purchase from PUSKUD on a cash basis and up to a limited amount on a credit basis.

Price and market information is mainly provided by traders. Consumer prices of rice and secondary food crops are monitored by a price information project from the Ministry of Agriculture. However, this price information is limited to food prices in major city markets and is not diffused in West Pasaman.
Credit

Four types of credit are available to farmers:

1. Credit from traders is the most common form of financing of agricultural production in West Pasaman. The informal credit that is often given to the farmers by local traders, is related to pre-harvesting marketing agreements.

2. Institutional credit is limited because of the existence of only two banks in West Pasaman. Bank Rakyat Indonesia (BRI) and Bank Pembangunan Daerah (BPD) are both government banks used for the implementation of government credit programs and to promote investment in feasible development projects in the area. Except for the BRI Bimas loans (Rp 10,000-25,000 equivalent to US$ 10-25), most bank loans are short-term are not very suitable for agricultural loans. It is very difficult for farmers to obtain a long-term bank loan of Rp 500,000 (US$ 500) or more for farm equipment or investment in tree-crop production or livestock.

3. Credit Unions, Credit Savings Associations and Cooperative Credit Schemes are operating with different degrees of success in isolated places in West Pasaman. The most successful is the locally controlled credit savings association (LPN), but also some KUD cooperatives are able to operate a cooperative credit scheme (KCK) with partial government funds and partial members' funds. The average member loans are approximately Rp 50,000 (US$ 500).

4. Informal credit agreements. These are communal small savings
credit clubs (Arisan) and savings and loans associations (Simpan Pinjam) to provide for the informal credit needs of the members.

Most traders rely on their own capital or from wholesalers. Few traders receive commercial loans from banks or local credit unions. Farmers who do not qualify for BIMAS credit have to borrow at high interest rates from money lenders. Lack of access to institutional sources of credit and small volumes of credit available from informal credit sources lead to the conclusion that there is a need for improving access and expanding rural financing in West Pasaman.


Unlike in the Philippines, the provincial government may set specific priorities in the implementation of the national cooperative development program in Indonesia.

As of 1977, there were 26 KUDs in the Pasaman District, of which 13 were located in West Pasaman. There were 1,545 farmer members of KUDs, which had a total capital accumulation of Rp 9 million with an average annual business volume of Rp 1.8 million (Repelita III, 1983). In the period 1977-1983, the number of KUD members was targeted to increase to 2,707; the capital build up of KUDs were targeted to increase to Rp 20.4 million; the average volume of business that KUD were expected to conduct for their
members was targeted to increase to 3.7 million in 1983 (Repelita III). Tables 7 and 10 shows that these targets were met by 1984.

Only one PUSKUD secondary cooperative was planned and implemented for West Sumatra in 1974. The office of the PUSKUD West Sumatra was located in the provincial capital Padang 272 km away from the center of West Pasaman. In 1982 a FPK-PUSKUD Branch Office for the whole of Pasaman District was established in Lubuk Sikaping 120 km away from the center of West Pasaman.

Only in 1984 was a PUSKUD Branch office established in West Pasaman to serve West Pasaman KUDs with farm inputs supply and the marketing of rice. So far four West Pasaman KUDs are members of the provincial PUSKUD in Padang.

The PUSKUD has three major functions:

1. Improving the flow of fertilizers and pesticides from provincial (PUSKUD) level to KUDs in West Pasaman.

2. Provide agrobusiness support for KUD rice procurement, grading and drying, milling and marketing.

3. Provide KUDs with pre- and postharvest technology such as cooperative use of tractor ploughs and threshers.

4.4.1 Training and Education Efforts

The West Pasaman Cooperative Development Project received training from three national training institutions:

1. The National Cooperative Training Center (PUSLATPENKOP),

2. The Cooperative Marketing and Audit Project (PASMAKOP), and

3. The Cooperative Management and Auditing Program (COMAP/PAU).
In West Pasaman, training schools were carried out in cooperative development and marketing, financial management and business management, farm input supply and distribution, rice milling and marketing, pre- and postharvest handling of rice, cooperative management and bookkeeping, and auditing of cooperatives.

On-the-job training programs were implemented in project management and organization, audit of PUSKUD and KUDs, bookkeeping and accounting, fertilizer and pesticide storage and stock control, operation and maintenance of KUD equipment and buildings, and use of revolving funds.

Training materials, guidelines and manuals were prepared for KUD farm input supply, rice milling and marketing, threshing, postharvest handling, fund raising, bookkeeping and accounting, audit and inventory; for PUSKUD on farm input supply from manufacturers, on cooperative rice marketing and postharvest handling of grains. The printed training materials were very much welcomed by extension officers and KUD leaders.

4.4.2. Marketing Support Services

National Marketing Cooperative Organization (INKUD) was organized in 1976 to serve as a national organization of all KUDs and PUSKUDs in Indonesia. Due to the geographical condition of the country, INKUD never served as a direct marketing supply agency for the PUSKUD but more as a national platform where KUD and PUSKUDs could express their needs towards the government and
to the private sector.

Provincial Secondary Cooperative (PUSKUD)

For West Pasaman, much more important is the PUSKUD West Sumatra in Padang and its relationship with the government-controlled fertilizer manufacturer PT PUSRI in Palembang, South Sumatra and the National Rice Marketing Board/Logistics Agency BULOG in Jakarta, with a branch office (DOLOG) in Padang.

Since its foundation, the PUSKUD West Sumatra had limited capabilities to deal with all farm input requirements of the KUDs because of a lack of capital and irregular supply, management and organizational problems. PUSKUD also had large outstanding payments to PT PUSRI as part of the fertilizer received from PUSRI and sold to KUDs was not yet paid. No balance sheet of PUSKUD was available to judge the seriousness of the outstanding debt.

District PUSKUD/PPK Branch Office in West Pasaman

The West Pasaman PUSKUD depends in its decision making and implementation on the provincial PUSKUD. In 1983, the PUSKUD/PPK Branch Office had limited capabilities to deal with all farm inputs and farm produce, as it depended on the PUSKUD supply system, characterized by unrealistic planning, inefficient distribution, inadequate storage and transportation capacity, complicated pricing procedures, and lack of communication (FES/ADF, Analysis of Bottlenecks on Farm Input Supply in Cooperative Sector in West Pasaman, 1984, Appendix B, No.14).
Market Information

As no price and market information was available in West Pasaman, besides from private traders, PUSKUD started with the collection of rice prices in three major markets and monitored fertilizer prices in all outlets stores throughout West Pasaman. Price information was diffused to KUDs where farmers could be informed about prices of fertilizers, agro-chemicals of PUSKUD and the current rice procurement price of BULOG/DOLOG.

Foreign Technical Assistance

The focus of foreign assistance in West Pasaman, provided by the GTZ Area Development Project's Cooperative Section (1980-1988), is on improving the marketing linkages between KUD- PUSKUD Branch Office/ PPK-Provincial PUSKUD as well as the development of primary cooperatives. An improved vertical coordination through improved communication and supply and delivery contracts would help assure that KUD members and the PUSKUD Branch Office receive their needed farm inputs on time and would assist primary and secondary cooperatives with procurement, milling and marketing of rice.

4.4.4. Financial Support Services

Cooperative Credit and Guarantee Fund

The Cooperative Credit Guarantee Institute (LJKK) was created by Presidential Decree in 1971, with the purpose to assist cooperatives in their capitalization. However, it was clearly stated
that "government money in cooperatives should also be supervised and guided by government officials as this is a fund of the citizens" (DEPKOP, The Position and Role of Cooperatives in the Development in Indonesia, 1977).

The Cooperative Credit Guarantee Fund (LJJKK), which provides government guarantee for cooperative loans received from state banks, is very helpful in the capital formation of the cooperative movement since many KUDs are not very creditworthy and cannot meet commercial bank requirements and therefore are not able to receive credit except from LJJKK.

However, because of the poor repayment capacity of cooperatives, the LJJKK had encountered a high level of unpaid loans to be paid back by PUSKUDs and KUDs, which had borrowed funds for construction of rice mills and drying floors that were hardly used. Also a closer control is needed on the more selective use of the funds and the impact of the credit on cooperative development.

Several West Pasaman KUDs received credit from the BRI with LJJKK guarantee for the purchase of a rice mill and the construction of warehouse and drying floor (4 KUDs); for a rice marketing loan (4 KUDs) and for the start of a small traders' credit program (8 KUDs). The total amount borrowed from the BRI with LJJKK guarantee approximately Rp 25 million of which less than 20% has been repaid. Most of these loans were given to KUDs between 1976-1981 with a repayment period of 3 years for rice mills and 5 years for buildings. Some KUDs have not even paid the interest on
the borrowed funds. The chance of recovering the remaining 80% of the loans is slim.

Cooperative Bank

The recently formed Cooperative Bank (BUKOPIN) has increased its credit services and financial management expertise to member cooperatives (PUSKUDs, KUDs and other functional cooperatives).

In 1985 the National Cooperative Bank (BUKOPIN) opened a branch office in Padang. So far, several West Sumatra cooperatives (non KUD) have received loans from the BUKOPIN. Up to today only one KUD in West Pasaman has applied for a BUKOPIN loan. The application was denied because of high amount of uncollected receivables from members and outstanding loans to BRI and other banks.

4.5. The Outcomes: Growth and Development of Agricultural Marketing Cooperatives in West Pasaman

4.5.1. Growth and Development of Village Level Cooperatives (KUD)

In West Pasaman 13 village level cooperatives (KUD) were organized during the period 1973-1976, with a total membership of 1608 (1977). KUD members expected that by joining the President’s program of village cooperative development they could access government-provided farm inputs such as high-yielding seeds, fertilizers and pesticides; it would entitle them to the BIMAS credit package and it would solve part of their marketing problem as the KUD would always pay at least the government-guaranteed
floor price for rice and the KUD had a guaranteed outlet in DOLOG/BULOG for the national stock reserve.
Like in Benguet, Philippines, also in West Pasaman, Indonesia most KUDs were founded on the initiative of the extension worker (PKL) of the District Department of Cooperatives. Organizational meetings for KUDs were often made to fulfill the target set by the Indonesian development plans (REPELITA).

In a 1980-81 baseline survey among all West Pasaman KUDs it was reported that not one of the KUDs performed at a satisfactory level. This baseline survey also reported conflict of interest between the members, lack of strong leadership and lack of qualified management as the three major organizational bottle-necks in KUD development (Goeshing/Vergroesen, Cooperative Development in West Sumatra/West Pasaman, 1983, Appendix B, No.3).

Since 1982 KUDs have made farm input distribution plans with GTZ assistance for the fertilizers and agro-chemicals. These included the required farm inputs per season specified by volume, type, months and location.

Since 1984, procurement and marketing programs for rice were prepared for a selected number of KUDs that were supported by the ADF Project. Detailed financial and managerial operational plans were worked out for several KUDs, before they received credit to construct a warehouse and a drying floor to accommodate a rice mill previously purchased on credit from PUSKUD.

As of 1984 there were 16 registered KUDs in West Pasaman with a membership of 3075 (see table 7).
Table 7: Number of KUD Members in West Pasaman, 1984

<table>
<thead>
<tr>
<th>KUD per region</th>
<th>Number of full KUD Members</th>
<th>Number of KUD Credit Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talamau</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talu</td>
<td>135</td>
<td>156</td>
</tr>
<tr>
<td>Cubadak</td>
<td>123</td>
<td>134</td>
</tr>
<tr>
<td>Simpang Tonang</td>
<td>238</td>
<td>162</td>
</tr>
<tr>
<td>Kajai</td>
<td>1065</td>
<td>148</td>
</tr>
<tr>
<td>Pasaman</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aur Kuning</td>
<td>198</td>
<td></td>
</tr>
<tr>
<td>Sumber Rezeki</td>
<td>225</td>
<td>168</td>
</tr>
<tr>
<td>Sakato Kapar</td>
<td>613</td>
<td>232</td>
</tr>
<tr>
<td>Harapan Kinali</td>
<td>80</td>
<td>97</td>
</tr>
<tr>
<td>Cinta Damai Kin.</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>Lembah Malintang</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Usaha Jaya (Ujung Gading)</td>
<td>229</td>
<td>137</td>
</tr>
<tr>
<td>Simpang Tiga Alin (Paraman Ampalu)</td>
<td>75</td>
<td>128</td>
</tr>
<tr>
<td>Sungai Beremas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bunga Tanjung (Air Bangis)</td>
<td>274</td>
<td>202</td>
</tr>
<tr>
<td>Murni (Desa Baru)</td>
<td>57</td>
<td></td>
</tr>
<tr>
<td>Keluarga Sepakat (Silaping)</td>
<td>115</td>
<td></td>
</tr>
<tr>
<td>Fish Coop: Mina Sejahtera (Air Bangis)</td>
<td>81</td>
<td>-</td>
</tr>
<tr>
<td>Mina Rantau Pasaman (Sasak)</td>
<td>162</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>3075</td>
<td>1564</td>
</tr>
</tbody>
</table>

KUD Kajai is the only KUD with more than 1,000 members, most KUDs have between 60 and 100 members. After 1982, the number of members in some KUDs doubled or even tripled (table 8):

Table 8: Number of KUD Members in Two KUDs in West Pasaman from 1974 to 1985.

<table>
<thead>
<tr>
<th>Year</th>
<th>KUD SUMBER REZEKI</th>
<th>KUD KAJAI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of Members</td>
<td>No. of Members</td>
</tr>
<tr>
<td>1974</td>
<td>31</td>
<td>-</td>
</tr>
<tr>
<td>1975</td>
<td>48</td>
<td>-</td>
</tr>
<tr>
<td>1976</td>
<td>49</td>
<td>-</td>
</tr>
<tr>
<td>1977</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1978</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1979</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1980</td>
<td>50</td>
<td>35</td>
</tr>
<tr>
<td>1981</td>
<td>-</td>
<td>60</td>
</tr>
<tr>
<td>1982</td>
<td>69</td>
<td>325</td>
</tr>
<tr>
<td>1983</td>
<td>149</td>
<td>1065</td>
</tr>
<tr>
<td>1984</td>
<td>167</td>
<td>1065</td>
</tr>
<tr>
<td>1985</td>
<td>225</td>
<td>1065</td>
</tr>
</tbody>
</table>

Source: Annual Reports KUD Sumber Rezeki (1975-1986) and KUD Kajai (1980-1986)

Membership has clearly increased in these KUDs, especially after the guidance from the ADP/Cooperative Department since 1981.

Capital Accumulation

As of 1977 there were 26 registered KUDs in Pasaman District with Rp 35 million in equity capital. In 1983 this number has risen to 28 registered KUDs, with Rp 73 million equity capital. The volume of business increased from Rp 57 million (1979) to Rp 97 million (1983). In December 1983 the average amount of KUD savings/membership contributions for 5 KUDs in West Pasaman was
as follows:

<table>
<thead>
<tr>
<th>Source of Fund</th>
<th>Savings per KUD</th>
<th>Savings per KUD per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simpanan Pokok</td>
<td>Rp 514,750</td>
<td>Rp 85,791</td>
</tr>
<tr>
<td>Simpanan Wajib</td>
<td>Rp 219,182</td>
<td>Rp 36,530</td>
</tr>
<tr>
<td>Contribution PUSKUD</td>
<td>Rp 79,727</td>
<td>Rp 13,288</td>
</tr>
<tr>
<td>Total Accumulated</td>
<td>Rp 813,659</td>
<td>Rp 135,609</td>
</tr>
</tbody>
</table>


In 1985 there were 16 KUDs in West Pasaman with a total capital (including borrowed capital) of Rp 101,094,938, of which Rp 42,769,205 was equity capital. This leads to an average capital position of Rp 6,318,433 per KUD and an average equity capital of Rp 2,673,075 per KUD (Table 10).

Also capital accumulation in the KUDs has increased, especially during the period of ADP/Cooperative Department management and organizational support.

Some KUDs did not realize a further growth of membership and equity capital. This was often the case when members had lost confidence in the practices of the board of directors or the manager. However, the revival of KUD Sumber Rezeki in 1982-1983 gives a good example that rehabilitation of KUDs is possible.
<table>
<thead>
<tr>
<th>KUD per region</th>
<th>Equity Capital (member savings)</th>
<th>Capital Accumulation incl. borrowed capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talamau</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talu</td>
<td>497,320</td>
<td>8,254,249</td>
</tr>
<tr>
<td>Cubadak</td>
<td>1,342,150</td>
<td>4,031,459</td>
</tr>
<tr>
<td>Simpang Tonang</td>
<td>1,264,160</td>
<td>2,786,516</td>
</tr>
<tr>
<td>Kajai</td>
<td>3,921,545</td>
<td>7,953,375</td>
</tr>
<tr>
<td>Pasaman</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aur Kuning</td>
<td>281,900</td>
<td>9,099,992</td>
</tr>
<tr>
<td>Sumber Rezeki</td>
<td>1,287,450</td>
<td>4,886,295</td>
</tr>
<tr>
<td>Sakato Kapar</td>
<td>5,046,413</td>
<td>13,757,167</td>
</tr>
<tr>
<td>Harapan Kinali</td>
<td>101,000</td>
<td>1,101,000</td>
</tr>
<tr>
<td>Cinta Damai Kinali</td>
<td>104,750</td>
<td>3,220,832</td>
</tr>
<tr>
<td>Lembah Malintang</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Usuha Jaya (Ujung Gading)</td>
<td>1,842,010</td>
<td>8,507,373</td>
</tr>
<tr>
<td>Simpang Tiga Alin (Paraman Ampalu)</td>
<td>4,157,150</td>
<td>6,412,268</td>
</tr>
<tr>
<td>Sungai Beremas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bunga Tanjung (Air Bangis)</td>
<td>13,763,845</td>
<td>14,731,938</td>
</tr>
<tr>
<td>Murni (Desa Baru)</td>
<td>922,150</td>
<td>1,817,798</td>
</tr>
<tr>
<td>Keluarga Sepakat (Silaping)</td>
<td>7,349,036</td>
<td>12,062,050</td>
</tr>
<tr>
<td>Fish Coop</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mina Sejahtera (Air Bangis)</td>
<td>479,075</td>
<td>886,738</td>
</tr>
<tr>
<td>Mina Rantau Pasaman (Sasak)</td>
<td>407,251</td>
<td>1,583,887</td>
</tr>
<tr>
<td>Total</td>
<td>42,769,205</td>
<td>101,094,938</td>
</tr>
</tbody>
</table>

4.5.2 Growth and Development of West Pasaman PUSKUD Branch Office

The West Pasaman PUSKUD Branch Office was established in October 1984 by a board resolution of the provincial PUSKUD. It was decided that a branch office would be set up in Simpang Empat; that the working area of the PUSKUD branch would consist of the four West Pasaman sub districts; and that the main aim of the branch office would be the support and develop the business of the West Pasaman KUDs, especially the distribution of fertilizers and pesticides and other agricultural needs for the members.

The set up of a semi-independent PUSKUD branch office came as a result of the frequently reported shortage of fertilizers and pesticides, the problem of farmers who had received BIMAS-farm input credit slips (SPPB) but could not receive goods for their coupons on which they were charged interest. The opening of the West Pasaman connection road enabled the branch office to receive farm inputs directly from PT. PUSRI in Padang.

Despite understaffing of the PUSKUD branch office, it succeeded with ADP support to achieve a marked increase in supply of fertilizer stocks. A start was made to collect outstanding debts from fertilizer delivered by PUSKUD/PPK operations from previous years.

In 1985/86 a marketing plan for PUSKUD West Pasaman was prepared by the GTZ/ADP advisor in cooperation with the PUSKUD branch manager to identify the potential for PUSKUD involvement in rice procurement, milling and marketing (Vergroesen, A Five-Year Development Plan for PUSKUD Secondary Cooperative in West
The marketing plan for PUSKUD West Pasaman identified the location and volume of the marketable rice surplus. It also dealt with the collection and transportation problem from the field to the PUSKUD rice mill and organizational and managerial practices. Special attention was given to needed adequate storage and drying facilities and checking of rice quality and moisture content.

The PUSKUD West Pasaman marketing plan identified the potential farm inputs requirements for the KUDs in West Pasaman. In 1985, PUSKUD had a market share of 50 percent and was capable to expand market operations if auxiliary services were available.

Increasingly PUSKUD had found it profitable to serve private traders and the smallholder nuclei estate plantation (NESP) in West Pasaman. These non PUSKUD/KUD members received 1232 ton for the October 1984-March 1985 season, while PUSKUD distributed only 500 ton to member KUDs. Hence, PUSKUD increasingly served non members.

In 1980 there were 13 KUDs in West Pasaman and only three were members of PUSKUD. In 1985 from the 16 KUDs in West Pasaman only 4 KUDs had contributed a total of Rp. 208,575 to the working capital of PUSKUD (see table 11). Each member KUD pays Rp 25,000 share capital and an additional amount of voluntary savings and compulsory savings from sales of goods purchased through PUSKUD.
Table 11: KUD Capital Contribution to PUSKUD (1974-1984)

<table>
<thead>
<tr>
<th>KUD</th>
<th>Share Capital</th>
<th>Compulsory Savings</th>
<th>Voluntary Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talu</td>
<td>Rp 25,000</td>
<td>Rp 42,000</td>
<td>Rp 74,300</td>
</tr>
<tr>
<td>Aur Kuning</td>
<td>Rp 25,000</td>
<td>Rp 32,000</td>
<td>Rp 57,785</td>
</tr>
<tr>
<td>Sakato</td>
<td>Rp 25,000</td>
<td>Rp 20,000</td>
<td>Rp 46,490</td>
</tr>
<tr>
<td>Usaha Jaya</td>
<td>Rp 25,000</td>
<td>Rp 5,000</td>
<td>Rp 30,000</td>
</tr>
</tbody>
</table>

Total Rp 100,000       Rp 99,000       Rp 208,575


So far, the West Pasaman PUSKUD does not have its own board of directors and is still completely dependent on management instructions, supply and credit lines from the provincial office.

Problems of shortage of working capital in PUSKUD did affect availability of fertilizers in West Pasaman, as the provincial PUSKUD had difficulties to pay its liabilities towards PT PUSRI, the national fertilizer manufacturer. Because PUSKUD was not able to collect most of its credit sales, it could not pay the supplier on time and was confronted with a halt in deliveries.

Cooperative Marketing Activities

In 1982, the PUSKUD/PPK started with its farm input supply program in West Pasaman from stocks held at the District level PPK office. In 1984, PUSKUD/PPK had three warehouses, only one was in West Pasaman with a storage capacity of 200 tons.

Nevertheless, the distribution of farm inputs in West
Pasaman still was a problem due to lack of personnel, warehouse space, administrative procedures and transportation.

Since 1984, with the establishment of the West Pasaman Branch Office, efforts were made to improve the fertilizer distribution program and to rehabilitate the rice marketing operations. Additional warehouse capacity was sought in Simpang Empat; the administrative control and supervision of farm input stocks in PUSKUD warehouses and KUD stores have been improved. Planning of fertilizer distribution has been improved. Procedures have been implemented to safeguard easy access to stocks, but with sufficient control of in- and out-going stocks. Transportation problems were partly solved by the acquisition of a PUSKUD West Pasaman truck.

PUSKUD staff had received on-the-job training in bookkeeping and accounting as well as in marketing and financial management. One basic problem remains. The West Pasaman PUSKUD Branch remained dependent on the provincial PUSKUD for liquidity and input supply from the provincial level and PUSKUDs financial problems with PT PUSRI were partially shared by PUSKUD West Pasaman.

Another problem was the lack of market outlets for rice. This was especially needed in the off season when PUSKUD could not sell to DOLOG, as the market price was above the minimum price and the West Pasaman rice could not meet the DOLOG standard. In fact most (95%) of the rice trade in West Pasaman was carried out through private channels. (Vergroesen, An Evaluation of KUDs in Kecamatan Pasaman, 1983b, Appendix B, No.5).
4.6 Implementation Problems in West Pasaman

Koperasi Unit Desa (KUD)

The main problems of the KUDs can be summarized in the following 3 categories (Vergroesen, Final Report, 1986, Appendix B, No.25).

1. Organization and Management: low level of general education and technical skills among KUD leaders, managers and personnel; little cooperation between KUD leaders and members; poor function of the supervisory committee; overlapping of executive duties and unclear division of work among officers; poorly paid and motivated employees; and non-optimal use of self-generated equity capital.

2. Finance and Business Turnover: liquidity problems and poor cash flow; difficulties in collecting receivables; low volume of sales; inaccurate and not up-to date financial reports due to personal use of funds by leaders; difficulties in obtaining credit and excessive burden of debt servicing borrowed funds and default on previous loans.

3. Facilities and Equipment: lack of office space and equipment; insufficient storage space for farm inputs, rice and consumer goods; inefficient rice milling units due to lack of funds and poor supervision; lack of adequate transportation means; and poor maintenance of rice machinery.

PUSKUD West Pasaman

The management of the West Pasaman PUSKUD branch encountered the following 4 major problems in implementation of cooperative

1. Structure of Decision Making: "Top-down" decision making in the provincial PUSKUD organization with little "bottom-up" information flows; most decisions depends on provincial PUSKUD initiative and approval by main PUSKUD board of directors.

2. Coordination with Member KUDs: with the rising amount of unpaid fertilizer stocks, KUD management is becoming less reliable for PUSKUD; there is a lack of supervision and control over outstanding stocks on KUD and KUD store level; PUSKUD lacks the funds for an intensive extension program; and there is a lack of communication between the West Pasaman KUDs and PUSKUD.

3. Farm Input Supply and Distribution: PUSKUD's unpaid debt to PT PUSRI limits new fertilizer deliveries; lack of warehouse capacity to accommodate large amount of fertilizer needed in West Pasaman; insufficient transportation capacity; poor control over KUD stocks; difficulties in collecting receivables; and delayed remittance from KUDs.

4. Cooperative Rice Milling and Marketing: Lack of qualified management and sound planning; the PUSKUD rice mill is in direct competition with small KUD rice mills in the area. As of 1986, there was no working capital and no operational procurement, milling and marketing plan existed.
Organizational Constraints KANWILKOP/KANDEPKOP:

The Provincial Department of Cooperative Development (KANWILKOP) in Padang extended major financial and manpower support in the form of the establishment of a Project Development Office (PDO) for West Pasaman, after a major review mission in 1984 showed a poor involvement of the Provincial Cooperative Office in the on-going development efforts in West Pasaman.

After settling a number of organizational, institutional, legal, financial and manpower requirements involved in creating the PDO office, some coordination and budget problems still remain to be solved:

1. Cooperative Development Programs in West Pasaman still have to pass the District Cooperative Office. This includes approval for extension programs, training programs and approval of loan request for KUDs.

2. PUSKUD on the provincial level was a major support for the cooperative input supply in West Pasaman. However, its efforts to deliver farm inputs on time, were sometimes upset by a poor functioning PPK on district level.

3. Budget proposals had to pass a long way from PDO to KANWILKOP via the Provincial BAPPEDA to the Cooperative Department in Jakarta and the final decision is made by the National Planning Agencies BAPPPENAS.

4. The lack of budget available for West Pasaman.
The District Department of Cooperative Development (KANDEPKOP) in Lubuk Sikaping, could only extend limited support for the KUDs and PUSKUD in West Pasaman. All major financial transactions between KUDs and BRI need to be approved by the head of the District Cooperative Department. This has led to a situation where KUDs look to KANDEPKOP for financial assistance, but for technical advise on how to operate their equipment purchased on BRI loans, they look to PDO/ADP.

A major change in this situation was achieved in 1984 with the establishment of a Project Development Office (PDO) in West Pasaman to coordinate all cooperative development activities from the provincial and district level especially dealing with the training and education and with KUD counseling and consultancy. Several field activities and cooperative training sessions and on-the-job training activities were held. Also PUSKUD farm input distribution and rice marketing program received a big boost from the PDO/ADP Cooperative Development Project.

Manpower Constraints

To avoid a situation where there was a total lack of guidance, the District Office in 1980 had posted four cooperative extension officers in the sub-district towns. However, due to lack of experience, funds and sufficient training, they were easily discouraged from helping those KUDs with seemingly insurmountable problems.

In 1984, the PDO started with 2 assistants to coordinate
field activities of the cooperative extension workers (PKL) and cooperative business advisers (PAU) in West Pasaman. In 1986, there were two field and two office assistants with the PDO. Training had been conducted for government officials; cooperative board of directors; managers; KUD employees and members.

Cooperative Management

Three monthly field staff meetings were organized between the PDO, cooperative extension personnel and PUSKUD West Pasaman to evaluate work plan implementation and to coordinate between the agencies. Specific field visits to KUDs were scheduled to attend boards of directors' meeting and to advise them on the management and basic administration of the KUD business units. These regular visits have effectively opened contacts with KUD leaders. They have also proved useful for solving problems in organization and business matters. One major problem when visiting KUDs is that seldom are all KUD leaders available at the same time. The operational efficiency in many KUD units has been improved by investment, financial control and hard work by KUD managers and assistants. The performance of the farm input supply and credit units has been strengthened by requiring bonding of officers and storemanagers holding stocks or funds.

Cooperative Marketing

The cooperative fertilizer distribution program encountered delays in the procurement, delivery and administration of KUD
outlets stores. Money paid for fertilizers was not always entered in the books and records and used instead for other (personal) purposes. PUSKUD suffered losses due to poor storage of fertilizers on the village level. KUDs were often late with their remittances of cash or SPPB credit slips to PUSKUD on fertilizer or pesticides sold by the KUDs.

Meanwhile, PUSKUD intensified its efforts to collect outstanding debts. PUSKUD experienced lack of personnel causing inadequate supervision of stocks and delay in collecting accounts receivables, lack of adequate fertilizer storage capacity and the lack of transportation for hauling fertilizers within West Pasaman. Also in the improved rice marketing and post harvest program, KUD and PUSKUD encountered several problems such as rejection of KUD rice by DOLOG due to its high moisture content, high percentage of broken grain; discoloring of the rice seed; and high operational cost for procurement, drying and milling that reduced KUD/PUSKUD profits.

Cooperative Financing
Three kinds of external working capital were provided for West Pasaman KUDs:

1. Rice Procurement Credit (Max Rp 3 million) for the purchase of rice at the government-set floor price during the harvest period. Major problems have been reported with this fund, as some rice delivered to DOLOG was rejected and KUDs were forced to sell it on the private market for lower prices.
Sometimes these funds were "borrowed" by KUD leaders for private trading transactions.

2. Small Traders' Credit (Max Rp 1 million), which served as a government revolving fund to provide small loans to market vendors, with a repayment period of 3 months. Members can borrow up to Rp 50,000 from this fund without collateral and repayment follows in 12 weekly installments. Some problems have been reported with this KCK credit scheme, especially low repayment rates.

3. PDP Revolving Fund (Max Rp 700,000), which was set up to help KUDs acquire sufficient funds to purchase farm inputs on a cash basis. The use of this fund has been limited due to low repayment rates, a problem affecting all credit funds.

The major weakness of this external working capital is the lack of responsibility among the KUD leaders and managers. Insufficient guidance and assistance in the past had led to the opinion that repayment of government loans could be delayed until such time as the KUD had made a large profit.

Another difficulty for KUDs was to obtain institutional bank loans from private or government banks to finance profitable marketing operations. Due to the lack of institutional credit available for KUDs, efforts were made to increase their own capital-generating capacity through a voluntary savings program. Such a voluntary savings program (Simpanan Bajapuik) had been successfully tried in other areas of West Sumatra. Where these
savings were realized, there was an increase in cooperative agricultural marketing transactions. These funds were mainly used to purchase fertilizers or to form a credit fund for small loans to members.

4.7. Summary Evaluation regarding Performance Criteria

In evaluating the performance of the West Pasaman cooperatives, use will be made of the chosen efficiency (4.7.1), equity (4.7.2) and progressiveness (4.7.3) performance criteria.

4.7.1.1. Efficient organization of marketing transactions

Farm input distribution by the KUDs was characterized by complicated request procedures, irregular supply from PUSKUD to the KUD, poor control over stocks in KUD outlet stores, poor storage facilities and complicated accounting, as part of the fertilizer was paid in cash and part of it was paid by Bimas credit slip.

Since the establishment of the PUSKUD West Pasaman Branch Office, major improvement have been achieved in farm input distribution in West Pasaman. Increased efficiency was achieved due to improved training, manpower and equipment support.

Rice procurement still faces stiff competition from the private sector, and KUDs can only compete when they receive marketing loans and have access to the national buffer stock assured market. However, rice marketing to BULOG/DOLOG is hampered due to the poor quality of the West Pasaman rice, caused
by lack of high quality seeds, cultural practices and the lack of postharvest technology. In rice marketing the PUSKUD West Pasaman has not yet made any major effort, as KUDs market direct to BULOG/DOLOG.

4.7.1.2. Efficient use of available equity and borrowed capital

Most West Pasaman KUDs have some equity capital and borrow additional government funds for marketing operations. Except for the rice marketing loan, most of these funds have been turned into accounts receivables, as there was a build up of unpaid credit transactions and also fertilizer delivered to members was only partly paid for. In some cases, loans to the KUD were used by the manager or director for personal rice marketing transactions.

Many KUD have considerable amounts of PUSKUD farm input stocks as accounts payable because fertilizer and chemicals have already been disbursed but no payments were received, or the funds were used for other KUD activities and not yet remitted to PUSKUD. This is an inefficient use of funds, as new deliveries will not be made when old fertilizer stocks that have been distributed are not yet paid for. All these practices have caused a negative effect for PUSKUD and KUDs in generating their own capital.

4.7.1.3. Efficient use of installed cooperative equipment

Most KUD rice mills were only used 3-4 days per month. Many KUD rice mills have to compete with a large number of privately
owned rice mills in the same working area of the KUD. Cooperatively owned rice mills lack the procurement funds for continuous operations and have a low recovery rate of below 60 percent caused by inadequate maintenance.

4.7.1.4. Efficient use of available cooperative facilities

About half of the West Pasaman KUDs have their own warehouses, drying floor and fertilizer kiosks, but the other KUDs rented warehouse space and use fertilizer stores owned and operated by private traders. Most cooperative rice marketing facilities are not efficiently used during the short rice harvest. More efficiently used are fertilizer distribution spaces because demand for farm inputs is more scattered throughout the year. Availability of operational funds will allow to extend the use of the rice marketing facilities and optimize the use of fertilizer storage spaces if KUDs increase their volume of business.

Since 1982, the West Pasaman PUSKUD has an almost unused rice milling complex in Kinali. Efforts to make the PUSKUD rice mill work efficiently failed due to lack of working capital, qualified management and sound planning. The PUSKUD rice mill also is in direct competition with small KUD rice mills in the neighborhood, which is an inefficiency for the cooperative system as a whole.
4.7.1.5. Efficient use of available marketing and management skills

Only a small number of KUDs have made an operational plan for fertilizer and rice marketing transactions based on a realistic budget. The West Pasaman PUSKUD Branch Office with its three division for farm input supply, rice marketing, finance and administration has made an effort to use the available skills from its employees. The three divisions are under the supervision of the branch manager. With only 3 employees, the West Pasaman PUSKUD branch still depends on the provincial PUSKUD office for input supply; accounting services, audit and also major management decisions have to be approved by the provincial PUSKUD board of directors.

4.7.2.1. Equitable use of cooperative funds and services

The largest inequities of all is the fact that many KUD leaders use their position to conduct private trade with the funds from the KUD or put their own profit margins on KUD rice procurement or fertilizer distribution services.

4.7.2.2. Equitable representation of members in the cooperative organization

An equitable representation of members only occurs during the general assembly meeting once a year, but even there seldom more than 50% of the registered members showed an interest in attending. Annually KUD general assembly meetings tend to be
well attended by the members in KUDs that have a rising record of activities. It is only here that all members are equitably represented and elect the board of directors for the coming year. However, directors are more often involved in direct operational tasks, other than providing guidelines to the KUD manager and report to the members.

4.7.2.3. Equitable build up of cooperative working capital

Most KUDs have equity capital ranging from Rp 100,000 (Kinali) to Rp 5,000,000 (Kota Baru) and total capital accumulation including borrowed funds ranges from Rp 1 million to 13 million (see table 10). The amount of KUD funds is sufficient to conduct business activities. Farmer members do not like the compulsory savings program, but like the voluntary and special savings program as they can withdraw the funds when needed and they receive interest on their investment.

There is a wide variation in the ratio of members' equity to total capital accumulation (see table 10). In some KUDs this is ratio is 1: 30 (Cinta Damai) and in others 9:1 (Bunga Tanjung) On the average only 40 percent of the total capital accumulation consist of members' equity. In case of bankruptcy, members are liable for about 20-80% of the risk bearing capital of the KUD.

4.7.2.4. Equitable access to cooperative goods and services

Credit and input supply were the most widely accessible goods and services presently offered to the KUD members in West
Pasaman. Only five KUDs offered threshing and rice milling services and only two KUDs were actively involved in rice marketing.

It is very difficult for KUDs to get access to the PUSKUD rice milling complex, as PUSKUD would rather buy rice from KUDs and process and market this under its own management.

Access to fertilizer has been greatly improved in 1983-1984 with the establishment of the West Pasaman PUSKUD Branch Office. However, equitable access is also determined by location, availability of infrastructure and number of kiosks established. The major problem here is that most truck deliveries are restricted to the dry season because of the poor quality of the feeder roads and large areas in northern and western part of West Pasaman cannot be reached by truck at all due to lack of roads or bridges.

4.7.2.5. Equitable sharing in the cooperative patronage refund

The cooperative by-laws state that patronage refunds will be paid according to volume of business conducted with the KUD.

In West Pasaman, KUDs that had a positive net margin from operations divided part of the net margin according to members' share in equity capital of the KUD rather than according to volume of business, as the record system of most KUDs did not differentiate the volume of business conducted with each member.

KUDs also paid interest on share capital from members based on amount and duration of investment which is not according to
the cooperative by-laws. Patronage refunds based on volume of business conducted with the KUD is still a theoretical concept in the West Pasaman KUDs.

As far as data available, PUSKUD has not made any patronage refunds to its members, but instead it offered loans for KUDs to purchase rice mills, threshers and mini tractors.

4.7.3.1. Progressive introduction of agricultural innovations

Koperasi Unit Desa has been the main instrument for the introduction of the high-yielding seed-fertilizer technology in rice production supported by the BIMAS credit program. Besides the rice intensification program, KUDs have also been instrumental in generating rural savings and improved cultural practices. Pilot KUDs in West Pasaman have conducted fertilizer trials and tractor and thresher demonstrations in cooperation with the extension staff of the Agricultural and Cooperative Departments.

PUSKUD has been active in stimulating the rice intensification by supporting its member KUDs with adequate amounts of needed farm inputs. Recently PUSKUD has also been involved in planning of farm input requirements for KUDs.

4.7.3.2. Progressive implementation of postharvest technology

West Pasaman KUDs have recently been involved in reducing postharvest losses and improving the quality of rice to be marketed to DOLOG/BULOG, by joining postharvest training sessions, and use of threshers. Many KUDs replaced the drying mat
system with construction of cement drying floors. KUD managers learned to use moisture testers and other grading standards for a selective procurement policy. Some KUDs replaced the milling rolls to improve the recovery rate and to reduce the losses in the older KUD rice mills.

PUSKUD has been active in organizing practical training on the use of rice threshers and improved operations of rice mills. Training was conducted on improved handling and storage of rice and the use of moisture testers in procurement operations. A technical study on postharvest handling of rice in Talu was prepared to advise the KUDs on improved procurement, drying, milling, marketing and storage operations.

4.7.3.3. Progressive establishment of modern communication and price information systems for market intelligence.

KUD managers have to come to the PUSKUD office to get price and market information, as no market intelligence is available on the KUD level except sources in the local village market. A marketing assistance service was set up by the PUSKUD branch Office for the West Pasaman KUDs.

Although the provincial PUSKUD has radio communication with all PPK offices, it does not have any communication with its branch office of West Pasaman, mainly because this is not budgeted for. Therefore, the West Pasaman PUSKUD made use of the ADP radio transmitter or contacted the nearest PPK office to make orders for delivery from the provincial PUSKUD.
4.7.3.4. Progressive introduction of advanced levels of management, accounting and stock control.

Several KUDs established an updated bookkeeping and accounting system with ledger cards, a monthly cash report and individual membership cards. All these KUDs made a quarterly statement of operations and an annual balance sheets and profit and loss statements.

On the marketing side, several KUDs have input requirement plans laid out per kiosk and per month to determine the needed amount of fertilizer and agrochemicals to be ordered from PUSKUD. With the use of vouchers and stock cards there is a better control over the flow of fertilizer and chemicals in the organization. The introduction of the Taylorix accounting system provided an easy way to achieve proper recording of accounts.

Several KUDs keep a schedule for KUD board meetings, where heads of KUD business units report to the manager and the financial position of the KUD is evaluated.

In rice marketing, KUD leaders have learned to use marketing cost and margin concepts in determining profitability of their operations. Ordering farm inputs on the provincial level is the responsibility of the provincial PUSKUD, but the distribution of farm inputs on district and sub-district level is the task of the PUSKUD Branch office in coordination with the KUDs.

Strict control and supervision on the PUSKUD accounting system is maintained by the provincial PUSKUD as well as by the provincial audit cooperative (KJA).
CHAPTER 5: SUMMARY AND CONCLUSIONS, POLICY IMPLICATIONS AND 
SOME ORGANIZATIONAL AND OPERATIONAL RECOMMENDATIONS 

5.1. Introduction 
This final chapter deals with the role of cooperatives in rural development, the role of the government in cooperative development and the role of cooperatives in food system development. This section utilizes the operational objectives, research questions and conceptual framework presented in chapter 1 and 2.

This section also discusses the policy implications of the study. The evaluation of cooperative development in the Philippines and Indonesia has shown a large number of shortcomings in the operational efficiency, the distribution of cooperative benefits to members, and progressiveness towards a more dynamic, enterprising cooperative marketing system.

Contrasting these shortcomings with the goals and objectives of cooperative development in both countries raises several important policy questions which are dealt with in this section.

Finally, some organizational and operational recommendations are suggested to improve the performance of cooperatives in the two countries under study.

5.2. Role of Cooperatives in Rural Development
5.2.1. Were the stated goals for the cooperatives attained?
In the Philippines, the cooperatives have only partially attained the government's stated goals of increasing income and
purchasing power of members, stimulating capital formation for
development activities, and institutionalizing cooperation as a
technique for improving the social and economic status of the
members.

In Indonesia, cooperatives have succeeded in increasing
rice production in the country, but have only partially attained
the government's stated goals. These goals include increasing
employment opportunities, and spreading development more evenly
to achieve a more equal distribution of income. Although some
local cooperative initiatives have been successful, most of the
government-promoted cooperatives failed to obtain a strong
membership and capital base from their members. Leaders in these
government-supported cooperatives often had to work without the
members' support and used the cooperative for personal gain or as
a stepping stone to a political career.

One goal that was clearly not achieved in either country,
was the establishment of an efficient and effective cooperative
marketing system for members' produce. This was the case even
where provincial level cooperatives were able to organize the
supply of production inputs to their member organizations.

Another unattained goal was the creation of a sense of
belonging among cooperative members. This failure was reflected
in poorly attended general assembly meetings, zero growth of
equity capital, and the poor repayment of cooperative credit.
5.2.2. Was the designated role for cooperatives in rural development achieved?

In the Philippines, cooperatives were "to foster farmers' participation in the rural development process. The cooperative would give farmers a source of control over their destiny."

In Indonesia, cooperatives were "to unite, mobilize, promote and develop the potential of the rural population to increase production and distribute income more evenly."

Government-promoted cooperatives in both countries have assisted farmers with an improved supply of farm inputs and some forms of credit, as well as relaying information about government agricultural and cooperative extension programs to farmers. However, these cooperatives have seldom promoted effective grass-root level participation in community development. Furthermore, cooperatives have not become a means of educating the members and the community about problems in organizing and managing cooperatively owned businesses in the rural areas.

Promoting greater local participation in planning and implementation of community and rural development projects was another objective that was not achieved during the period of review. Likewise, cooperatives have not provided an opportunity for real democratic decision making on the village and district/provincial levels. The pro-forma by-laws and articles of incorporation of the cooperative are written by the government and are approved after only minor consultation with the members in the community.
Finally, cooperatives have only marginally contributed to an improvement of living standards and social cohesion in the rural areas. Cooperatives have contributed very little to the introduction of modern technology and speed up development in the rural areas of the two countries. Given this evidence, one must conclude that government-promoted cooperatives were ineffective in promoting the government's objectives of increasing village participation in rural development and discouraging migration from rural communities to the cities.

5.2.3. Did the cooperatives in the two countries meet the prerequisites for successful cooperative development?

In terms of Uma Lele's (1980) prerequisites for successful cooperative development (see 2.2., page 16) it can be concluded that:

1. In only a few cases were the societal constraints blocking the way towards improved living standards identified. A stagnated agrarian reform program combined with the lack of rural education and health care, poor access to markets, credit, extension and farm inputs must be considered the major constraints to rural development in both countries. Tillage of protected forest areas, illegal land settlement, aggravated forms of soil erosion, spontaneous migration, "costly" land certificates are all indicators that the existing resource base is a very uncertain source for farm household income.
2. No critical ex-ante examination was made to determine whether cooperative institutions were necessarily the best suited for removing constraints in rural development. In both countries, feasibility studies for marketing cooperatives were made after the decision to establish cooperatives. Examinations of the structure of cooperatives, goals and objectives, composition and methodology of a cooperative development program, performed by independent research institutions, were not available for circulation within or outside the Department of Cooperatives.

5.2.4. How can the effectiveness of the cooperative development program be assessed?

The cooperative programs under study were not tested in pilot areas for their feasibility. Instead, evaluations of previous failures were available to inform the designers of new cooperative development programs. In implementing new cooperative programs, one often faced the same problems as those faced by cooperatives that had already failed: lack of member support, lack of equity capital contribution by the members, inadequately trained cooperative leaders and managers, "recipient attitude" of the members. A striking example is the Philippine case.

It can be deduced that the previous evaluations did not accurately identify the underlying causes of past failures. Therefore these underlying problems were never adequately addressed in designing the new cooperative programs.
The adaptability of nationwide cooperative programs was difficult to realize in two heterogeneous countries.

In Benguet, farmers did not contribute to the Barrio Guarantee Fund, because they were not covered by a land reform program, and their commercial vegetable production did not allow them to set aside one bag of rice as a membership contribution. The fact that vegetables are perishable and difficult to market, disqualified the Benguet AMC from the government's nationwide marketing loan package intended for rice marketing. In Indonesia the national cooperative program had put all attention on the rice intensification program. Therefore, the KUD cooperatives founded by the government in West Pasaman were not appropriate for the marketing of rubber, coffee and spices, the major cash crops. Also, the fact that West Pasaman was only part of a district resulted in serious delays in getting official government support for the West Pasaman KUDs and PUSKUD.

In both countries, the biggest shortcoming in the development of the program was in its provisions to meet management requirements. Hierarchic and complex cooperative marketing organizations from village to urban retail markets can easily develop into unmanageable bureaucracies that serve neither the urban consumer nor the farmer member. This was especially the case in the Philippines. Also, the government's cooperative development program with its affiliated financial, research, extension, training and marketing support institutions on the national, provincial and district levels, became a burden
at the primary cooperative level.

The major deficiency of the program was its lack of a strong grass-roots membership. A top-down approach is preferred by governments, as cooperatives are easier to control and supervise when they follow along the same path of development. At the same time, however, members often feel alienated from a government-promoted organization, and are not willing to put a major effort into participatory decision making, and will be reluctant to volunteer manpower and contribute capital.

In both countries, the cooperatives' by-laws and articles of incorporation, as proposed by the respective governments, allowed a heterogeneous membership, which often created more conflicts of interest than would be the case with a more homogeneous membership. These governments also promoted multi-purpose cooperatives rather than more easily managed single purpose cooperatives. Moreover, as noted by other writers, cooperative by-laws often allow large government involvement for political and "watch care" reasons (Heckman, 1969). This can take away local initiatives for community development projects. The cooperative rules and guidelines from a Department of Cooperatives often prepare the setting for a complex, hierarchical and top-heavy cooperative network with an insufficient base of active, educated members.

In terms of cooperative financing, cooperatives with poor repayment records or with high debt-asset ratios, find it almost impossible to get loans rescheduled or to qualify for additional
working capital credit. In addition governments are biased against giving additional loans for working capital to cooperatives, which have yet to repay their previous marketing, building, and equipment loans.

5.3. The Role of the Government in Cooperatives Development.

5.3.1. How has the government intervened in the development of cooperatives?

The Philippine Government has taken Presidential Decree 175 of 1973, as legal justification for involving itself in strengthening the cooperative movement. However, in the 1950s, decrees by previous presidents also legitimized government involvement in the development of cooperatives.

The Philippine Government has been involved in establishing an integrated system for promoting and organizing cooperatives. Such heavy involvement in cooperative development goes much beyond training and education efforts. The Government has also involved itself in providing financial and marketing facilities to the cooperatives.

The Bureau of Cooperative Development is the sole agency where cooperatives can be registered. Therefore, the government is in a position to monitor, audit and evaluate the performance of cooperatives. It channels foreign technical and financial aid to the cooperatives, supplies the capital and provides the training for most of the national cooperative organizations.

The Indonesian Government takes article 33, provision 1, of
the 1945 Constitution as the legal justification for its involvement in the cooperative development program. The government's role was further detailed in Cooperative Law No. 12, of 1976.

Just as in the Philippines, the Indonesian Government has built up a huge network of government and cooperative organizations on the national, provincial and district levels to provide training and education, auditing, marketing services and financial assistance. The Indonesian Government is also the owner of the PUSRI National Fertilizer Corporation, which supplies the cooperative network with farm inputs. It also controls the BULOG National Marketing Agency, which is the main buyer of rice from the cooperative rice mills. It has set up a Cooperative Union (INKUD) and a Coordination Council for Cooperatives (DKI).

As in the Philippines, the Department for Cooperatives in Indonesia is the sole agency for cooperative registration, without which they are not allowed to operate.

5.3.2. Why has the government intervened in the development of cooperatives?

Both countries have legal documents which authorize governments to provide continued direction and restrain cooperative behavior. They view such interventionist policies as necessary to assure successful cooperative development. These governments rationalize that establishing stable cooperatives in areas with low literacy levels and poor management skills
requires government assistance, if these cooperatives are to grow without an extremely long development period.

Another factor favoring government participation in the operation of cooperatives, is to protect cooperatives where their leaders or managers are inexperienced. In both countries, the government serves a major training and protection function for cooperatives. The training component supports cooperative development, especially in management, marketing, and financial control. It is the government's responsibility to protect the cooperative from dishonest businessmen, traders or managers and other unscrupulous business connections that may undermine the existence of the cooperative. The government is also expected to protect the members' interest as well as its own capital investment in the cooperatives. Evidence provided in chapter 3 and 4 showed that the government has failed to provide such protection.

In the Philippines, the Bureau of Cooperative Development provides legal support, and general support like licensing and inspections. It also sets grades and standards, provides extension services and carries out research. The government has a special management training assistance program (MTAP) and a cooperative education and training fund (CETF). In addition, the government controls decisions concerning the cooperative development loan fund (CDLF), which provides cooperatives with marketing loans and equipment.

In Indonesia, the Department of Cooperatives promotes
cooperative organizations and gives guidance to cooperative leaders and employees. It operates a national and provincial network of cooperative training centers (PUSLATPENKOP/ BALATKOP). It also controls the Cooperative Credit Guarantee Institute (LJJK), which provides cooperatives with marketing funds and rice milling equipment on credit. The government has provided the starting capital, guidelines and supervision for a cooperative credit program (KCK). Recently, it has taken the initiative to promote cooperative export activities, such as assembly and processing of plantation crops.

5.3.3. What is the impact of government's involvement in the development of cooperatives?

In both countries, heavy government involvement in the funding, training, and sometimes management and marketing of cooperatives has resulted in cooperatives dependent on government support. This has not, however, increased member involvement. Members' apathy increases when they observe that their participation is not essential for the growth and development of marketing cooperatives. This increases the difficulty of organizing self-help organizations at the village level.

Farmers are now only interested in "grass-roots" organizations when the government comes up with financial incentives to join such organizations. Without such incentives, cooperative leaders face zero growth of membership contributions and are eventually driven into the hands of the government loan
agencies. Under these circumstances, members take a "wait-and-see" attitude. They have realized that if the cooperative management is not good, they stand to lose what little capital they have. In reality, the government as the major creditor, is the biggest loser when a government sponsored cooperative goes bankrupt.

5.4. Role of Cooperatives in Food System Development

5.4.1. What was the role of cooperatives in the food system?

Within the system approach, which emphasizes the food system as a set of interdependent economic activities, marketing cooperatives in both countries have attempted to link the production of farm products and the distribution of farm inputs to the distribution of food.

Cooperatives could play a vital role in vertically coordinating the different stages of food production and distribution. Cooperatives are an institutional mechanism for arranging market exchange and can coordinate markets through administrative linkages between producers, wholesalers, retailers and the urban public market (see 2.3. pp.21-24).

In both countries cooperatives have tried to create more competition in the market, but not always with a high degree of success. Likewise, they were not able to overcome excessive price differences between markets or significantly reduce seasonal price fluctuations. The cooperatives failed most in providing effective marketing services for food crops as well as export
crops. However, cooperatives in the two countries were successful in providing effective farm input and credit services in areas which previously supplied with these items only sporadically. Often, these services were provided at subsidized rates. Some cooperatives were also able to establish systems of grades and standards, and improve drying methods for rice and packaging materials for vegetables.

In the Philippines, cooperatives were supposed to link all stages between production and urban consumers through the Cooperative Marketing System of the Philippines. This cooperative marketing system failed because it was too complex, hierarchically organized. It proved too difficult to be managed by semi-government officials relatively inexperienced in actual marketing operations. Moreover, the top-heavy administration, with most its members in the capital city maintained poor contact with the member marketing cooperatives in the provinces.

In Indonesia, the cooperatives were linked to the National Fertilizer Company for its supply of farm inputs and linked to the National Marketing Agency for the delivery of milled rice to the national food security stock. In contrast to the Philippines, the absence of a national wholesale organization for cooperatives in Indonesia, allowed for a more decentralized system that could adapt better to regional market conditions in each of the provinces.

The local marketing cooperatives in both countries could
rarely rely upon their national and provincial cooperative marketing organization. Also the multi-commodity orientation, and even multi-purpose orientation (credit, marketing, processing, farm input supply etc), of many marketing cooperatives, have added to the complexity of managing the cooperative marketing systems.

5.4.2. How have cooperatives contributed to vertical coordination in the food system?

Cooperatives in both countries have tried to assist in better matching of the supply of farm products to the urban demand for food crops. However, this coordination function has not been well implemented due to the hierarchical structure of the cooperative marketing system, and the inadequate vertical coordination between the different stages in the food marketing system. Efforts to coordinate economic activities through cooperatives have been more successful in Indonesia than in the Philippines. This is especially true for the provision of farm inputs, because until a cooperative marketing agency entered West Pasaman, farmers could not rely on the supply of fertilizers and agro-chemicals from the few private traders. The timely delivery of farm inputs by cooperatives has supported the successful introduction of high-yielding rice varieties.

In the Philippine case, with a small number of market outlets assured by the national cooperative marketing system, the urban based wholesale cooperative could not absorb all the farm
produce farmers were willing to provide. However, by making use of improved market information, cooperatives were able to sell small quantities to other market participants.

In Indonesia, the high standards set by BULOG and a strict quality control forced many KUDs to sell rice below the guaranteed price in the open market.

A cooperative-organized market information system in both countries assisted farmers to make their own planting and marketing decisions assuming private traders would buy their products based on actual wholesale prices, even if the marketing cooperative could not purchase their produce.

Productivity in the whole food system in both countries has probably been only slightly improved as a result of producers being able to make use of the cooperative's price and market information system. Farmers used this information service to strengthen their individual bargaining positions and used it to sell their produce to private traders.

An ideal single criteria for measuring productivity of the food system is the real delivered cost of food to the consumer after deducting of the cost of any subsidies involved. However, the quantitative data is not available to verify the observation that productivity in the food systems may have been increased.

In both countries, cooperatives have failed to assist farmers in marketing their farm produce to wholesalers and retailers. Farmers continue to depend on the traditional traders.
5.4.3. Has improved coordination in the food system been achieved?

Some improved coordination was probably achieved through the use of cooperatives as an institutional mechanism for market exchange and price setting. The use of the cooperative price and market information services has helped market participants to make more informed decisions on production and marketing of their produce, even though the private sector remained the main trading channel.

Coordination was also improved by cooperatives' efforts to vertically coordinate markets through administrative linkages. For example, these efforts sometimes enabled marketing cooperatives to enter into a supply contract with an urban supermarket or other institutional buyer such as a hospital or hotel. Bulk purchases at discounted prices, from fertilizer companies or regional distribution centers are another form of improved coordination in the food system facilitated by cooperatives.

In general however, the mix of market-price coordination and administrative action was not the appropriate. Many marketing cooperatives could have performed much better if they had developed their own market outlets and created their own trading funds to conduct operations. Marketing cooperatives might have performed better if they had been better coordinated with the private sector. For example, a cooperative could take over the assembly function, but leave the wholesale and retail functions to private traders.
5.5. Policy Implications

This research indicates that participation of government-organized cooperatives in food marketing had both positive and negative aspects. At a time when cooperatives and cooperative marketing systems are under increasing attack, it is important to recognize their positive contributions to the achievement of the national policy goals in the two countries.

In spite of the CMSP's and PUSKUD's operational inefficiency, poor financial situation, unequitable treatment of members and slow progressiveness, the cooperative marketing system has been instrumental in increasing rice and other food crop production through a heavily subsidized farm input supply system. However, due to increased participation of private traders in the farm input supply system, cooperatives should now reconsider their future role in this field.

Achieving a satisfactory compromise between goals of rural development, cooperative development, and food system development, will almost certainly require some form of joint action (market integration) between the government, cooperative, and private sectors.

The results of this study contain three major policy implications. These are discussed below.

5.5.1. Redefining the role of the government in cooperative and rural development

Governments need to treat cooperatives as non-protected
trading partners in the food marketing system. They can provide a mechanism for effective vertical coordination--linking producers, assemblers, wholesalers and retailers. Moreover, they have the potential to become innovators in the food system.

The role currently played by cooperatives and governments should be changed as indicated below.

1. Increased participation of private traders in the food marketing system should be encouraged, and cooperatives should become fair competitors without extensive government protective measures. Government could actively facilitate private-sector development by providing public services such as constructing or rehabilitating farm-to-market roads, creating strategically located assembly-wholesale markets, developing grades and standards for farm produce according to consumer preferences, providing market and price information, and providing training and credit facilities to all market participants.

2. Governments need to limit their control over the cooperative system and delegate much of this control to a cooperative union. During the transition period, the government can play the role of a training institute, but should stay out of the operational aspects of the cooperative. It should also reduce its intervention into the food marketing system, allowing the market to work more efficiently, while giving cooperatives a chance to compete in the market place.
In redefining the role of government in cooperative and rural development programs, the public services should be emphasized, while encouraging a "de-officialization" approach to cooperative development, management and marketing. The government remains responsible for setting development targets and safeguarding the achievement of the national development objectives. However, in its role as public service agency, the government should encourage and support community initiatives, local cooperatives and private traders in the wider scope of food system development.

5.5.2. Restructure the Cooperative Marketing System

A three-phase restructuring of the cooperative marketing system would allow for a more open and decentralized system of local marketing cooperatives in closer competition with the private sector. In the first phase, in order to improve the cooperatives' ability to achieve its objectives, the existing cooperative marketing system should be streamlined and adapted to the existing market conditions. Marketing cooperatives are encouraged to strengthen their membership base and develop a reliable local source of supply, while looking for suitable market outlets.

In a second phase, well-organized local cooperative marketing programs could be integrated into regional marketing systems. Only in a third phase, after regional integration has been achieved, is it expected that cooperatives can provide
assistance in improving national marketing system for food crops.

The Benguet AMC should coordinate with the private sector, especially in areas where they complement each other. For example, the marketing cooperative could be responsible for production planning and assembly stages, while the private traders handle wholesaling and retailing. An alternative would be for the Benguet AMC to search for its own market outlets. For example, it might set up a temporary wholesale organization to assist cooperatives, until the Cooperative Marketing System of the Philippines (CMSP) is able to service its members more adequately. The Benguet AMC should also attempt to reduce spoilage losses in vegetable trading by improving the packaging, loading and unloading of the perishable products.

The West Pasaman PUSKUD should coordinate more closely with exporters and wholesalers to market West Pasaman’s large volume of export crops, such as rubber, coconuts, coffee, cinnamon, and spices. Another problem the PUSKUD faces is that the surplus rice produced in West Pasaman cannot be absorbed by the National Marketing Agency (BULOG). The PUSKUD should, therefore, set up its own market outlets for its rice mill, as well as for the KUD rice mills, and contact large buyers to arrange sales of the areas surplus grain. Also needed, are improvements in postharvest handling, especially in drying, milling and storage of rice.

5.5.3. Reconsider the basic foundation of cooperatives

The basic foundation of the government-promoted cooperatives
needs to be reformulated to allow for more participation in cooperative development based on self-help and local initiative. The by-laws of the cooperative should encourage local decision making and create independence from government funds, equipment, and managerial and educational assistance. These support services should be provided by cooperative apex organizations—not the government.

To promote participation at the village level, government needs to treat cooperatives as local institutions, not as government instruments for rural development. Local participation should not be limited to decision making by cooperative members and leaders, but should also involve planning and implementation of community projects, depending on the needs expressed by the members. Furthermore, cooperatives should be responsible for assisting farmers with needed farm inputs, credit and marketing of their products.

The government also need to divest itself of decision making and managerial functions in local cooperatives and should stay out of election procedures at general assembly meetings. The decisions of the cooperative's general assembly, approved by all members, should regulate the cooperative. The elected board of directors should be respected as the representative body of the members responsible for guiding the management of the cooperative, and guidelines from the Department of Cooperatives should not be taken as orders.

Promoting the cooperative, encouraging members to save and
educating the members, is a task of the board of directors. The board of directors, on behalf of the members, and not the government, should provide management guidelines to the cooperative's manager for implementation.

Finally, cooperatives should be allowed to initiate business activities where the members or board of directors see a profitable enterprise that can provide a needed service to the members. Managers and boards of directors should decide on business activities. Government loan agencies or cooperative extension officers should play only a supportive role in such decisions.

The government's major role ought to be to facilitate private sector development and to ensure that its assistance is effective to attain the national objectives for development in the field of food marketing systems, cooperative development and rural development.

Governments, agricultural marketing cooperatives and other private sector participants need to improve the existing food marketing system by operating more effectively together, so as to better serve both the urban and rural consumer and the rural producer. To obtain such improvements there must be a clear distinction between the public service activities of the government and the operational activities of cooperatives and other private sector entities in the food system.
5.6. Organizational and Operational Recommendations for the Development of Marketing Cooperatives in the Two Countries

5.6.1. Membership Support and Capital Accumulation

In both countries, membership support is weak, especially in the attendance of meetings and payment of membership dues. An extension program organized by the Board of Directors could inform the members on the activities of the cooperative and emphasize the need for active member involvement. However, cooperatives need to acquire capital to improve services to their present members, before new members can be recruited. Only improved business performance of the cooperative and the provision of adequate services to the members can increase farmers' sense of belonging to the organization.

Efforts should be made to encourage self-generated savings by offering attractive investment-with-interest opportunities for members who pay their regular cooperative contribution. Action must also be taken to improve members' confidence in the cooperative. Managers and cooperative leaders should not take personal advantage of cooperative funds at their disposal. Here, the Board of Directors need to be educated on their supervisory role. If needed, the government can suggest an external audit of the cooperative.

In both countries, secondary cooperatives have liquidity problems. Collection of accounts receivable from members and non-members should have the highest priority in the financial management of the cooperatives. Cooperative leaders should settle
their credit with the cooperative before any regular member is approached for collection. Moreover, cash trading needs to be emphasized, as the cooperatives are not in a position to extend credit to their members.

Other measures for improving the financial position of the marketing cooperative include, increasing the volume of sales, reducing overhead costs, making more efficient use of available trucks, reducing postharvest losses and spoilage and minimizing marketing costs, by utilizing fuel-efficient transportation and organizing return loads.

5.6.2. Training and Education

The performance of marketing cooperatives is directly related to the training and education investment in human resources. Therefore, high priority should be given to the training of cooperative directors, managers, members of the audit and inventory, training and education committees of the SN and AMC, and members of the supervisory and credit committees in the KUD and PUSKUD. Well trained boards of directors are better able to explain the functional aspects of the cooperative to the members, and explain how members can contribute to the success of the enterprise. Also, cooperative employees, such as bookkeepers, rice mill operators and fertilizer storekeepers, should receive adequate job-specific training, as well as having a general background in cooperative principles and practices.

On the primary cooperative level (SN/KUD), priority should
be given to membership training that includes subjects like structure and place of the primary cooperative in the cooperative network, basic cooperative principles, rights and duties of members, and the purposes of different savings funds. Leaders' initial training may relate to the duties, responsibilities, functions and tasks of the board of directors. In a later stage, attention can be given to cooperative marketing and management, farm input distribution, fund raising, bookkeeping and accounting.

On the secondary level (AMC/PUSKUD), attention should be given to the administration and finance divisions, the procurement and market operations division, and the general coordination between the divisions in the marketing cooperative. Further training is needed in bookkeeping and accounting, cooperative management, marketing strategies and inter-cooperative trade. Managers of marketing cooperatives should be able to make their own business plans and prepare feasibility studies for new operations.

Field demonstrations of high-yielding seeds, new fertilizers, agro-chemicals, the use of threshers in harvesting, improved handling techniques, processing and storage for farm products may be conducted through joint training sessions between the cooperative and agricultural extension services. Technical marketing training may deal with market research, market development, product handling, grading, classification, postharvest technology, use of price and market information in
procurement decision making, organization of collection centers and packing sheds, and the operation of rice mills. This type of training may be conducted by experienced managers of outstanding cooperatives or external consultants.

Training programs may be carried out by national, provincial and local government cooperative training centers. However, the secondary cooperatives also have an obligation to disseminate information to their members. At the primary level, the best trainers are the board of directors and the manager themselves, although government funds and external consultants may be assist in implementing some of the more technically oriented training programs.

5.6.3. Cooperative Market Development

In both countries, the marketing of farm products requires improved management, organization and infrastructure at the primary level (SN/KUD), as well as on the secondary cooperative level (AMC/PUSKUD).

The Philippines needs to emphasize production planning, input supply organization, and create a network of collection centers to assist procurement operations. At the same time, the cooperatives need to contact wholesalers who can distribute large volumes of fresh fruits and vegetables to the Metro Manila area or other major market outlets.

In Indonesia, attention should be focused on improving the quality of rice, upgrading existing milling facilities and
organizing the supply of individual farmers to the KUD or PUSKUD rice mills. If cooperatives cannot meet the BULOG standards, they should improve their procurement, drying and milling operations, while at the same time developing their own market outlets and contacting local traders who can distribute farm products outside the working area of the cooperative.

Updating available marketing plans can strengthen a cooperative’s operations and will be the basis for the improved performance of the marketing cooperative. Regularly held board meetings can provide policy and management guidelines to the cooperative manager.

Effective vertical coordination in the food system will create conditions where markets transmit production incentives to farmers, while food costs remain at a relatively low level due to competition from other sources of supply. In both countries, there is a need for improved vertical coordination between primary cooperatives and secondary cooperatives.

In the Philippines, there is need for improved coordination between the provincial AMCs and the CMSP, the wholesale organization for marketing cooperatives. In Indonesia, contacts from KUDs and PUSKUD with BULOG, the national grain marketing organization, could also be improved. Effective use of radio communication facilitates market exchange and price information leading to better coordination in the food system.

Contacts with the private sector firms could be channelled through the Marketing Assistance Center, or through direct
contacts between the cooperatives and wholesalers in the two countries. Cooperatives should concentrate on crop monitoring, price information and assembly marketing functions and make contracts with existing wholesalers for the further distribution to processors, retailers and public market outlets.

There is also great potential for improving efficiency in the use of cooperatively owned or rented equipment such as trucks, rice threshers, rice mills. Better use of available storage facilities and an effective control over stocks are part of improved business performance.

Priority areas for Philippine cooperatives financing include improvements in procurement, packing, handling and storage facilities, and the development of transportation and markets. However, prior to releasing marketing or restructuring loans, the CDLF should conduct feasibility studies at such projects. Indonesian cooperatives should concentrate on providing the necessary working capital for cooperatively owned rice threshers and rice mills, and construction of adequate drying and storage facilities. A feasibility study is needed before funds are released by the LJKK.

More flexibility is desired in the use of borrowed funds. Allocated funds can only be used for a single cooperative enterprise, which is often not the most profitable one throughout the course of the whole year. For example, a marketing loan made to Benguet AMC cannot be used to upgrade the quality of its vehicles and the rice procurement credit funds in West
Pasaman cannot be used for the marketing of tree crop products in the area. Additional liquidity and net savings that eventually lead to increases in working capital, could be obtained through the organization of other income generating activities.
APPENDIX A

LIST OF PROJECT PUBLICATIONS
FAO Project PHI/76/001


8. "Role of SN’s and its Members". Paper, (Ooyen, 1979a)

9. "Role of Education and Training Committee Members of the SN". Paper, (Ooyen, 1979b)

10. "Fruit and Vegetable Market Information". Paper, (Ooyen, 1979c)


APPENDIX B

LIST OF PROJECT PUBLICATIONS
GTZ Project IND/79/2149.7


2. "Development of Water Users Associations (P3A) and Village Level Cooperatives in West Pasaman for the year 1983/1984." F-10 Budget Proposal, (Vergroesen, 1982)


21. "Post Harvest Handling of Rice in Talu, West Pasaman; A case study of rice from Koperasi Unit Desa Talu, Kecamatan Talamau." Technical Paper in cooperation with the Agricultural Research Station (BALITTAN) in Sukarami (Yulmar Jastra/Vergroesen, 1985)


APPENDIX C

Balance Sheet Benguet AMC (in Phil.Pesos)
per December 31, 1980. (1US$=P 14)

<table>
<thead>
<tr>
<th>Current Assets</th>
<th></th>
<th>Current Liabilities</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>cash on hand</td>
<td>128.80</td>
<td>acct payables trade</td>
<td>527,629.27</td>
</tr>
<tr>
<td>petty cash</td>
<td>1,500.00</td>
<td>other payables</td>
<td>133,529.19</td>
</tr>
<tr>
<td>due from officers</td>
<td>71,381.00</td>
<td>tax, medicare, others</td>
<td>16,892.00</td>
</tr>
<tr>
<td>acct receivables</td>
<td>537,873.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cash advances</td>
<td>15,242.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>inventories</td>
<td>94,875.84</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total cur. assets</strong></td>
<td><strong>719,401.14</strong></td>
<td><strong>Total cur. liabilities</strong></td>
<td><strong>678,650.46</strong></td>
</tr>
<tr>
<td>fixed assets</td>
<td></td>
<td>loans CDLF</td>
<td>500,000.00</td>
</tr>
<tr>
<td>acc. depreciation</td>
<td></td>
<td>Total Liabilities</td>
<td>1,178,950.46</td>
</tr>
<tr>
<td>other assets</td>
<td>212,133.68</td>
<td>Members Equity</td>
<td>(197,323.28)</td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td><strong>980,726.48</strong></td>
<td><strong>Total Liabilities and</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Members Equity</strong></td>
<td><strong>980,726.48</strong></td>
</tr>
</tbody>
</table>

Profit and Loss Statement (in Phil. Pesos) for the year ending December 31, 1980 (1 US$ = P 14)

Sales 640,426.19
Less: Cost of Goods Sold 555,531.29
Gross Profit 84,894.90

Less: Operating Expenses
  Salary and Wages 36,688.57
  Gas and Oil 35,587.75
  Rent 39,480.00
  Repair and Maintenance 10,327.82
  Subsistence Allowance 11,126.90
  Incentive Allowance 9,100.00
  Interest Expense 16,100.00
  Other Expenses (Postage, Handling, Education, Meetings, Services, and Legal Fees, Depreciation) 71,705.92

Net Loss from Operation (145,222.06)
Add: Other Income 4,742.74

Net Loss for the Period (140,479.32)

Source: Annual Report Benguet AMC, 1980
BIBLIOGRAPHY


Area Marketing Cooperative Benguet (Kilusan Bayan), Annual Reports 1976-1982, La Trinidad, Benguet, Philippines.


KUD Sumber Rezeki; Kajai; Talu; Sakato; Kinali; Annual Reports, 1982-1986. West Pasaman, ADP/PDP.


Vergroesen, A. Projects reports FAO/PHI/76/001 (see Appendix A) (1979-1981)

Vergroesen, A. Project reports GTZ/IND/2149.7 (see Appendix B) (1982-1986)


