RURAL BARANGAY TRANSFORMATION AND THE ADOPTION OF AGROFORESTRY INNOVATION IN THE PHILIPPINES

A Thesis Submitted in Partial Fulfilment of the Requirements for the Degree of Doctor of Philosophy in Sociology in the University of Canterbury

by

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Chapter Thirteen

Local Prevailing Conditions and the Initial Introduction of Agroforestry Projects: A Case Study in Linayasan

Map 5. Map of Barangay Linayasan.
13.1 Introduction to the Case Study in Linayasan

The Linayasan case study explores the introduction of agroforestry demonstration projects to encourage innovations in the existing orchard practices of local farmers. It was considered that an increase in fruit production would provide more income for orchard growers and local farmers. In rural barangays like Linayasan, fruit production was an important supplementary source of income for local farming families. However, a lack of management skills and the poor quality fruit trees meant the income produced from orchards was very low, especially those orchards located on hillsides or marginal land areas susceptible to soil erosion.

In Linayasan, the previous experience of the researcher of this case study showed that orchards had been one of the traditional agroforestry practices. The locals produced fruit for the subsistence of their families. The families sold some fruit and kept some for their own use. Linayasan locals grew fruit trees in small parcels of hillside land. Some developed orchards in their backyards, inter-cropped with other plants like cash crops, coconuts and trees for timber. In some cases, animals were also raised in the space between plants and that made the management of orchards complicated. A lack of technical and managerial skill in the management of orchard projects had been considered a significant reason why Linayasan farmers had not increased fruit production from their land.

In 1993, a review of previous project reports showed that ten years from the time that the College had established various demonstration farms for agricultural production in Sibalew, similar projects assisted by the ERDSC were established in Linayasan. The Center was one of the departments created during the reorganisation of the College in 1992. A review of the 1993 ERDSC Annual Reports indicated that the Center established the farmer-based demonstration projects in four barangays.

The selected barangays included barangay Polocate, located in the municipality of Banga. Barangay Rosario in the Malinao municipality were also selected. Odiong and Linayasan in Altavas were the final two barangays selected for the project. Farmer-based demonstration projects were established in those barangays based on the Center's mission statement. The mission statement declared that the Center was concerned to
assist disadvantaged families in rural barangays. The Center was committed to reducing problems related to poverty, unemployment and underemployment and juvenile delinquency amongst out-of-school-youth. Furthermore, there was an effort to address the low productivity and poor income-earning capacity of locals in rural barangays. The implementation of projects was funded by the Countrywide Development Fund, designed to help finance the Center to operate the ongoing non-formal education programme and the establishment of livelihood projects in the selected rural barangays in 1993.

Of the four barangays assisted by the Center, this case study will focus only on Linayasan. The establishment of agroforestry demonstration projects in Linayasan from 1993 to 1994 was part of a widespread assistance campaign by the Countrywide Development Fund in the province. In supporting the campaign, the Center endorsed the outreach projects established in Sibalew and existing demonstration farms were used as 'model farms' for technology transfer. Farmer co-operators from other barangays visited Sibalew and sought information to improve their traditional farming methods and existing agroforestry practices in their barangays.

In 1998, the findings of the case study in Linayasan suggested that the initial results of the agroforestry demonstration projects were not sufficient to encourage local farmers to change their existing methods in orchard production. Interviews with locals revealed that farmers needed more assistance to improve their existing orchards. Linayasan farmers considered that the funding and technical assistance provided by the Center was of a relatively short duration and inadequate to produce income and train owners in proper management techniques.

An analysis of the case study findings indicated that there were many interrelated aspects associated with the establishment of projects that had not been thoroughly examined during the planning stages of the development. These issues were crucial for the success of the projects and important to the locals but were not examined thoroughly, if at all. The lack of a 'benchmark survey,' meaning an initial survey, on social and technical aspects prior to the introduction of the project led to difficulties. The survey could have identified some of the problems and needs of locals, as well as being a useful measure of subsequent progress once the projects were established. There were distinguishing characteristics in Linayasan which were absent from Sibalew. Linayasan had particular
problems to circumvent and used Sibalew as the model of technology transfer, but the situations of the two barangays were markedly different. Those issues are examined in this case study. Results of this case study will be used in the discussion in the final chapter of this thesis.

13.2 Objectives of the Linayasan Case Study

The primary objective of this case study was to examine the initial results of the introduction of agroforestry demonstration projects in Linayasan from 1993 to 1995. The examination was undertaken in two parts. First it was necessary to conduct fieldwork in Linayasan. The second part was to assess the results of the demonstration projects of Linayasan locals. The purpose of the fieldwork was to examine the condition of the demonstration projects, as they existed at that time. In particular, part of the fieldwork time was spent in conducting interviews and group discussion with locals, to elicit their opinions and perceptions on the use of contour hedges in hillside orchards. Time was also allocated to seek the response of locals concerning the asexual propagated fruit trees used in the demonstration projects.54

The case study also examined important aspects of the potential for local Linayasan development. This was undertaken through descriptive discussions of barangay profiles, features, local livelihoods and other sources of income for locals of Linayasan. The analysis of the discussions was used to interpret the results of the agroforestry demonstration projects. In this manner those aspects important for the economic development of the Linayasan locals were emphasised. Other, less obvious or apparent elements crucial for the establishment of demonstration projects were also evaluated. Analysis of the results of this case study will be used in the discussion section in the final chapter of this thesis.

54 The reason the Center introduced hedgerows and new plants was to encourage Linayasan locals to improve existing agroforestry practices in the orchards of Linayasan locals.
13.3 Overview of the Case Study

Chapter Thirteen is an introduction to the barangay of Linayasan, which described the process of how this case study was conducted in this barangay. This chapter presents the main objectives of this case study that have been described above. This overview provides information on the structure of the Linayasan Case Study as presented in this work. The geographic location of Linayasan is described and the fieldwork involved is discussed.

Chapter Fourteen provides a profile of Linayasan. The discussion is divided into eight sections. Following this introduction, section two describes the location, population and levels of education in Linayasan; section three describes the income and social structure of the barangay; occupations and employment are presented in section four. Section five discusses barangay governance; section six highlights the religions and fiesta and section seven examines local utilities and social services. Section eight, the last section, is a summary of the chapter illustrating issues and problems related to the introduction of agroforestry projects in Linayasan.

Chapter Fifteen examines the features of Linayasan. This chapter contains six areas of discussion. It begins with a description of the physical conditions, the land use and access to resources. Access to resources outside the barangay is described in a separate section. Following this is a description of the local trading and transport utilities; local land tenure practices and gender activities are all discussed separately. Finally, the last part of this chapter is a summary of the subjects discussed.

Chapter Sixteen discusses the local livelihoods and other sources of income that existed in Linayasan. The discussion is divided into two areas. Following the introduction, the rice farming and fishing industry are described in separate sections. After those two industries are described, other sources of income are discussed including kaingin; coconut plantations; homegardens, raising animals and backyard orchards. All of these are discussed separately. A summary of the discussion covered within this chapter is presented which shows that local livelihoods and other sources of income that existed in Linayasan need to be considered to ensure the success of the agroforestry projects introduced in Linayasan.
Chapter Seventeen presents the results of the fieldwork of the case study that examined the agroforestry projects assisted by the Center in Linayasan. The examination focused on the response of Linayasan locals regarding the technology introduced in the demonstration farms to encourage innovation in the existing agroforestry practices of locals. The issues and problems associated with the establishment of demonstration farms are also examined. The discussion in this chapter is organised into seventeen sections. The topics discussed within this chapter include: the reorganisation of the College extension programmes; the recent system of extension programmes and the demonstration projects; the concepts and status of income-generating projects in Linayasan and the selection criteria for recipients of income-generating projects.

This is followed by a discussion of accounts from Barangay Demonstration Laboratory Instructors and accounts regarding SOAs. The next section describes the farmers in Linayasan and the more affluent and less affluent farmer co-operators are discussed separately. Next, accounts from Farmer Co-operators regarding their projects; roles of barangay officials; views from the representatives of the Municipal Government; the change in the management of projects and the insights by the locals from the limited assistance in Linayasan are all discussed in separate sections. The last section is a summary of the subjects discussed within this chapter and highlights how limited assistance to the agroforestry projects in Linayasan over two years has yielded limited the results for the locals.

Chapter Eighteen summarises the main points discussed in this case study. It begins with a condensed discussion of the results of the implementation of the agroforestry projects assisted by the Center over two years in Linayasan. A brief description of other aspects examined in Linayasan that the Center had overlooked prior to the establishment of agroforestry demonstration project follows. This covers the barangay profile, features, local livelihoods and other sources of income that had been examined in Linayasan. Finally, the discussion concludes by highlighting the significance of controversial issues and complex problems experienced by the Center and locals in Linayasan in their agroforestry demonstration projects.
13.4 Fieldwork and Associated Issues

Like the fieldwork procedures applied in the Sibalew case study, the main purpose of the fieldwork conducted in Linayasan was to examine the results of the agroforestry demonstration projects assisted by the Center in the period 1993 to 1995. The fieldwork was undertaken for a period of two months, from May to June 1998. During this time, the researcher stayed in Linayasan.

The local key informant, who was the tour guide during the fieldwork, was identified by the researcher from the names of locals recommended by barangay officials. This process allowed the researcher to view the culture of politics in the case study barangays. In the fieldwork, the researcher acknowledges that relying on key informants could eventuate in biased information. However, in some respects, the “full exploitation of insights from key informants”...from their...“previous experiences gives them particularly valuable information on a given topic” (Moris and Copestake, 1993: 58). The information given by the key informants was incorporated into the discussion of the case studies. In this barangay, the fieldwork involved three stages. However, the activities in the barangay were difficult to distinguish clearly as stages; there was considerable overlapping and intermingling.

The first stage of fieldwork activity was when the researcher conducted field observation/investigation around the barangays with the assistance of a local guide. Basic information was gathered during the field observation, from discussions with the guide, and other Linayasan locals. The discussion covered the local land use system, crops grown in the barangay, livestock raised by the locals, local markets and other aspects related to the livelihood of locals. Interesting aspects related to the social, economic, cultural and political situations were also discussed with locals.

In the second stage, the researcher conducted interviews with different groups of people, participating in informal group discussions, attending meetings and visiting agroforestry demonstration projects. The current situation of the demonstration projects and various aspects associated with the establishment of this project were discussed with farmer co-operators and other Linayasan locals. Interviews were conducted with farmer co-operators who related how they had become involved in the projects. They discussed
their experiences, how they had participated and the tasks they had performed in the demonstration farms. Informal discussions were conducted with farmer co-operators and other locals about the outreach activities of SOAs in Linayasan.

As well as interviews, the second stage of fieldwork involved observations of the everyday activities of locals: on the farms, at the sports center, working and shopping in the local public market, making purchases in stores and going about their everyday domestic chores. Locals tended to congregate near the artesian wells where they engaged in washing, drawing water for household needs, and socialising. Observations were also conducted on the various livelihood activities of locals, such as kaingin, coconut plantations, homegardens and orchards. Other observation noted the roles and behaviours of local families engaged in fishing or raising animals. During the observations, locals were asked various questions as a way of entering into discussion with them. They mentioned interesting issues and aspects of their traditional farming practices and also described previous livelihood projects.

Finally, in the third stage of fieldwork the researcher engaged in informal discussions with barangay officials, instructors and Center staff regarding their experiences in Linayasan and other barangays where they established demonstration projects. Other aspects discussed with barangays officials included opportunities and training in relation to employment, sources of income, local religious activities, ritual practices in farming and, finally, barangay politics.

Informal discussions and interviews were also conducted with officials from the municipal offices of the Department of Agriculture and the Municipal Agrarian Reform Office. Some officials who worked in the Municipal Town Hall were also interviewed. The discussion focused on social, economic, cultural and political interference in the development of projects, particularly in rural barangays. Aspects of the rural development projects introduced by the government were also discussed. Opinions were also elicited from those officials regarding the results of the demonstration projects assisted by the Center in Linayasan.

Because of unforeseen circumstances, as had occurred in the Sibalew case study, the researcher was unable to rigidly adhere to the original plan in the research proposal for
Linayasan. The national election on May 11, 1998 was a major event that interrupted the routine of the peaceful social environment of the country. In Linayasan, tension was apparent in the whole barangay. The stress was particularly evident in the candidates and their supporters before and after the day of the elections. There were various rumours, gimmicks and other tricks observed that threatened the social harmony of the communities. This atmosphere also affected the results of interviews with locals who were too preoccupied with the election to concentrate on the issues being discussed. For example, in group discussions and interviews the locals preferred to discuss topics related more to politics than farming.

In interviews with barangay officials, politics was always a large part of any discussion. The researcher experienced difficulties when trying to limit discussion with locals to the subject of demonstration projects or other issues concerning the development of their barangay. The national election also created some tension for the researcher while staying in Linayasan due to the volatile disposition of the locals during the pre and post-election period. The unsettled nature of the locals challenged the researcher. The electoral event led to the scope of the investigations being broadened to include various aspects associated with the introduction of agroforestry projects in Linayasan. Several issues emerged during the national election that had a significant impact on the lives of the locals, as well as on the projects of the government in rural barangays, especially in the two case study barangays.

As well as a national election, the researcher also observed various cultural activities like the local fiesta, spontaneous parties, formal and informal social gatherings and private family celebrations. This provided additional information for the researcher on widely practiced cultural activities. Similar cultural practices had been observed in Sibalew. Another event that was significant for the researcher that occurred during the fieldwork in Linayasan was a serious motorcycle accident. The accident was also discussed with the locals and this provided valuable information in regard to other matters that existed in Linayasan.

At the conclusion of the fieldwork, the tape-recorded interviews and the accounts from informal interviews, field notes on the group discussions and the notes made during the observations were analysed and discussed back at the University of Canterbury in
Christchurch, New Zealand. The purpose of the analysis of the discussions and notes was to describe the results of the agroforestry demonstration projects in Linayasan. The analysis would also assist in the identification and clarification of controversial issues and to understand and articulate the complex perceptions stated by various actors during the fieldwork. Several manuscripts were composed and discarded to clarify and consolidate the ideas, issues, suggestions and concerns presented by various actors involved in the projects.

In the initial discussions, the results of the investigations revealed that demonstration projects had attained only limited results. Moreover, many local farmers had not adopted the technologies introduced, such as the hillside contour hedges and fruit trees because there were some arguments over them. Some Linayasan locals insisted that they were not interested in adopting the orchard system income-generating project promoted by the Center in their barangay. Such replies from locals broadened the scope of the investigation of this case study.
14.1 Introduction

This chapter provides a profile of Linayasan. The discussion is divided into eight sections. Following this introduction, section two describes the location, population and education in Linayasan; section three describes the income and social structure of the barangay; occupations and employment is presented in section four. Section five discusses barangay governance; section six highlights the religions and fiesta and section seven examines local utilities and social services. Section eight, the last section, is a summary of the chapter illustrating issues and problems related to the introduction of agroforestry projects in Linayasan.

14.2 Location of Linayasan, Population and Education

To reach Linayasan from Manila takes forty-five minutes by plane to Kalibo airport, on the island of Panay. Passenger buses or jeepneys take one hour to travel from the airport to Linayasan, which is located along the national road, close to coastal areas about five kilometres from Poblacion. Linayasan has a total land area of 303.47 hectares. In the 1995 survey, Linayasan had a total population of 1,445 people in 303 households (NSO, 1996: 1).

In 1998, the Extension Research Development Services Center (1998: 1-2) conducted a survey in Linayasan which claimed a total population of 1,690 people and 343 households. There was an increase of 285 people and 40 households respectively over the three-year period. Of this population, the Extension Research Development Services Center report indicated that 49.2% (832) were male and 50.8% (858) were female. The

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55 According to the locals the name of this barangay came from a couple who lived there hundreds of years ago. They had no children and lived happily with the natural environment. However, for an unknown reason, the women left her husband without leaving any notice umalis na walang paalam. Thus, the barangay was named Linayasan that means 'deserted'.

56 Based on 1995 records of the Department of Agriculture Office, Municipal of Altavas, Aklan.
average family size was about 6 people in each household and extended families were
common in the households (ERDSC, 1998: 1-2). The average annual growth rate of
1.23% was similar to the provincial reports, but lower than the national annual growth
rate of 2.32% (NSO, 1997).

The children in Linayasan have access to free primary education. They also have access
to high schools or, later, colleges, dependent on the economic well being of parents.
School expenses such as tuition fees, books, and living allowances for food, board and
travel are costs parents must attend to. But because of the lack of employment in this
barangay, the less affluent families struggled to make a living and only more affluent
families or those who had a stable income could afford to send their children to college.
The majority of the children of less affluent parents study to high school level only.
Some of them do not complete high school, but go into the cities to find jobs as factory
workers or shop assistants.

Table 2. Distribution of Highest Grades Completed by Locals of Linayasan.

<table>
<thead>
<tr>
<th>Highest Grade Completed</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not of School Age (Below 6 Years Old)</td>
<td>211</td>
<td>12.5</td>
</tr>
<tr>
<td>No Formal Education</td>
<td>25</td>
<td>1.5</td>
</tr>
<tr>
<td>Primary School Unfinished (on-going)</td>
<td>264</td>
<td>15.6</td>
</tr>
<tr>
<td>Primary School Unfinished (drop-out)</td>
<td>259</td>
<td>15.3</td>
</tr>
<tr>
<td>Primary School Finished</td>
<td>133</td>
<td>7.9</td>
</tr>
<tr>
<td>High School Unfinished (on-going)</td>
<td>138</td>
<td>8.2</td>
</tr>
<tr>
<td>High School Unfinished (drop-out)</td>
<td>130</td>
<td>7.7</td>
</tr>
<tr>
<td>High School Finished</td>
<td>213</td>
<td>12.6</td>
</tr>
<tr>
<td>Vocational Unfinished (on-going)</td>
<td>5</td>
<td>0.3</td>
</tr>
<tr>
<td>Vocational Unfinished (drop-out)</td>
<td>51</td>
<td>3.0</td>
</tr>
<tr>
<td>Vocational Finished</td>
<td>59</td>
<td>3.5</td>
</tr>
<tr>
<td>College Unfinished (on-going)</td>
<td>52</td>
<td>3.1</td>
</tr>
<tr>
<td>College Unfinished (drop-out)</td>
<td>132</td>
<td>7.8</td>
</tr>
<tr>
<td>College Finished</td>
<td>17</td>
<td>1.0</td>
</tr>
<tr>
<td>Post College</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>Total</td>
<td>1,696</td>
<td>100</td>
</tr>
</tbody>
</table>

Note: * Missing data, this table represents the students in one year only. Sources: ERDSC (1998:
5) Community Profile: Barangay Linayasan, Altavas, Aklan.

The Extension Research Development Services Center survey (Hereafter: ‘The Center’)showed that the majority of local people in Linayasan had a formal primary education
and the majority completed high school. The survey indicated that only 17 of the total
population had completed a college degree. In 1998, interviews with locals during the
fieldwork revealed that there were professionals from this barangay such as engineers,
dentists, accountants, nurses and lawyers, but they were employed in Manila. The schoolteachers, clerks and employees in the municipal offices were the only people in Linayasan who had an academic degree. It could be suggested the migration of professionals to seek employment in urban areas depleted the human resources from this barangay and slowed down its development.

14.3 Income and Social Structure

In Linayasan, the population consisted mainly of subsistence farmers, tenant farmers, fishermen and labourers. There were a small number of semi-skilled labourers, professionals, government employees and overseas contract workers. There were very few employed people. The majority of locals were poor with an income below the minimum national standard of living level of the country. Interviews with local farmers claimed that their income ranged from PhP2,000.00 to PhP5,000.00 or US$51.41 to US$128.53 per month. But very few of them had an income of PhP5,000.00 per month. Many locals also received an allowance from their children abroad, triple the rate of the highest income mentioned above. The number of families who had local businesses, fishponds or remittance of money from children abroad made the economic condition of Linayasan locals more diverse than Sibalew. Few Sibalew locals had relatives in abroad.

In 1992, the percentage of the population existing below the poverty line in the Philippines was about 81.1% of 62 million Filipinos. The poverty threshold for the Philippines was PhP6,420.00 (US$249.70) per month (Espiritu et al., 1995: 146). This figure was reported six years ago. However, when the fieldwork was conducted in 1998, Linayasan farmers revealed that the owners of trading businesses, fishponds and coconut plantations were affluent families with more access to economic opportunities in the barangay. This group of families employed some locals as helpers to run their business or farm.

57 There was an average exchange rate of US$1=38.90 pesos in 1998 (Europa Publications, 1999: 1031).

58 There was an average exchange rate of US$1=25.71 pesos in 1995 (United Nations, 1997: 295).
The more recent reports from National Statistics reports show that the Filipino families have an average annual income of PhP123,881.00 ($US4,203.63) (NSO, 1998: 1-4). Out of this income, the National Statistics indicated that the major expenditures of the Filipino family were 43.9% for food, 15.4% for housing, 5.6% for transportation and communication; 5.3% was spent on household furnishing and equipment and 3.7% went to education. However, this annual income was different from rural areas. Previous statistical records indicated that the average annual income of people living in urban areas was 47% higher (PhP113,121.00) than those in rural areas (PhP53,483.00) (1997 Philippine Yearbook: 2-14).

In the Aklan region, where this case was executed, the Provincial Food Security Plan indicated that the province had 36.80% poverty from a total population of 410,539 people based on the 1995 census (Provincial Food Security Plan of Aklan, 1999: 8). But this figure was not realistic when compared with accounts from interviewed locals, because there were deficiencies in recording of data between municipal and provincial level. Those households who had members working in government or had businesses were receiving higher incomes. In Linayasan, there were significant differences in the standards of living between the more affluent and less affluent families. Such differences could be discerned by the benefits that the ownership of land brought: the types of houses and household appliances that people had. The levels of education and positions occupied in organisations were also indicative of class differences.

The more affluent and less affluent families were more easily distinguished in Linayasan in any comparison with Sibalew families. In general, the literature indicated that the more affluent families dominated the rural economy. In Linayasan, it was apparent that the more affluent families not only dominated the local business, but they also had more access to local employment. The majority of those employed in government offices came from affluent families. The more affluent families in Linayasan enjoyed the rural lifestyle. They employed some locals to do the work they did not want to do. Some locals interviewed considered that the more affluent families in Linayasan were more fortunate
people than those in urban areas who earned an income of PhP123,881.00 ($US4,203.63).\(^5\)

This was because of their economic advantage and their inherent power over other locals in the barangay. Most of their houses were located along road sides with easy access to electricity and business. The Center survey indicated that out of the 343 houses in Linayasan 55.7% (191) were made of nipa and bamboo, 25.7% (88) semi-concrete built with nipa, bamboo with wood and cemented floor and 18.7% (64) concrete and modern houses with a galvanised roof, a wooden structure and cemented floor (ERDSC, 1998: 12). These modern houses belonged to the more affluent families. The modern houses, the ownership of land and transport reflected the social identity of the more affluent families in Linayasan. Most of them owned a jeep or motorcycles for transport. A forty-five-year-old laundry woman explained during her interview how she viewed the more affluent women when she attended parties:

I had attended various social parties, not as a visitor, but I helped the family to prepare for their occasions: birthdays, weddings and family reunions. At the party it was easy to identify the class the visitors belonged to. Usually, the visitors with a family background from the more affluent families were treated as special guests. They were served with special food and drinks such as *lechon kag benakal nga manok*, a roasted pork and chicken cooked inside a bamboo tube, which was different from the food eaten by ordinary people like me. Their fashionable clothes and jewellery also could distinguish these visitors. They would be wearing American styles showing a social identity to others. But I did not care who they were. I did my job washing dishes and cleaning tables. After the occasion, if there was food left over, I asked for some food to take home for my children.

Less affluent families consisted of small farmers, tenants, fishermen and labourers. This group of locals had limited access to any of the resources in the barangay. Many members of this group were landless, living in the traditional way on the farms of their relatives or their *amo*, the more affluent family who employed them. They had temporary houses: the floor was elevated one metre above the ground and made of bamboo with nipa-thatched walls and roof. Under the houses, domestic animal such as pigs, chickens, ducks and goats were kept at night. During the day these animals were grazed in the backyard. The less affluent families had few household facilities. Most of them had

\(^5\) There was an average exchange rate of US$1=29.47 pesos in 1997 (Europa Publications, 1999: 1031).
transistor radios and some had second-hand television sets given to them by their relatives who worked in Manila or abroad. These families used the passenger jeeps or buses to go to town to sell their produce on market days.

In the Philippines, according to Garcia (1994: 40), poor people were struggling to survive and lived with desperation. He mentioned that poor families wanted to have more children, first, to make up for those who might die of childhood diseases, and second to have extra hands to ensure family survival. Garcia's arguments are consistent with the opinions expressed by the less affluent families interviewed, who were asked how they perceived themselves as being poor in the barangay. The less affluent families mentioned that they were poor because they had limited access to better education, did not have a stable source of income and had little access to other resources. They also explained that the more children they had, the more chance there was for them to escape from poverty if their children had jobs to earn money and help them.

The relationship between the more and less affluent families was linked to the socio-economic, cultural and political economy. Panopio et al. (1994: 305) described social relationships in rural barangays as 'familistic:' a strong dependence on the family unit. They argued that a strong feeling of family loyalty can lead a lack of self-reliance and indifference to welfare institutions. They claimed that the "kin relationship is characterized by the traditional obligations and expectations" (Panopio et al., 1994: 305).

In relation to this, in Linayasan, young female family members from the less affluent branch of families, aged from five to fifteen years old, were employed by the more affluent members as house helpers or as 'school girls'. While the schoolgirl did the housework she also did her study. Household work was performed after school. The girls did not receive a salary but the affluent family paid for board, food and all school expenses such as tuition fees, books and allowances for travel. Her employer sometimes hired the parents of schoolgirls to repair their houses and to work on their farms. In a situation where there was sickness of a schoolgirl's family member, the employer was the main source of money to pay for hospital expenses. The parents of the schoolgirl usually repaid the money by labouring on the farm.
Hunt et al. (1997: 276) explained that rural life in the Philippines had been changing slowly toward urban lifestyles. But Hunt et al. argued that the rural barangay was still characterised by the traditional and personalised by the local people's strong connection to a kinship system. In Linayasan, the locals were strongly tied in such ways, although there were some people who had experienced city living, and had successfully embraced an urban lifestyle.

There were locals interviewed who claimed that the more affluent families had a more urban lifestyle than the less affluent families who, they considered, were still tied by reciprocity, the 'traditional obligation'. Less affluent families had limited chances of escaping poverty. Economic and social inequality coloured the lifestyle of locals in Linayasan by providing comparative identity. However, for the locals involved, Fiesta distractions were small enough compensations for poverty. Although there were locals who had adopted an urbanised way of life, the majority of Linayasan locals were closely tied to cultural practices that were based on religious doctrine.

14.4 Occupations and Employment

Farming and fishing were the two major occupations of locals in Linayasan. Almost 80% of working people were employed in these industries. Some of the less affluent families were engaged in fishing and fish vending and others, particularly the women, had sari-sari stores at home. The more affluent families were out-numbered in the barangay, but they were the source of capital for the less affluent families engaged in sari-sari stores or in retailing local produce, such as rice, copra, bananas, corn and other cash crops. Most of the family members who had a degree went to urban areas to find employment. Others went abroad to work as overseas contract workers. The money earned abroad was sent back to their family. The workers only returned to Linayasan during their holidays.

The Center's survey showed that out of 300 households, only 36.7% (110) of household heads had regular employment. The Center examined further the source of household incomes based on the occupation of local people in Linayasan. The survey showed that of the 302 respondents 26.2% (79) were farmers, 7.9% (24) fishermen, 32.8% (99) labourers, 9.3% (28) government employees and 2.6% (8) traders/small businessmen. Two households (0.7%) had professionals, for example, an engineer, nurse or chemist;
2.6% (8) were overseas contract workers and 13.9% (42) were semi-skilled workers (ERDSC, 1998: 7-8).

The Center also evaluated the source of income of other family members in Linayasan. Of the 724 family members engaged in different economic activities, 193 (26.7%) were labourers and 164 (22.7%) were semi-skilled workers, employed as drivers, mechanics, carpenters and dressmakers. There were 113 (15.6%) engaged in farming and 30 (4.1%) in fishing. The number of family members employed in government offices was 83 (11.5%) and those privately employed amounted to 60 (8.3%). Only 11 (1.5%) families had members practising in professional positions and 28 (3.9%) families had members engaged in small businesses. There were 25 (3.5%) families in this barangay who had members working abroad as contract workers or seaman (ERDSC, 1998: 9). But the survey did not indicate the number of unemployed local people. The reason was the diversity of livelihoods that the local people were employed in and the short period of the fieldwork for this study.

14.5 Barangay Governance

Like other barangays, Linayasan was administered by elected local officials. The barangay captain was the local chief executive, who worked with the members of Sangguniang Barangay or barangay counsellors who exercised their political power at the barangay level (see Nolledo, 1991: 162). Their main functions were administering the funds of the barangay, making local policy, and developing and implementing plans and policy made by the national government. The literature suggested that the leadership style of the local officials was significant to the success of the development projects introduced by external agencies (Rikken, 1993; Simpas et al., 1983; Sosmena, 1979; Simpas 1979). The Sibalew case study was an example of such claims.

The most distinguishing feature between the local officials in the two case studies was the political patronage that existed within each barangay. Interviews with Linayasan locals revealed that their officials were not as united as officials in Sibalew. The Sibalew officials belonged to a single party, while Linayasan officials were selected from several parties. Another difference was that most of the Linayasan officials were women, while in Sibalew the majority of officials were men. In Linayasan, out of the seven
Sangguniang Barangay members, five were women. In addition, the male barangay captain provided a "sluggish leadership role." Linaysan locals claimed that the women in this barangay were more active in community organisations. Women spent most of their time in the barangay while men were often engaged in work outside the barangay. This claim was related to the observation of the barangay officials during the sessions. Although women dominated discussions, the decision of the male officials, or the barangay captain, took precedence. It means that the participation of female officials thwarted by patriarchy.

Traditionally, members of families who belonged to the more affluent or upper classes were dominant candidates during national or local elections. The less affluent could be candidates but they were usually dependent on established politicians with influential power (Leones and Moralenda, 1998; Madigan, 1968; Simpas, 1979). Leones and Moralenda (1998) explained that the ordinary people, especially those from the middle or lower classes, did not usually want to involve themselves actively in politics for various reasons. They contended that one of the main reasons was their "cynicism towards politics as an instrument of genuine structural change" or the "highly hierarchical and paternalistic structure of Philippine society" (Leones and Moralenda, 1998: 334). Further, Leones and Moralenda stated that politically and historically, it was always the elite who controlled politics in the Philippines. They argued that from the outsiders' point of view, "politics is a road fraught with dishonesty, personal ambition, greed and other monstrosities" (Leones and Moralenda, 1998: 334).

An example of the truth of this statement was the observation made on the 11th of May 1998, during the national election when the fieldwork was undertaken in Linaysan. The people who belonged to the more affluent families were local leaders of different political parties. Their activities included putting up posters and going house-to-house to campaign. There were claims that local leaders received money from their parties to provide sufficient capital for campaign expenses. Some local leaders interviewed claimed that the election was not only for voting but also to provide some local people with employment to help their families' address pressing economic needs.

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60 Quoted from Linaysan Socio-economic profile 1998.
14.6 Religions and Fiesta

Another significant difference between the Linayasan and Sibalew case study was the different numbers of religions that existed in these two barangays. Although the majority of the population was Roman Catholic, there were religions that existed in Linayasan that were not actively practised in Sibalew. These were the Iglesia ni Kristo (10.4%), Seventh Day Adventist (1.1%), Aglipayan or Philippines Independent Church (5.1%) and a small number were Jehovah’s Witnesses (ERDSC, 1998: 4). The Centre survey showed that 83.4% of the population of Linayasan belonged to the Roman-Catholic Church, and a similar number existed in Sibalew. Three religions had established churches in Linayasan. These churches provided access for local people to practice their own religion. In Sibalew, there were only two churches. Both belonged to, and were exclusively for the Roman Catholic Church.

The religious leaders of the Roman Catholic Church had their own form of worship through mass on Sundays. Some leaders of other religious groups organised other activities. For example, some religions organised catechism lessons and ‘Couple for Christ’ prayer meetings aimed specifically at the more affluent families. These activities were a source of donations to help the poor. In the other religions the religious leaders organised bible studies, visited their members and went house-to-house convincing others to join their religion.

Panopio et al. (1994: 316) explained what religion meant to the rural people in the Philippines. According to Panopio et al. rural people viewed religion as a means by which they could pray for help in times of need and when confronting major crises. They observed religious rituals and ceremonies related to important events in their lives like baptism, marriage, death, planting and harvesting. The local people also saw that religion offered them an opportunity for socialising if they engaged in the local religious programme.

The fiestas have been the main religious event in the rural barangays. The literature indicated that there were four ceremonial activities in fiesta that were important to the locals. These were the baptism and confirmation of a child, marriage, birthdays and the feast of the Patron Saint (see Hunt et al., 1997: 281; Espiritu et al., 1989: 75). According
to Hunt et al. (1997: 281) the fiesta was a time of the year when friends and relatives from different places returned to the barangay to renew old ties and bring news and gossip from the outside world. Espiritu et al. (1989: 75) noted the significance of fiestas in the social structure. Its purpose was to "strengthen family loyalty and solidarity; serve to acquire new friends and allies; heal individual and group animosities and misunderstandings; serve to re-establish and strengthen the power structure; serve to display the new affluence and status of the host group." Similarly, Panopio et al. (1994: 316) explained that fiestas could be status symbols which meant the need for more lavish fiestas, and to have influential guests like higher government officials, whose presence brought higher status to the barangay.

The Linayasan barangay captain explained that their fiesta was celebrated in a manner similar to other barangays. In Linayasan, the locals celebrated the barangay fiesta on the 30th of November every year in honour of Medalia Milagrosa, the Patron Saint of the barangay. The local people undertook various activities in preparation, such as repairing, cleaning and decorating their homes. He explained that new curtains, cushions and the best chinaware, even some that had not been used, were brought out to emphasise the importance of the celebration. Like the claims from other sources, the barangay captain also mentioned that celebrating fiesta brought advantages and disadvantages to the lives of local people. The barangay captain explained that family reunions and renewal of spiritual obligations were important aspects of the fiesta in the barangay. The fiesta also involved social, religious and political activities.

Despite the fact that the fiesta had social significance in the barangays, authors criticised the barangay fiesta celebration. Panopio et al. (1994: 317) explained that fiesta could "have an economic dysfunction as it can be a drain on the economic resources of the members of the community." It constituted a "waste of time and money" (Hunt et al., 1997:281). According to Espiritu et al. (1989: 75) the Filipino incurred debts by borrowing money that was difficult to pay back just to host the party. They explained that the celebrations of the fiesta required long planning and the expectation of it provided an emotional and psychological satisfaction "that enable the people to bear the drudgery of their lives with resignation and acceptance until the next fiesta" (Espiritu et al., 1989: 75).
The Linayasan barangay captain argued that the celebrations were changing because people were only interested in social activities such as eating and drinking rather than participating in religious activities. The barangay captain criticised the fiesta claiming it had a negative economic impact on the households' economy. However, it provided income to other families engaged in businesses such as selling beer, soft drinks and other commodities on the day of celebration. The Sibalew officials also made similar arguments regarding the expenses incurred during the celebration of the fiesta in their barangay.

14.7 Local Utilities and Social Services

There have been a main highway, power lines, national high school, local public market and rural health center for many years in Linayasan. The national road was an important economic feature of the infrastructure in the barangay. The road allowed access for commercial businesses from Aklan to the neighbouring provinces. The road provided local people with the opportunity to sell their produce in the town of Kalibo, the capital of Aklan. There were feeder roads connected to the national road. The feeder roads provided access for local people from remote barangays so they could also transport their produce to the markets. When compared with the road system in Sibalew, the network of roads in Linayasan was more comprehensive than the roads in Sibalew. Of the utilities in Sibalew, the water system was better than the system in Linayasan. Sibalew had a relatively reliable and continuous supply of clean water whereas Linayasan locals experienced frustration over the lack of supply, particularly during summer.

Other important facilities to be found alongside the national road were a government primary school and a national high school. The majority of the teachers in these schools were local residents. Their salaries and operating expenses were subsidised by the government. The primary school provided free education, while secondary students were required to pay registration fees that cover costs of health, library, and sports. There were about 300 primary students and 400 students enrolled in the high school. Most of the students were local residents but some came from neighbouring barangays. After the students finished high school, most of them went to university in Kalibo. Some students who belonged to more affluent families went to Iloilo or Manila to study at exclusive universities.
Linayasan had a rural health center situated about one kilometre from the primary school. The health center had one particular midwife for almost five years. She lived with her family fifty meters from the health center and provided her services when they were urgently needed. When interviewed, she explained that the health center only catered for illnesses such as headaches, stomach pains and minor injuries. Patients with major injuries from car accidents, stabbings, or serious birthing difficulties during deliveries, were sent to the provincial hospital about thirty-five kilometres away. The health center did not have an ambulance. The family of the patient was responsible for moving patients to the provincial hospital. The midwife further explained that she had conducted seminars on family planning and health in the center. She mentioned that the limited number of facilities and lack of medicine had been an enduring problem in the health center. Because of the problems, she claimed that the health center had been unable to provide a quality service for local people in need in Linayasan.

Linayasan, like Sibalew and other barangays has a barangay hall and basketball court. Barangay officials used the hall as an office when they held monthly meetings. It had limited facilities, only a big table, a few chairs and a filing cabinet. The basketball court, or as they are sometimes called, the multi-purpose pavement, had several uses for sports and social activities. The surface was used for basketball and volleyball tournaments and the barangay ‘social benefit dances’, a fund-raising event held during the fiesta celebration. These two facilities were communally owned by the barangay. The barangay was also responsible for the maintenance. In most barangays, these facilities were located in one area. However, in Linayasan, these facilities were located in different places. According to the barangay official interviewed, the reason was because of the limited amount of land available. Previous politicians made decisions about where such facilities should be constructed. This showed the power of politics in influencing the distribution of infrastructural development in the barangay.

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61 The “social benefit dances” are the traditional fund raisers in the barangays run by the barangay official and youth’s organisations. This is usually held during fiesta. The money derived from the “social benefit dances” goes to the barangay to use in special projects in the barangay such as improvements to the sports center, repairs of the barangay hall and others.
Linayasan has an established public market that was overseen by the barangay officials. The area of market was about 2,000 square meters. A private individual owned the site and the barangay council contracted to rent the space. Inside the market, there were stalls made of local materials. For example, there were tables made of bamboo that were used to display produce for sale. Market days were Wednesdays and Sundays. The ground of the market was not concreted and became muddy on rainy days. About seventy vendors sold various household commodities on market days. People from neighbouring barangays also brought their produce to sell.

There were no irrigation facilities in Linayasan. Farmers were dependent on rain for planting the rice fields and cash crops on the paddies. Artesian wells and springs were the sources of water for household use: drinking, bathing and laundry. The Center’s survey showed that 28 (81%) households used artesian wells as a source of drinking water. Other households had their own open wells or fetched water from springs for drinking (ERDSC, 1998: 10). Observations showed that from 15 to 25 people shared one artesian well. These people could be found at the artesian well every morning, some having baths while others were doing laundry. The limited source of water was a major problem that local people emphasised during the fieldwork in Linayasan.

14.8 Summary

The profile of Linayasan was described in this chapter. The aspects discussed included: location, population and education; income and social structure; occupations and employment; barangay governance; religions and fiesta and the final section described local utilities and social services in the barangay. Linayasan was located on the national road, close to the western coastal area about five kilometres from Poblacion. Linayasan was one of the more densely populated barangays in the Municipality of Altavas. In 1995, a survey by the National Statistics Office indicated that Linayasan had a total population of 1,445 people in 303 households (NSO, 1996: 1). This barangay had a total land area of 303.47 hectares.

A recent survey conducted by the Center in 1998 showed an increase of the Linayasan population to 1,690 people and 343 households. The average family size was about 6 people in each household. Extended families were common in the households. Some
children completed studies in high school and then proceeded to Colleges in Kalibo. Children of more affluent families went to study in the standard universities in Iloilo or Manila. However, the children of less affluent parents studied to high school level only. Many of them had not completed high school. They left school to find work as factory workers or shop assistants in the cities. The locals who acquired professional skills and academic degrees migrated to urban areas and others went abroad to seek employment. Most of the locals were farm workers, farmers, traders and fisherman. There were a small number of professionals residing in Linayasan.

The majority of locals were subsistence farmers or engaged in fishing. Incomes from the two industries were seasonal. Other locals relied on waged labour, fish vending or sari-sari store businesses. Many disadvantaged families were employed by local traders as helpers to run their businesses or farm. The Center’s survey conducted in 1998 showed the occupations and employment of locals in Linayasan. There were 28 locals engaged in trading businesses. There were 83 locals employed in government offices. Eleven families had members practising in professional positions. There were 25 local families who had members working abroad as contract workers or seaman. Those families belonged to the more affluent group. This group of families dominated local businesses and had more access to resources and local employment.

Like in the urban areas, the more affluent families enjoyed their modern way of life and managed to maintain their social identity in Linayasan. This was through owning modern houses and acquiring family assets like transport. Those families were out-numbered in the barangay by less affluent families. However, because of their access to other elite outside the barangay, they had an advantage over the majority of locals in Linayasan. Some of the more affluent families employed disadvantaged relatives as helpers or workers to run sari-sari stores or retail businesses of local produce. An example was the account of the schoolgirl who was helped by her affluent relatives to study.

The less affluent families lived a more traditional rural life. This group of families included landless farmers or tenants, fishermen and labourers. Those locals were disadvantaged with poor housing and limited modern household appliances. There was severely limited access to resources from external agencies. Many of the families who belonged to the less affluent group relied on the help of their affluent relatives for the
education of their children. However, the assistance extended by the affluent relatives demanded reciprocity.

The barangay's governance was also discussed. Like other barangays, Linayasan was administered by elected local officials. The barangay captain was the local chief executive, who worked with the members of the barangay council. The barangay officials implemented policies from the central government. They developed local plans and assisted external agencies that implemented projects within the barangays. The majority of the members were women who were very politically diverse because of their affiliations to many political parties. They were not united under a single party, as were the officials in Sibalew. Locals claimed that most men were preoccupied by their outside work. Because of that, women were more involved in barangay activities. It was their involvement that led them to enter the arena of politics. The members of affluent families were the dominant candidates during local elections.

The local religions and fiesta were also discussed. Although the majority of locals were Roman Catholics, there were three other religions established in Linayasan. These were the Iglesia ni Kristo, Seventh Day Adventist, Philippines Independent Church and a small number were Jehovah's Witnesses. These churches provided access for local people to practice their preferred religion. In the case of Roman Catholics, the yearly barangay fiesta was the major celebration of religious and cultural significance.

Although the fiesta brought some positive aspects to the lives of locals, there were also criticisms. The barangay captain argued that the fiesta was a time of family reunions when members come home from other places or abroad. The fiesta was also important for the renewal of spiritual obligations. But the celebrations had changed over recent years. Family spending for social activities had become excessive some argued. The locals had begun to emphasise eating and drinking rather than participating in religious activities. Some families considered that the more lavish their fiesta celebrations were, the more other locals would respect them. Such behaviour, it was thought, would bring the family an improved social identity in the barangay. Consequently, excessive spending depleted the financial resources of many local families.
The last area discussed in this chapter was the local utilities and social services in Linayasan. The main highway, power lines, national high school, local public market and rural health center had already existed for many years in this barangay. The national road was an important economic feature of Linayasan in comparison to Sibalew. The rural health center and the national high school were other utilities that gave Linayasan an advantage over Sibalew. Another considerable advantage was the barangay public market that was overseen by the Linayasan local officials. The supply of water was a major problem in Linayasan. Sibalew enjoyed an abundance of water throughout the year.
Chapter Fifteen
The Features of Linayasan

15.1 Introduction

This chapter examines the features of Linayasan. This chapter contains six areas of discussion. It begins with a description of the physical conditions, the land use and access to resources. Access to resources outside the barangay is described in a separate section. Following this is a description of the local trading and transport utilities; local land tenure practices and gender activities are all discussed separately. Finally, the last part of this chapter is a summary of the subjects discussed.

15.2 Local Physical Conditions

Linayasan’s topography was characterised by rolling terrain like Sibalew. However, while both barangays had eroded hilly areas, Sibalew suffered less from erosion. Linayasan and Sibalew were about 36 kilometres apart. However, the difference in geographical locations of these two barangays made their physical conditions very dissimilar, particularly during summer. Linayasan was about three kilometres from the coast. Linayasan was warmer and drier than Sibalew but further inland the humidity is higher.

A review of the Altavas Municipal Socio-Economic Profiles indicated that there were three types of soils found in Linayasan (1994 Altavas Socio-economic Profiles: 10). There were the alimodian, bantog clay and hydrosol soils. Alimodian soil is found in hillside areas. This soil is suitable for growing fruit trees, bananas, and cash crops such as corn, cassava and vegetables. Bantog clay soil can be found on the plains and is suitable for growing rice and other cereal crops. Hydrosol soil can be found in mangrove swamp areas. It is suitable for growing nipa palms for the thatch used for roofing. The hydrosol soil is not found in Sibalew because of its location inland.

The type of soil and the location of farms near the sea were crucial determinants of the varieties of crops that could be successfully grown by locals. An example was given by a Linayasan farmer co-operator who revealed his frustration over the retarded growth of
rambutan plants on his farm. The plants grew very well in Sibalew. The Linayasan farmer insisted that he made a great effort to grow rambutan. The farmer recently acknowledged that the ‘pH’ level of his soil was not suitable for rambutan. The prevailing salty wind from the sea also had an adverse effect on the rambutan.

One major limiting factor of the projects introduced to Linayasan and Sibalew was the lack of critical evaluation regarding information on local conditions. Equally important to the locals was the severely limited access to weather records in the province. The researcher of this case study knew that data about weather conditions was filed in the provincial office, but this was not made available to local people. There was no printed material on weather conditions available to guide farmers. The farmers explained that they obtained information from weather forecasts on the radio or television. However, it could be argued that printed materials, preferably easily understood diagrams or drawings, would be a more useful guide for the local farmers on expected weather conditions.

Because of a lack of adequate weather information for locals there was a farmer in Linayasan who explained that he used his previous experience to predict the weather conditions. This farmer explained that the technique he used for almost thirty years to predict the weather came from his father who taught him when started to work on the farm. He insisted that he could predict the weather for a particular year by observing weather conditions at the beginning of the year, from the first to the twenty-fourth of January. During this period, the farmer explained that he made a record of which days were rainy or sunny.

Matching the numbers, the farmer claimed, from one to twelve and by applying those numbers to the appropriate calendar month, could help determine the weather conditions within the same year of farming. For example, if January 9, 10, 11 and 12 were rainy days, he expected the months of September, October, November and December to be rainy months that year. Then, the farmer said that he repeated his observations from January 13 to 24 to replicate his findings. That meant if January 19 and 20 were rainy days, he expected heavy and long rain in the months of September and October. However, if January 23 and 24 would be sunny, he expected dry weather would occur in November and December. He claimed that some farmers also used similar traditional
methods in predicting local weather conditions. The farmer also acknowledged that his prediction was not accurate, it could only distinguish sunny and rainy months but could not be applied to determine the period of a drought or the amount of rainfall at any specified time.

While acknowledging the limitations of his method, the farmer argued that his method was better than no guidelines at all for his farm planning. He insisted that droughts and typhoons were the main climatic conditions that deterred them from investing capital in farming, particularly the planting of long-term crops. This account has illustrated an example of the sorts of local knowledge farmers have. Local farming knowledge must be recognised in the introduction of new projects. The account also indicated deficiencies that local farmers were subject to. In this case, access to data on weather conditions could have helped them to understand and plan their farming activities more successfully.

15.3 Land Use and Access to Resources Outside the Barangay

One of the more complicated areas examined in Linayasan and Sibalew was the land use system, in particular, the access of locals to the natural resources under the control of other barangays. There were similarities in the methods of farming in Sibalew and Linayasan. Both barangays had similar types of coconut plantations, crops and cereals. Locals of both areas had diversified sources of income and the sociocultural practices of locals were relatively similar. Those similarities led to difficulties when it was necessary to evaluate suitable land-use systems for the two barangays.

Locals in Linayasan and Sibalew were familiar with resources available in their own barangay that could provide them a living. There were natural resources like lake and coastal areas that could be found in other barangays but did not exist in Linayasan or Sibalew. Access to those natural resources was necessary for locals to obtain additional income for their living. This was important because of the limited resources in these two barangays that were available to supply the increasing population. Therefore, economic opportunities for locals outside their own barangay were important to locals living in Linayasan or Sibalew.
However, in most cases the previous experience of the researcher of this case study revealed that the locals’ economic opportunities outside their own barangay were not given particular attention when new projects were initiated in the barangays, particularly, when funding was made available for locals to establish the projects. Traditionally, the locals perceived that the benefits they could obtain from new projects could provide economic advantages to them. The establishment of the demonstration farms in Linayasan was an example. Some locals in Linayasan had access to, and were dependent on fishing in the local coastal area. Their activities in fishing did not complement the establishment of demonstration farms. Because of the diversity of income, some farmers were fishermen as well. Acknowledging the access of locals to earning a living from the natural resources of other barangays would be useful to reduce complex cultural and political problems in the dissemination of new types of livelihood in a particular barangay.

Linayasan had a total land area of 303.47 hectares, which was almost the same as Sibalew. In Linayasan, about 246.29 hectares was used for agriculture (Linayasan Barangay Profile, 1998: 3). There were coconut plantations inter-cropped with banana. Bamboo was sparcely distributed within the area of the barangay. Some farmers raised animals such as cattle, goats and buffalo under the coconut plantation in a traditional way. The rice fields were found in valleys in the hillside areas that covered about 63 hectares (Linayasan Barangay Profile, 1998: 3). There were no irrigation facilities, so the farmers depended on rain to irrigate the rice. Under normal conditions, farmers indicated that they could produce from 50 to 60 sacks, one sack equivalent to 50 kilos, of rice a hectare per cropping. Cash crops such as corn, beans and vegetables were planted in the rice fields after the rice had been harvested.
Plate 14. The Topography of Linayasan. Upper: Dry rice fields surrounded by mixed coconut and banana plantations. The rice field is not irrigated, depending entirely on the rain, so farmers’ fish in the lake during their off-farm works or summer months. Lower: (Foreground) sundrenched fishponds beside Lake Tinagong Dagat. In the background, the uplands that envelope the lake (Photo: R. L. Saladar, 1998).
The swampland in Linayasan was one of the major sources of income. Sibalew did not have areas of swampland. In Linayasan, the land offered economic opportunity: some swampland was developed into fishponds. The *Linayasan Barangay Profile (1998: 3)* indicated that this barangay had a total area of 57.19 hectares suitable for fisheries. Portions of this area had been developed into fishponds that produced prawns, shrimps, crabs, mussels and milkfish to be sold to local traders. Some produce was sold within the barangay for local consumption. The fishponds were located along the *Talon River* near the sea where the water was tidal and salty. This river was connected to a lake called *Tinagong Dagat*, which was also salt water. Although this lake belonged to another barangay, the local people of Linayasan also had access to it for fishing and collecting mussels and oysters for sale.

Water from the tidal *Talon River* contained seawater and could not be used for irrigation. But the Talon River had significance to the livelihood of local people in Linayasan. It provided the residents with access to fishing in the coastal area. Along the riverbank, some landowners had planted nipa palms to protect the riverbanks from the currents of tidal water, especially during heavy floods. The palms also provided leaves for roofing as an extra source of income.

The close proximity of Linayasan to Lake *Tinagong Dagat* and with the *Talon River* provided economic opportunities for locals in the coastal areas for saltwater fishing. The lake and river allowed Linayasan locals' access to another type of livelihood from 'fishing,' that Sibalew locals did not have. This meant that the Linayasan locals were not entirely dependent on agricultural production. Their access to the lake and coastal areas provided substantial income to families. In Sibalew, the locals concentrated on the diversification of farming methods. Some locals engaged in other income producing practices but they were supplementary activities that complimented the farm income. Next, the local trading practices and transport facilities of Linayasan and Sibalew are compared.

**15.4 Local Trading Practices and Transport Utilities**

The increased number of locals engaged in trading produce and the transport utilities in Sibalew were not much different to Linayasan. In 1998, the survey conducted by the
Center showed that there were eight traders in Linayasan (ERDSC, 1998: 7). In Sibalew, it was apparent during observations that the local co-operative store was well established. However, there were traders from other barangays who established business linkages with Sibalew locals. There were few Sibalew locals engaged in small-scale businesses like sari-sari stores.

The established local public market in Linayasan was a major economic advantage to the locals. Sibalew did not have a public market so the locals sold their produce in Torralba, an adjoining barangay that had a public market. In Linayasan, like the public market in Torralba, the facilities were poor. The traders and middlemen who had established businesses in the town dominated the trading in the market. This could be observed most easily on market day in these two barangays.

In Linayasan, there were about seventy vendors and traders who did business in the market every Wednesday and Sunday. Some of them were farmers who brought produce such as rice, root crops, banana, fruit, vegetables and meat. Prawns, milkfish, mussels and oysters were other common items bought in the market. The local public market generated revenue for the barangay. However, the money was not utilised to improve the existing facilities. According to the barangay captain this was because land was owned by a private person and not by the barangay collectively. Private ownership was problematic, the barangay captain explained, the lack of security that the barangay could use the space permanently hindered the local councils' investment in improvements. Rather, they maintained the existing facilities inside the market, which were made of local materials, rather than building a more permanent structure.

When observations were made at the public market in Linayasan, it was noted that there was a lack of information for locals about the prices of products sold by the traders. There were no prices displayed on the various items for sale by the traders. That meant that the prices of items being sold were negotiable to some degree, but in the final analysis the traders ultimately controlled prices. The traders could put an inflated price on an article and the locals would bargain the price down but they still paid more than the price normal supply and demand would fetch in an open market. The market economies, and particularly the actors involved, were not subjected to overt interference from the government. There was no obvious policing by officials over the prices demanded by
traders. The researcher visited the market on five successive market days but failed to see any sign that the economy was supervised or inspected by government officials. There were no printed lists of prices in the market, particularly the recommended retail prices for the products produced by local farmers. Interviewed farmers mentioned that they got information on the radio about current prices in the market in the province. Some farmers argued that the information was unrealistic because prices provided by the radio were based on prices paid in the central market. They stressed that local prices were different from current prices in towns and barangays. Linayasan barangay officials mentioned that most of the local farmers preferred to ask local traders for information regarding prices rather than rely on the radio.

There were arguments from other Linayasan barangay officials that the prices provided by traders were not uniform. Interviewed local traders revealed the unified prices for produce such as rice, fish, vegetables and other items were not much higher through individual traders and business was competitive. The traders acknowledged it was difficult for local farmers to transport and sell their produce in the town. For this reason, the traders explained they had invested money for transportation and they needed to recover their investment. The researcher noted this allegation. It was usually applied by traders to locals who were not content with the stated prices. In this manner, the local traders could control prices within the barangay.

Sari-sari stores were one of the significant businesses in Linayasan. These stores were opened daily and provided local people with their immediate needs. For example, sugar, milk, salt, bread, dried fish, canned foods and school supplies could be bought from the stores. Some storeowners made space available for customers to come for a drink after work. Other storeowners provided a limited amount of credit or loans. Interviews with storeowners indicated that they provided loans during the planting season and the beginning of the school year based on a traditional practice. The loan was limited to not more than PhP3,000.00 ($US77.12). This was through a ‘character’ loan, based on borrower credibility or integrity with no collateral. The minimum interest was about five percent depending on the store owner-borrower relationship. Some storeowners lent

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62 There was an average exchange rate of US$1=38.90 pesos in 1998 (Europa Publications, 1999: 1031).
money without charging any interest if the repayment was made by a specified agreed date. If the repayment was not forthcoming then interest was added.

Linayasan had a national road and accordingly, more economic opportunity than Sibalew. Historical accounts gathered from locals of Linayasan indicated the national road had been in existence since the early 1950s in this barangay. The road provided access to local people to ameliorate different economic activities. Despite this, the locals claimed that economic improvement of their barangay occurred slowly. Locals noted the lack of knowledge and capital necessary to improve their local business prevented them from obtaining the opportunities for which the road has been provided. The inability of the inhabitants to undertake business development and opportunities meant that these were taken instead by traders from other places who had capital more readily available. The more progressive business people in the barangay were more likely not to be locals, but settlers who had moved there to set up a business.
Plate 15. Sources of Income for Women in Sibalew. Upper: Women fish vendors inside the Linayasan Public Market, held on Sundays and Wednesdays. Products include crabs, shellfish, such as clams and mussels, as well as several kinds of fish. Lower: Women make nipa thatches for roofing. The nipa leaves are cut and gathered by men, and then woven by women. The thatch is sold in standard lengths, individually or in bulk lots (Photo: R. L. Saladar, 1998).
In Linayasan, the national road provided the locals more options for transport such as the buses, jeepnys and motorbikes that operated in Aklan, Capiz, and Iloilo, the three neighbouring provinces. Historically, accounts from Linayasan locals indicated that sledges hauled by buffalo or oxen were used to transport produce or products from remote areas to the national highway. In the early 1980s, there were accounts from locals that when access roads were constructed and connected more remote barangays to Linayasan, single motorbikes started to operate as businesses. They were used to transport their products directly to town. Some locals still used sledges hauled by buffalo or oxen to transport produce, particularly in areas that did not have feeder-roads.

In Linayasan, there were areas where roads were not maintained properly. The roads deteriorated badly during rainy days. They became unsuitable for passenger buses or jeepnys and even single motorbikes had difficulties. This was because of the topography of the area around Linayasan. The rugged terrain and poor feeder-roads became impassable in wet weather. The less affluent farmers acknowledged that the sledges hauled by buffalo were backward and obsolete compared with motorbikes or jeepnys. However, there were arguments from less affluent farmers that a sledge loaded with three sacks of rice or corn hauled by a buffalo was the cheapest and most convenient method for them to transport their produce to the national highway. This means of transport was also the prevalent practice of locals in Sibalew.

During the fieldwork in Linayasan, it was noted that on market day in Altavas, a large volume of passengers travelled to the local town. Some passengers were even riding on the top of buses or jeepnys. The Linayasan barangay captain explained that large numbers of passengers were from other barangays. Linayasan was a station for local people going into the town, five kilometres away from this barangay. He mentioned that three families in Linayasan had passenger jeepnys and operated a daily service for the local people. But sometimes, these jeepnys were not available due to other transport commitments, so local passengers used motorcycles instead. In Sibalew, the locals had similar problems during the market day in Banga.

The local informant who was the guide during this fieldwork mentioned that the uncertain schedule of buses and jeepsiees caused frustration for passengers in Linayasan.
To avoid time delays, the informant explained that most Linayasan locals used passenger motorbikes. The informant described the importance of this type of transport:

Some people here in our barangay call this passenger motorbike *skylob*. It is the easiest means of transportation for the people in Linayasan. It does not take much time. There is no need to wait for other passengers. The driver can deliver even one passenger into town. The motorbike can easily reach the remote barangays. It can carry seven passengers including the driver. Some drivers can load onto their *skylob* five to seven sacks of rice or copra. They are expert at crossing rugged terrain. They can traverse even loose-gravelled feeder roads. But it is dangerous for the passengers who are not used to riding on them. Especially if the driver is not familiar with the terrain of the area. People here in Linayasan use it, but accidents sometime happen and cannot be avoided. There was an accident just two weeks ago.

It is risky to ride motorbikes, because the passengers have no insurance. The motorbikes used for public transport here do not have any franchise to operate from the Land Transport Office. That's why the owners could not get insurance for their passengers. The motorbikes are registered for private use only. But the owner uses it as public transport, you know, to get income. That's one of the main livelihoods for men here in Linayasan. Some men were employed to operate this business. There were no women drivers. Some women could ride motorbikes but it is too dangerous for them to ride motorbikes with five sacks of rice. It's a good source of income, especially during market days. Sometimes I am a driver too, but my license has expired and I need to renew it.

During an informal discussion with Linayasan officials the issue of the safety of passengers on motorbikes was discussed. One official who owned a motorbike for family use and for hire occasionally explained his previous experience. In the account, the official recalled his experience when he applied to register his motorbike for use as passenger transport at the Land Transportation Office. He remembered:

When I went to the Land Transportation Office in Kalibo to register my motorbike as a public utility, the officer asked me to attach the sidecar to it before it could be registered and operated as public transport. I did not have enough money to buy the sidecar. It cost me about PhP15,000.00 [US$385.60]. There are many people here who have been using their private motorbikes for public transport without a franchise. The LTO knows about that. The practice is illegal because we do not have a franchise to operate. Many of us have applied to the Land Transportation Office to get the franchise. Nothing has happened up till now. We provide transport services to the people. But we run the risk of being caught. There were many motorbike accidents here and the motorbike owners were responsible for the costs incurred in the hospitalisation of the passengers. Not only that, if the passenger died the owner was obliged to pay the money demanded by the passenger's family. If the family were not happy with the agreement, then, they go to the court. We operate without insurance of our passengers. That's why we wanted to franchise - without it we

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63 There was an average exchange rate of US$1=38.90 pesos in 1998 (Europa Publications, 1999: 1031).
couldn't obtain the insurance for our motorbikes. I don't know what the Land Transportation Office is doing about this problem. I know that the Land Transportation Office knows about this, but the people there ignored this problem. I do not want to use my motorbike for public transport without a franchise but with no insurance I am unable to get a franchise. I need the income from my motorbike.

In relation to the account by the local official there was a motorbike accident in the early morning of the 19th of May 1998. This occurred at the front of the Linayasan Elementary School, where the researcher stayed during the fieldwork. In the accident, a fifty-five-year-old man died a day after being admitted to the Altavas Emergency Hospital and the three other passengers were slightly injured. An eyewitness to the accident explained that the motorbike was loaded with passengers and was travelling at high speed when the crash happened. An interview with the barangay captain was conducted three days after the accident. The driver, a minor, was 18 years old and his parents owned the motorbike. The barangay captain mentioned that accidents like that seldom happened in Linayasan. Most drivers were the owners and aware of their responsibilities to the passengers. The barangay captain explained that the insurance company demanded several documents before the owner of the bike or the victim's families could claim compensation.

Elsewhere, Francisco and Routray (1992) evaluated the effect of the rural road on barangay Orani, Bataan. This barangay was located on the western coast of the Luzon region of the Philippines. Their study examined agricultural productivity, farm input applications such as fertilisers and chemicals, and market produce, profitability and travel patterns. Their findings showed the rural road had positive and negative effects in the community. One positive effect was accessibility to the market and basic social services that enhanced higher productivity and increased levels of income. Francisco and Routray claimed that the local institutions, particularly the co-operatives, were strengthened. They concluded that the creation of new activities by transport was dependent on the nature of the local economy and social and political structures and resources in the community (Francisco and Routray, 1992: 69). But Francisco and Routray's study had not specifically evaluated the consequences of roads on the local social structure of the community. There was no attention paid to the effects of motor accidents, a direct result of more roading, at the local level.

In Linayasan, interviews with locals indicated that some saw the road as providing opportunity for those already privileged in the community while not enabling much
general economic progress. The general perception of locals was that the presence of road transport was the major factor in the social and economic changes in the barangay. The locals perceived that the road networks provided various opportunities for them. It provided access for transporting farm produce to the market center; it offered an opportunity to new businesses and easy access to service facilities.

However, the practices of the traders and the opportunities provided by the national road were not enough to ensure, for example, economic development to all locals in Linayasan, as was noted in Sibalew. To some Linayasan locals, particularly the less affluent families, the road provided a means to circumvent the external interventions that favoured the more affluent families in their barangay. In Sibalew, this argument was similar to the issues that emerged over the improvement of the access road. It was the mercenary traders who took advantage of the economic development of this barangay.

15.5 Local Land Tenure Practices

The local land tenure practices were one of the elements in the development of the rural agricultural economy. The security of land tenure has been an enduring issue in the transfer of agricultural technology in rural barangays. This is particularly so when long-term income-producing plants were introduced as in the case of Linayasan and Sibalew. There were two types of land tenure practised by the locals in these two barangays: 'leasehold' and 'ownership'. Accounts from the locals both in Linayasan and Sibalew suggested agrarian reform was not problematic in their barangays as far as the landowner/tenant relationships were concerned. In other barangays, for example barangays with large landholders, agrarian reform was difficult to implement and relationships suffered. Another problem was the utilisation of land. However, the findings from interviews with locals in Linayasan and Sibalew revealed that there were problems regarding customary rights over inherited land between relatives. How the problems emerged varied between locals and barangays.

In the Philippines, Panopio et al. (1994: 208) described that the tenure, acquisition and distribution of ownership and control of property depended greatly on the existing social norms and values of people toward it. They emphasised that "...the land-ownership, the foundation of wealth, prestige, power and influence, was heavily concentrated in a few
families” (Panopio et al., 1994: 208). They insisted further that the “...concentration of ownership, control, transfer and use of property results in paternalistic-employer and subservient-employee relationship.” Panopio et al. argued that such a relationship had “...tended to produce unequal distribution of per capita or family income, poverty, malnutrition, poor health, low productivity, low saving and investment, social mobility and inadequate housing, clothing, medicine and recreation” (Panopio et al., 1994: 208).

In Linayasan, the official interviewed from the Department of Agrarian Reform mentioned that there were about 70 farmers who had rice fields in this barangay. Twenty-nine farmers were tenants, 16 farmers were leaseholders and about 25 farmers were landowners who managed their farms. However, the officials acknowledged that this figure was not accurate. Many tenants were still not registered because the landowners resisted adopting the agrarian policy that required the registration of tenants in the office of the Department of Agrarian Reform.

According to the official, one major reason why the landowners were reluctant to register their tenants was to keep land entirely the property of the family. For this reason some landowners, the official claimed, did not want their tenants to be registered in the agrarian office. If the tenants were registered, the official explained, landowners felt that they had lost the power to control their tenants. This was because the tenants could use the agrarian policy to claim rights on the land they occupied. Under the recent agrarian policy, the official suggested that the tenants could demand a payment from the landowners if they were driven from the land they cultivated. Consequently, many big landowners were opposed to the policy. As a result, the official insisted that he and his colleagues in the office of the Department of Agrarian Reform had experienced various threats from some landowners, particularly those with connections to political power.

In the case of Linayasan, the official explained that the agrarian programme did not cover this barangay. He argued that there were problems in the relationships between landowners and tenants, but they were not serious when compared with other barangays that were occupied by prominent families. In Linayasan, he claimed that the 70 farmers were small landowners. Most of these farmers had from one to three hectares and a few had more than five hectares. In other words, the Linayasan farmers with the most land
were still too small to be concerned with the agrarian policy because the land owned was under the minimum amount that the programme catered for.

In an interview, the official further explained that although the government long ago had imposed land titling there were still many landowners that did not have the documents. Instead, the landowners had land tax declarations as their legal documents of ownership. The tax declaration contains an assessment of land value. The taxable amount of land that the owner needed to pay the government for was also indicated in the document.

Interviews with less affluent farmers in Linayasan revealed that although the tax declaration was a legal document that gave the right to own the land, it had some limitations. This group of farmers maintained that they had difficulties getting loans from banks. Because the banks demand a ‘land title’ for collateral the tax declaration was not valid if they applied for the loans. The farmers argued that although the banks and other lending agencies had various prerequisites regarding loans, the land title was the basic document required in applying for a higher amount.

Although the tax declaration provided legal rights to the locals to own the land, this document also created some problems when division of the property between claimants was necessary. Consequently, such problems created conflict and insecurity over land tenure between relatives, as well as brothers and sisters. This issue deterred farmers from growing permanent crops, especially when farmers did not have legitimate access to harvest future crops.

Hirtz (1998: 249) explained that “insecurity and indecisiveness” were the main contributing factors that trapped the majority of less affluent people in poverty which could probably be overcome through their own initiative (Hirtz, 1998: 249). He further mentioned:

> [P]eople who work on land that they do not own are in principle dependent and thus insecure. As tenant, as leaseholder, or as producer without legal title, one can easily be evicted and can, consequently, be put under pressure from a landowner to conform to demands that are antithetical to the interests of the farmers (Hirtz, 1998: 249).

In Linayasan, a forty-six-year-old woman described one example of problems over customary rights between relatives regarding the land inherited by her husband's parents.
This woman explained that land was a constant source of conflict between her relatives. Conflict increased, she claimed, if the heir failed to consider *utang na loob* or reciprocity, the mutual relationship with other members of the extended family (see Espiritu *et al.*, 1989: 72-3; Panopio *et al.*, 1994: 158). In an interview, the woman cited herself as an example of how the paternalistic relationship created social deprivation of her family. She explained that because she was poor, her brother-in-law helped finance her children’s education. He was her husband’s oldest brother and holder of the traditional rights and title to the land inherited from their parents.

Customarily, she described that the traditional practices of her parents-in-law meant that the eldest members of their family had the right to hold the land title, but not dispose of it, when the parents died. However, in this instance, the woman was constrained by *utang na loob*, her mutual obligation to acknowledge the decision of her brother-in-law because of the financing of the education of her children. She explained that the practice of the principle of *utang na loob* was complicated. She was unable to acquire the title of the land that belonged them because of *utang na loob*, and she felt insecure and inferior and unable to challenge her brother-in-law. The woman was reluctant to argue with her brother-in-law when the application of the entitlement of their land was discussed. She explained that her husband also had little authority in discussions concerning the land.

She complained that there were many women who, because of the perceived obligations of *utang na loob*, were unable to enforce their decisions. This was especially the case when they wanted to obtain the necessary documentation to get the title of their land. The woman insisted that she had tried to ensure her legal entitlement to the land for the sake of her children. However, her attempt went against the traditional practices of relatives. There was much controversy over the management of land by heirs. There were obligations imposed by relatives regarding legal entitlement of the land. There were arguments between in-laws over technicalities in the sharing system of the land. There were problems over land partition that some relatives were concerned about. The equal sharing of income produced from coconut plantations and the rotation of the use of the ricefield amongst brothers and sisters led to argument.

Because of such complicated arrangements and inasmuch as she did not want trouble, she was obligated to follow and acknowledge the decisions of her brother-in-law who
held the power over the land. In addition, she mentioned that her *utang na loob* on the education of her children from her brother-in-law contradicted and undermined her argument to have a separate title for their land. She criticised the practice of *utang na loob* as being discriminatory:

> My husband owned the land where my family lived. There are six brothers and sisters. They were heirs to the five hectares of land left by their parents. My husband’s elder brother had the power of attorney over the land. We did not have title of the land we occupied. They sub-divided it a long time ago. I did not know when they were going to apply the land title. Because we did not have money for it. Our problem was that we were not sure whether the land my family occupied belonged to my husband. We did not have a legal document to prove that my husband owned this land. The land title was in the hands of his older brother who was also interested to realise the investment we had made in an undertaking. We had planted mahogany trees and fifteen-years from now we can harvest them and make good money. But my family was not sure about it because many were interested to get their share. That was the problem, we did not have full rights to own the plants we had planted because we did not have land title. When my husband’s brother from Manila had their vacation here, we treated them very well. You know! ...because of our *utang na loob* to them. He helped the schooling of my children. One time my husband asked him to apply for the land title. He changed the subject. My husband’s brother did not want to talk about it.

Hirtz (1998: 260) described this as the “interdependent web of obligations for those who have access to and control over the land.” Local cultural practices such as *utang na loob* were one of the “indigenous norms” overlooked in the land reform programmes of the government (Hirtz, 1998: 247). Traditional cultural issues were often neglected in development projects and prevented less affluent people from gaining access to economic opportunities. In the change from communal to individual ownership those with little power or economic resources were disadvantaged. Those with even a little amount of power were able to disenfranchise others with no power, over the ownership of land.

Other accounts of Linayasan locals related to the problems of the land tenure practices are examined in this case study. For example, the conflict between farmer co-operators that arose after the termination of funding for the project in Linayasan was provided. In the account the farmer co-operator revealed some complicated problems that caused misunderstanding with his caretakers. Some of the cultural issues inherent in the land tenure practices in Linayasan were also related to Sibalew. For example, in Sibalew, the power of the parents over the income produced by the students on their income-generating projects.
15.6 Gender Activities

The role of gender in rural development has been extensively studied for more than a decade in underdeveloped countries. However, access to, and control over local resources remain controversial, particularly the role of men and women in agricultural and rural development (Villacorta et al., 1995; Velasco, 1995; De Guzman et al., 1995; Eviota, 1992). There were studies that indicated economic and social inequality between men and women were linked to poverty (Tan, 1995; Tisch and Paris, 1994; Tisch, 1992; Paris and Luis, 1991). There were suggestions that the integration of the role of women in development planning would strengthen and expand their participation in agricultural development (Adriano and Castillo, 1991). Some studies evaluated in this research, showed changing labour patterns of women in agricultural production (Banzon-Bautista and Dungo, 1987; Res 1985).

In 1990, the census on gender differentials in the Philippines indicated that the traditional gender roles were very functional (De Guzman et al., 1995). This study emphasised that in many regions, especially rural areas, the “instrumental role” of the father or the male and the “expressive role” of the mother or the female were emphasised or remained largely unchanged (De Guzman et al., 1995: 1). However, in urban areas, the study revealed that such distinct roles have changed and the social norms were slow to accommodate new roles. De Guzman et al. indicated that:

Social movements have emerged, espousing the recognition of women’s rights and the provision of equal opportunities. While such efforts may have generated some flexibility in gender roles among certain segments of our people [Filipinos] and in our institutions, certain clearly defined gender roles persist and these are reflected in the personalities, interpersonal relationships and workplace experiences of men and women (De Guzman et al., 1995: 1).

Previously, Banzon-Bautista and Dungo (1987: 308) concluded that the impact of new rice technology introduced in two villages in the Philippines had affected farm households in different ways. They explained that men and women from landless households who used to participate in the different stages of rice production were displaced by threshing machines and by direct seeding. However, those in households with land resources were not directly affected by labour replacement. Banzon-Bautista and Dungo (1987: 11) offered three suggestions that are important to promote active participation by women in agricultural production:
(1) Since women have been active in agricultural production, agricultural technology in the long run should be designed not only with men but with women in mind. (2) Since labour displacement will continue, employment opportunities should be created on the village level for women as well as for men, considering the constriction of available employment opportunities for all. (3) Just as there is a need to create grassroots organisations among farmers, women should also organize on the village level to discuss ways and means of making ends meet and to effect the programmes they come up with. Incidentally, the grassroots organization of farmers should not exclude women since the study reveals that widows can run their farms. This also implies that they should not be excluded from land reform efforts (Banzon-Bautista and Dungo, 1987: 11).

In general, recent findings indicated that there were linkages between women's access to income, control of household resources and the improvement of household nutrition for the wellbeing of family members (Villacorta et al., 1995; Velasco, 1995; De Guzman et al., 1995; Eviota, 1992). There were arguments that women or wives were directly accountable for household food provisions. Despite the responsibility by women for knowledge and concern for the nutrition of the family, many Filipino women had less access to productive resources such as labour, land, technology, agricultural inputs, credit, markets and training than do men. There were arguments in the literature that claimed women's limited access to productive resources and social services were due to a lack of economic, political and legal power to improve their circumstances.

In rural areas, like Linayasan and Sibalew, the productive activities and household work between men and women or husbands and wives serve a common objective and complement each other. In these two barangays, interviews revealed that the role of women in response to economic opportunities dramatically changed in the space of a decade. Most women interviewed argued that they had more freedom to work on the farms and engage in various livelihood activities compared with twenty years ago. Then, most women were confined to household work. However, there were arguments in the interviews that the change was mainly advantageous for more affluent women. The majority of the less affluent women remained vulnerable in Linayasan and Sibalew. The findings of interviews with locals were consistent with the claims made by De Guzman et al. (1995: 1): the 'instrumental role' of the father and the 'expressive role' of the mother remained largely unchanged in Linayasan and Sibalew.

In Linayasan, the division of labour between men and women was easily detected. Men and women performed their respective roles in reproduction, production and having
access to, and control of, resources. The division of labour, the interviews suggested, was closely related to the socio-economic status of the family. In the less affluent families the work of men and women in domestic household activities was not stereotypical. Wives from less affluent families mentioned that their husbands would do household work. However, they considered that attending to small children was more appropriate for women. Husbands often prepared food, collected firewood, fetched water and did the laundry while wives worked on other farms. Duties undertaken were directly related to the level of income specific partners were likely to earn. Children often accompanied the working parent and sometimes both parents. These findings were confirmed in other interviews.

The characteristics of Filipino women observed and noted in the interviews with members of more affluent families showed that wives generally took more responsibility for household work. Concurrently, they attended sari-sari stores that involved less physical labour than other forms of work. Most of them had house helpers, usually poor relatives, who performed household chores while they attended business. Some more affluent women were active in social and religious organisations where they were officials. In terms of decision-making regarding family matters, both husband and wife had equal rights according to the women interviewed. However, observations suggested such rights were not equally shared between husbands and wives. The partner with the higher education and socio-economic background was often the one who dominated decisions. Husbands were dominant in decision-making when large amounts of money were involved. Moreover, generally, beyond the home in activities that involved heavy work, men made the decisions.

The sharing of responsibilities between men and women in productive activities was noted in the different kinds of work in Linayasan. Interview analysis indicated different social status groups undertook different activities. Differences can be identified between more affluent and less affluent families. The interviews revealed that more affluent families enjoyed economic and political power while less affluent families were the vulnerable people in the barangay. Interviews with less affluent families indicated issues similar to the findings of the study conducted by Velasco (1995: 147). Velasco maintained that gender division of labour existed in Barangay Bahia, in the Quezon province, located in the northern part of the Philippines. Velasco mentioned:
Contrary to the ideological position that exists in most agricultural systems, the responsibility to provide for the family rests with the men, the women in Barangay Bahia are not only responsible for the basic needs of their children and families but also for food production and income generation. Women share with men the responsibilities in rice and livestock production and employment. Further, women are solely responsible for tending homegardens, in coconut stick broom and handicrafts production. On the other hand, the men are predominantly responsible for coconut farming and fruit trees production (Velasco, 1995: 147).

The less affluent families were vulnerable people in Linayasan. According to Velasco and others, these people put economic survival ahead of traditional gender roles and cultural practices (Velasco, 1995: 151). Observation proved that even in the less affluent families where women were burdened with housework and childcare they were obliged to engage in economic activity. For example, the interviewed laundry women had five children, and one, a three-year-old, was taken to work each day. She mentioned:

I did not finish my study. I did only my elementary because my family was very poor. I got married and had five children. They were in school. I want them to have an education. That's the only way I can help them. I work hard as a laundry woman to get money for food and to pay for their schooling. I have one small child and I always bring her where I do my laundry because my husband also works as a carpenter. You know! How much is the salary of a carpenter? It's very low. If I did not have the income from the laundry, his salary for one day would not be enough for us to live on. It is only enough to buy a kilo of rice and fish.

The husbands in less affluent families often did housework if the work available to their wives was more profitable than any income they could generate. For less affluent people, subsistence of the family was the collective responsibility of the whole family: husband, wife and children. However, in the more affluent families most of the wives were engaged in domestic duties while their husbands performed a managerial role or some slight physical labour on their farms. For example, one of the barangay officials who belonged to a more affluent family mentioned:

My wife and my-self are both responsible for the wellbeing of our family. Both of us are responsible. I do not know what you mean by gender division of labour. What I do know is that my wife keeps and controls the money for our needs. My role is to look after our farm but that does not mean we have divided our work. We work together to control our expenses. People tend to think that men and women do this or that simply because of the Filipino culture taken from the Spanish. It may be because of biological differences that men do the heavy work. I don't. I have alat-kay [helpers] to do it. But it is important to know about gender roles. Many people don't.
However, the account illustrated above did not reflect the local cultural practice that restricted female involvement in production activities. An example was a traditional belief controlling the way locals farmed in the barangay. Some farmers prevented women who were menstruating from planting or harvesting crops such as tomato, squash and eggplants because the growth of plants would be stunted and could not bear fruit. This was similar in other studies conducted elsewhere (Velasco, 1995; Roquia, 1995).

The division of labour involving children was also observed in domestic households and on the farm. Children of the less affluent families started working from the age of eight-years-old. In particular, females were encouraged by parents to do domestic work. They also helped to earn money by fish vending and doing laundry on weekends. Male children worked on the farm, fishponds, and attended domestic animals. Some children worked at wage-labour on other farms to provide income for their family. The children from the more affluent families were also involved in housework and activities on the family farm. But the necessity for such children to work was not as great. There was not the same economic hardship.
Plate 16. Members of Household Activities and Source of Income in Linayasan. **Upper:** Elder children collect mussels from the Lake Tinagong Dagat. Bamboo poles support the mussels that are then easily gathered. Mussel harvesting supplies income throughout the year. **Lower:** Harvesting coconut. Nuts are cut in half, sun dried, and processed into copra. All members of the family participate in the operation (Photo: R. L. Saladar, 1998).
Lopez-Gonzaga et al. (1995: 24) described family collective labour in the following manner. The housework was a co-operative venture organised by the married women:

The household functions as a “commune” where mother, father and children pool their labor and income. They take care of housework and child care (tasks shared to some extent by their husband and children), and manage their children’s work. Children are drafted at an early age by their mothers for household chores and paid labor outside the home, making them contributors to the household fund. Though the child labourer’s income is paltry, it serves as a vital source of funds for clothing and schooling needs. Mothers also control the earnings of all their members and decide on the bulk of household expenditures (Lopez-Gonzaga et al., 1995: 24).

In Linayasan, women had more access to loans than did men. The women dominated the cash and credit. Some women who were active in the barangay organisations and those who were engaged in fish vending had more connections with business entrepreneurs than men. However, before applying for loans or credit the wives normally consulted their husbands. They asked for permission from their husbands to obtain a loan.

It was noted that men and women had different patterns of participation in the programme introduced by the Municipal Government in Linayasan. Observations showed the women were more active in the participation than men who participated passively. This was due to the fact that women were usually more involved in social organisations. In the animal dispersal programme instituted by the Municipal Government in Linayasan, most of the participants were women. The men’s work determined their level of participation. They spent more time working on the farms or were away from the location. They had less time available to them for attending training sessions or seminars. This meant that in many activities the women knew more about the organisational workings of the entity than the men.

On May 11, 1998 during the national election, observations of local politics in Linayasan showed that women were more involved than men in the political process. Sessions of the barangay council were open to all officials who attended to the decision-making processes concerning the development and welfare of local people, officials. The officials were given equal opportunity to share their opinion and raise suggestions. The women dominated discussion because they outnumbered male officials. However, the man who was the barangay captain controlled the decisions made.
Observations during the political campaign indicated that regardless of sex, the more affluent families were actively involved in campaigning. This group of women participated freely in the political activity and was influenced by their linkages with the elite and businesses outside the barangay. Such linkages cultivated favours from the social elite in order to access resources not otherwise available to them. The resources included finance, bureaucratic assistance with paperwork, connections to influential individuals for information and assistance. The effective cultivation of favours also increased the social status and power of such families. This cycle was continuous. The elite encouraged requests for assistance from more affluent families by accommodating requests when there was an opportunity for advantage such as providing selective assistance in finance and bureaucratic process; also providing ‘recommendation letters’ so individuals may be received favourably by other members of the elite.

Because the more affluent family members were influential in the barangay, these individuals had the potential to dominate less affluent family members. However, the more affluent individuals were beholden to the elite because of services rendered. As a result, the more affluent individuals become instrumental in the exploitation of the less affluent families in the barangay. These linkages, then, allowed the elite to take advantage of the poor through the services of more affluent individuals. Such a process consolidates the power and authority of the elite. Linkages between family, business, social practices, status, and obligations lead to effects not immediately apparent, the further oppression of the poorest members of the group.

Overall, the role of women in agricultural production in response to economic opportunities dramatically changed in Linayasan and Sibalew. The change allowed women to participate actively in production. The household division of work between men and women or husband and wife was dependent on the economic advantage for the survival of the family. This was particularly so in the less affluent families. The women from the more affluent families had more access to income and control of adequate financial resources for the household and were actively involved in political affairs. They also had better nutrition for their family members than less affluent women in these two barangays.
15.7 Summary

Linayasan had several features with the potential for increased economic development. Agriculture and fishing were the major sources of income of the locals. Linayasan had a moderately warm and dry environment compared with Sibalew. It was located close to the sea and the salt-laden wind stunted the growth of agricultural and orchard crops especially near fishponds. This indicated that those areas were not suitable for some agricultural and orchard crops. A more appropriate selection of crops is needed in the vicinity of the fishponds. Salt resistant crops could help to improve the productivity of this area.

The close proximity of Linayasan to the lake and coastal areas provided the locals access to fishing activities. The Sibalew locals did not have this kind of opportunity in their barangay. Disadvantaged families in Linayasan considered fishing a relatively stable source of income. This implied that any projects introduced for the economic improvement of disadvantaged families should be matched to the livelihoods already practised by those families. In other words, the assistance offered farmers might not be of less value than the same assistance offered to fishermen. More precise targeting of assistance is necessary to ensure that disadvantaged families are the intended, and actual, recipients of assistance. The fishing activities of locals could impede the development of agricultural production in this area, especially in the introduction of agroforestry projects in Linayasan. This dilemma remains a complex problem for the development of agriculture and the fishing industry in this area. In Sibalew, the locals concentrated on agriculture. The development assistance was focused on the diversification of farming methods. Various livelihoods were created and in Sibalew the local agricultural production increased.

The national road, electricity supply, barangay public market, national high school and the rural health center were the utilities that had existed in Linayasan from the 1970s. In fact, the national road has existed since the 1950s. In Sibalew, the access road, electricity and the water system were established in the mid-1980s. This suggests that Linayasan had more developed and better utilities than Sibalew. It also meant that in Sibalew, development of the utilities was comparatively recent, compared with Linayasan. This
implied that the two barangays were not at the same level of development. Observations also showed that Linayasan was more economically advanced than Sibalew.

However, in terms of water, Sibalew had a more developed water system. Linayasan had a limited water supply and the facility was poorly developed. In Sibalew, the abundance of water was conveniently available to households throughout the year. Humid conditions and the abundance of water provided more opportunities for Sibalew farmers to improve their agricultural production than Linayasan farmers. Technically, the Sibalew farmers had a more advanced management of orchard plantations than in Linayasan.

Economically, however, the Linayasan locals had many advantages over locals in Sibalew. The barangay public market provided the opportunity for locals to operate trading businesses. The trading provided employment for locals. The fishponds provided another option for local employment. Sari-sari stores and the retailing of local produce by farmers had existed in Linayasan for many years. All of those elements provided some economic opportunity for the barangay as well as the economic condition of individual local families. However, the economic opportunity was unequally distributed across the social structure in the barangay. The more affluent families dominated in areas of economic development. A similar situation was currently emerging in Sibalew. This substantial change had been brought about by the recent economic and technological development in Sibalew.

Like Sibalew, there were many controversies over the rural lifestyles of locals in Linayasan that included the cultural, social, political and technical problems associated with the various occupations of locals that existed in the barangay. There were problems over land tenure, especially for the less affluent farming families who did not have possession of a land title. Such families had little protection and the situation failed to provide long-term security for the crops they cultivated. Conversely, unlike Sibalew and most other barangays, interviews suggested that land tenure was less of a problem for Linayasan farmers. It meant that the redistribution of land was not necessary as the government required only the big landholders of other barangays to conform to the legislation.
In other barangays, locals suggested that there were many issues that arose over the restricted policies implemented in the land reform programme. There were problems concerning the legal and mutual agreements/disagreements between the landowners and tenants for the sharing of the rice produced. There were significant contradictions concerning traditional cultural practices and the development policies created and implemented by the national government. The previous experience of the researcher of this case study suggested that the loss of power and social control over family land distributions were cultural, economic, social and political issues that made locals resist change. In Linayasan, the local farmers claimed that locals from other barangays questioned the conflict between their cultural practices and the policies of the government to implement and obtain effective results for the land reform programme.

Other problems examined in Linayasan were the livelihood activities of men and women within and outside the barangay. The gender activities or the division of types of work between husband and wife varied, depending on the economic and social status of family members and the existing economic environment generally. The less affluent families had severely limited economic, political or cultural power to improve their circumstances. In less affluent families, the work of men and women in domestic household activities was not stereotypical. The literature suggested that the role of women in agricultural production had changed dramatically in the last decade. This also happened to the Linayasan women. There was also some change in the role of men. They sometimes participated in domestic duties while the women worked outside the home.

However, there were significant variations between the more and less affluent women’s activities in response to economic opportunities offered in this barangay. The more affluent women were more involved in managerial activities and supervisory tasks in agricultural production and trading activities. The affluent women had more access to income and control of adequate financial resources for their household. They were also actively involved in the cultural, spiritual and political development of the barangay. Less affluent women were actively involved in productive activities through manual labour and hard work on the farms. This is also similar to the arguments conveyed by the other authors discussed in Part One of the thesis. In conclusion, the gender livelihood activities in Linayasan were complementary to the social, economic and moral development of local families. The Linayasan women had more options for earning
income compared with Sibalew women. The Sibalew and Feliciano women were primarily engaged in agricultural production and related activities. Other issues related to gender livelihood activities are examined in the next chapter.
Chapter Sixteen

Local Livelihoods and Other Sources of Income

16.1 Introduction

This chapter discusses the local livelihoods and other sources of income that existed in Linayasan. The discussion is divided into two areas. Following the introduction, the rice farming and fishing industry are described in separate sections. After those two industries are described, other sources of income are discussed including kaingin, coconut plantations, homegardens, raising animals and backyard orchards but all are discussed separately. A summary of the discussion covered within this chapter shows that local livelihoods and other sources of income that existed in Linayasan need to be considered to ensure the success of the agroforestry projects.

16.2 Rice Farming

Linayasan has 246.29 hectares for agriculture. Of this area, 63 hectares was riceland and the rest was coconut, banana and a small area of orchard. There were 70 farmers who relied on rice farming as their major source of income in this barangay (1994 Altavas Municipal Socio-economic Profile: 18). The municipal profile indicated that Linayasan ranked second only to Poblacion as having the lowest riceland area of the fourteen rice-producing barangays in the Municipality of Altavas. In this municipality, their socio-economic profile showed that the highest riceland area was 170 hectares found in Cabangila. The lowest riceland area was 31 hectares found in Poblacion, a barangay in the commercial center of the municipality.

The Center’s most recent survey in 1998 indicated that there were 79 farmers in Linayasan. This implied that there were nine additional farming families over a period of four years, according to the Altavas Municipal Profile quoted above. In Linayasan, like Sibalew, the majority were subsistence farmers with little riceland to cultivate. They had about half a hectare of riceland: very few owned over a hectare. Out of those farmers there were 29 tenants and 16 leaseholders. About 25 farmers were landowners who directly managed their farms. Tenants, usually relatives of the landowners, managed the rice-fields owned by the more affluent farmers. The fields were non-irrigated and had...
two crops-per-year. However, in barangays with irrigation, the rice-fields produced three crops-per-year. The table below illustrates the distribution of farming families and their area of rice production in the Municipality of Altavas.

Table 3. Altavas Municipal Farm Profile of Riceland Areas.

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<tr>
<th>Barangays</th>
<th>Population*</th>
<th>Number of Households*</th>
<th>Number of Farmers**</th>
<th>Riceland Area (Hectares)**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cabangila</td>
<td>1,657</td>
<td>290</td>
<td>170</td>
<td>170</td>
</tr>
<tr>
<td>Cabugao</td>
<td>1,475</td>
<td>288</td>
<td>92</td>
<td>105</td>
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<tr>
<td>Catmon</td>
<td>1,142</td>
<td>213</td>
<td>140</td>
<td>145</td>
</tr>
<tr>
<td>Dalipdip</td>
<td>744</td>
<td>121</td>
<td>140</td>
<td>110</td>
</tr>
<tr>
<td>Ginictan</td>
<td>1,372</td>
<td>248</td>
<td>160</td>
<td>141</td>
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<tr>
<td>Linayasan</td>
<td>1,436</td>
<td>292</td>
<td>70</td>
<td>63</td>
</tr>
<tr>
<td>Lumaynay</td>
<td>864</td>
<td>157</td>
<td>111</td>
<td>123</td>
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<tr>
<td>Lupo</td>
<td>1,702</td>
<td>327</td>
<td>153</td>
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<tr>
<td>Man-up</td>
<td>2,203</td>
<td>402</td>
<td>95</td>
<td>150</td>
</tr>
<tr>
<td>Odiong</td>
<td>2,389</td>
<td>458</td>
<td>95</td>
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<tr>
<td>Poblacion</td>
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<td>465</td>
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<td>Quinasay-an</td>
<td>526</td>
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<td>80</td>
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<tr>
<td>Talon</td>
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<tr>
<td>Tibiao</td>
<td>1,179</td>
<td>200</td>
<td>128</td>
<td>155</td>
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<tr>
<td>Total</td>
<td>330,497</td>
<td>71,010</td>
<td>1,619</td>
<td>1,700</td>
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</tbody>
</table>


Accounts from local farmers indicated that the average rice production was from 50 to 60 cavans a hectare per harvest. The farms were less productive than rice-fields with irrigation. The farmers mentioned that in irrigated ricelands some farmers planted three times a year and their harvest was from 75 to 100 cavans per cropping. In Linayasan, some farmers cultivated their rice-fields through the use of draft animals such as buffalo and cattle. In irrigated ricelands, some farmers used draft animals for cultivation but usually locally made small, two wheeled, two stroke hand-tractors and threshers were used. In Linayasan and Sibalew, most of the more affluent farmers had acquired these machines.
In relatively high rainfall areas like Linayasan and Sibalew, called locally ‘rainfed’ areas, the rice was planted from June to mid-August depending on the ingress of the rain. Harvesting continued from September until mid-November. This was followed by a second planting at the end of November which was harvested in mid-February. The farmers kept the rice they produced for their own consumption. Some farmers, particularly tenants, sold rice to pay off the loans incurred during planting and kept some to provide for the needs of the family. Some income was used to pay for the tuition fees of their children.

Drought was the most prevalent problem for local farmers in Linayasan and Sibalew. This affected rice production in these two barangays. Linayasan farmers explained that sometimes they planted their rice-field only once a year due to the limited water supply. During summer, the farmers grew corn, beans and other cereals on their paddies. Traditionally, other farmers after harvesting the crops used the paddies to graze animals. There were farmers who explained that in many farming families, especially the less affluent, the wives and children took over the management and worked on the farms. The husbands worked outside the barangay with other local men in fishing or worked in the construction business. There were comments from some less affluent woman interviewed who insisted that when their husbands worked outside, they considered themselves as temporary managers of their farms. The women explained that because of this role they enjoyed the temporary freedom and the authority to direct work on the farms. However, many of them argued that whatever improvements they made on the farms were conditional, and all changes were ultimately dependent on the decisions of their husband.

Such accounts illustrate the roles of the various members of the household. Husband, wife and children were involved in rice production. Farmers in Linayasan and Sibalew trained their children to work on the farm at an early age. Traditionally, accounts from Linayasan farmers indicated that some children aged from seven-years-old helped on the paddies after school. The children participated in all activities on the farm, particularly during planting and harvesting seasons. The children supplied labour while the role of their parents was to teach their children the farming techniques of rice production. However, in cases where the paddies required large amounts of labour, some farmers in Linayasan and Sibalew practised bayanihan or reciprocal labour practices. The other
system of labour used was when relatives were hired to plant crops, with an agreement that they would also harvest it and take a portion of the profit, usually about one fifth.

In Linayasan, interviewed farmers explained that some of them still practised bayanihan, particularly during the planting season. This was through an exchange of food and drink for those who were willing to work. However, many farmers emphasised during interviews that bayanihan was not strongly practised compared with twenty years ago. Other farmers, especially the less affluent farmers, claimed that the exchange of labour occurred particularly during planting because in this period a lack of money was a serious problem for them. In the harvesting season, the farmers argued that bayanihan was no longer applicable because the labour was paid for through the participant's share of the harvest. Other farmers intimated that some of them asked for credit from traders and only paid for labour if it was necessary. The farmers repaid the traders in sacks of rice. The number of sacks to be repaid depended on the amount of credit the farmers owed, and also on the price paid by the traders for the rice.

An account from a widow interviewed in Linayasan indicated that bayanihan could facilitate faster results. She argued that cultural beliefs, like a form of superstition, could bring good or bad luck to the rice production to crops planted in that way. The women explained that superstitious belief is usually manifested most explicitly during planting and harvesting but this depends on the predisposition of the individual farmers. For instance, the woman cited her experiences of using high or low tides or the full or new moon and the calendar to guide their farm timings. She explained that before her husband died, he had adhered to the high and low tides method to determine when to plant and harvest their crops. The usual practice according to the woman was that her husband started planting or harvesting when the tide was high or the moon was full. It was thought that this procedure could bring good luck to their harvest.

When her husband died of tuberculosis, she managed their riceland with the help of her son. The woman wanted to follow the methods that she learned from her husband to manage the farms. Being a mother, she explained that she provided advice to her son to follow. She explained what the son's father did on the farms. In particular, she insisted her son start planting or harvesting during high tides. The son disagreed with her superstition that planting during the high tides could bring good luck to their harvest.
According to the woman, her son dismissed the advice as nonsense. He argued that such a belief would not increase their harvest. She explained that her son preferred to apply more fertiliser to the paddies. He maintained that was how to increase the harvest. The son criticised the methods used by his father and argued that the high and low tides noted in the calendar did not have any scientific explanation to increase production.

Despite the arguments, the woman budgeted to buy fertiliser for their paddies. She gave PhP500.00 to her son to buy 3 bags of fertiliser in the town. Unexpectedly, the women explained that her son bought only 1 bag of fertiliser. Her son used the rest of the money to buy alcohol with his friends in town. The woman said that she was very angry about the behaviour of her son. She accused him of not having any utang na loob for her, nor any respect for her advice. Finally, the woman mentioned that the lessons she had learned destroyed her trust in her son in any matters involving money. From that time she had purchased seeds, fertiliser and chemicals in the town for her son to use on their farm. The woman emphasised that despite the effort she had made to prepare her son to have a family in the future, her son kept demanding money to buy alcohol. The woman said that in an effort to resolve the problem, she had given full responsibility to her son to manage the riceland. She was content to only get a few sacks of rice as her share. The widow’s account was similar to the argument of locals in Sibalew that economic development brought by the new technology threatened their traditional social practices.

In general, officials of the Department of Agrarian Reform described the traditional practice of share tenancy in rice farming during the interviews. One official interviewed explained that the sharing of production in rice farming depended on having an agreement between the landowner and tenant. Further, the official mentioned that some tenants had to pay a fixed rental to the landowner based on an agreed number of sacks of rice. The rental of the rice fields varied depending on the location and the quality of soil in the rice field. Moreover, he noted that the tenants usually paid the rental after the harvest but this depended on their agreement with the landowner. The official also explained that there were tenants who still practised the traditional system of sharing produce in which 75 percent was the tenants’ share while the land owner received 25 percent. The tenant was responsible for costs incurred in production. This was similar to the findings of the previous study conducted by Lewis (1972) in the northern part of the Philippines. Lewis stated that the tenants were relatives of the landowners, and paid the
landowners a percentage of their crops for the right to farm a specified area of land. In the case of the rice-crop, tenants retained 70 percent of the crop. For other farm products like vegetables, the crop was divided equally (Lewis, 1972: 189).

Another system practised in rice farming was the sharecropping arrangement. Interviews with local farmers revealed this system favoured the landlords who increased their share of the harvest. Under the sharecropping arrangement, the local farmers claimed that the tenant provided labour while the landlord supplied the necessary implements such as buffalo or a hand tractor and thresher. In advance, the landowner shared half of the farm expenses in cash or rice to meet the tenant’s needs. The harvest was then divided on a 50-50 basis. The Sibalew farmers also practised a similar system.

In the mid-1960s, the development of “semidwarf breeding lines for rice” by the Philippines International Rice Research Institute occurred (IRRI, 2000). The new high-yielding grain varieties spread rapidly throughout the region. The development of the new grain varieties was consistent with the objectives of the Green Revolution to increase rice production. International Rice Research Institute produced statistical evidence of the dramatic change in rice production:

Average rice yields in South and Southeast Asia in 1991-93 were 83% higher than those in 1964-66, the 3 years immediately preceding the introduction of the first modern, high-yielding varieties. Total production rose by 120% while the land planted to [in] rice increased by only 21%. The population of South and Southeast Asia, however, grew by 85% from 1964-66 to 1991-93. From 1965-67 to 1991-93, total rice production doubled. Seventy percent of this increase came from higher yields and increased cropping intensity, but 30% resulted from new land brought under cultivation or shifted into rice from other crops. Much of the yield increase can be traced to the introduction of modern rice varieties and to the increased use of fertilizer, irrigation water, and other inputs (IRRI, 2000: 1-2).

From the trial station of the International Rice Research Institute at Los Baños Laguna, the modern rice varieties were promoted in the agricultural universities and colleges throughout the Philippines. An experimental project and the dissemination of high-yield rice varieties were the main purpose of the programme. The ASCA was a recipient of this programme from the 1970s. Several new rice varieties were tested in the College’s experimental area. The College produced a large number of sacks of new rice varieties, with the viable seed disseminated to local farmers. However, because of the higher costs incurred in the trials, the seeds of new varieties were sold at a higher price than regular
varieties. Consequently, the research of this case study revealed a direct benefit of the trials favoured the more affluent farmers who could afford to buy the new varieties. Later, those farmers also disseminated the new varieties to other farmers in their locality. Indirectly, over twenty-five years most local farmers in Linayasan, Sibalew and other barangays adopted modern varieties of rice. Local farmers in these two barangays raised the issue of the replacement of their traditional rice varieties that were resistant to local disease and pests.

There have been several studies by various authors related to the evaluation of rice production and its impact on the locals' in particular areas (Chua, 1990; Bautista and Dungo, 1987; Res, 1985; Illo, 1985). Those studies indicated complications caused by a variety of technologies used to intensify the rapid increase of rice production introduced in rural areas. There were issues of concern for the local farmers. These included arguments regarding the modern rice varieties that displaced the traditional grain, higher costs and the adverse effects of excessive use of fertiliser and chemicals. The displacement of local labour by the use of mechanised farming methods caused hardship to some families. There were concerns over the introduction of new varieties that increased rice production to double that of traditional methods of farming. Largely, the improved varieties favoured the more affluent farmers who could afford to invest in the new technology.

In Linayasan, the majority of the farmers interviewed claimed the increased production of rice was almost equal to the capital invested in the production. This was due to the increased cost of seeds, fertiliser and chemicals. The less affluent farmers interviewed indicated that they still preferred to use traditional rice varieties rather than introduced varieties. They claimed that traditional rice had greater resistance to pests and diseases than modern varieties. A forty-five-year-old less affluent farmer who owned half a hectare of rice field said:

If I want to increase the production of my rice field, it is also necessary to obtain capital. I did not have a permanent source of income. I could not afford to buy good quality seeds, fertiliser and chemicals. I did not need money to pay for labour because my children helped me to work on the farm. I asked them to absent themselves from their classes if we had a lot of work to do on the farm, especially in planting and harvesting seasons.

It was advantageous for other farmers who have a permanent source of capital, like those farmers who have children working abroad. They have capital. They could make
immediate decisions about what they wanted to do on their farms. But farmers like me; I was poor. It was difficult for me to make any decision without money to support what I wanted to do. That's why I was prepared to use the traditional rice and methods of farming.

If I had not used chemicals to spray my rice fields the insects from neighbouring farms would have invaded my farm and attacked the rice. That's why I did not have any choice but to adopt what other farmers used on their farms. Although it was difficult for my family, I borrowed money from my relatives to buy good quality seeds, fertiliser and chemicals for my farm. If I had not used such products I could not have had a good income.

Pertinent to this account is the study conducted by Chua (1990) who described the impact of mechanisation on rice production in the Philippines. The finding showed that rice farm mechanisation brought about changes in household and social structures and changes to the community as a whole. The roles or tasks of members of households with mechanised farm operations had changed. Chua posited that the main change was the reduction of manual labour or physical activity amongst the members of the family in terms of land preparation, planting and harvesting. Chua concluded that the impact of farm mechanisation changed the traditional rural community farming economy toward being market-oriented (Chua, 1990: 421-23).

In general, the Linayasan barangay captain, in his historical accounts, recalled that before the improvement of rice farming draft animals such as buffalo and cattle were used to cultivate the rice fields. Traditionally, reciprocal labour was adopted in planting and harvesting which involved less capital. But when the high yielding varieties of rice were available to local farmers, hand tractors gradually replaced the draft animals. Rice production doubled, new entrepreneurial enterprises opened and the number of local traders increased. However, the barangay captain suggested that many of the farmers expressed cynicism and argued that the benefits from increased rice production could only be observed in the more affluent farmers. The less affluent farmers who had a lack of access to the resources, technology and capital, remained poor and were relatively unaffected by technical or alleged economic progress.

16.3 Fishing Industry

In Altavas, where Linayasan was located, the 1996 Provincial Socio-Economic Profile showed that there were 703.70 hectares of fishponds in this municipality. Of this area,
549.83 hectares were fully developed fishponds and 153.87 hectares were undeveloped. In 1995, the provincial profile showed that the production of fish in Altavas reached 633.33 metric tons of fish (1996 Provincial Socio-Economic Profile: 80). Those statistics were different from the records of the 1994 Altavas Municipal Socio-Economic Profile reviewed. The municipal profile showed that Altavas had a total of 496.60 hectares of fishponds and there were 250 fishermen and about 252 metric tons of fish sold that year (1994 Altavas Municipal Socio-economic Profile: 24).

The discrepancies in the statistical figures from those documents mentioned could be caused by confusion over the year the reports were produced. However, the big difference in fishpond area recorded in the provincial and municipal records implies considerable inconsistency of information that was crucial in the region’s development. The review revealed other problems in the municipal profile. There was inaccurate statistical data concerning the fishpond area and fisheries production. The data on fish production in particular barangays was not clearly identified in the municipal records reviewed.

In Linayasan, a recent survey conducted by the Center indicated that there were 24 households, husbands or sons, and about 30 family members, wives and daughters engaged in the fisheries (ERDSC, 1998: 8-7). In the survey, the numbers of fishermen were out-numbered by farmers in Linayasan. Fishing was one of the livelihoods that provided a stable source of income to some locals in this barangay. The Sibalew locals did not have this kind of livelihood. An attempt was made to introduce the inland fish culture, tilapia, to the locals in Sibalew but this project was unsuccessful because of a lack of basic technical expertise. Climatic and environmental conditions also differed markedly from Linayasan.

In the previous chapter, it was mentioned that the close proximity of Linayasan to Lake Tinagong Dagat, Talon River and the coastal area, provided economic opportunities for locals. Interviews with locals revealed that the fishpond owners employed some Linayasan locals as labourers or fishpond caretakers. There were two types of fishponds in Linayasan: non-commercial and commercial fishponds. The barangay captain distinguished the two based on the size of the fishpond area and the amount of fish
processed. He maintained that fishponds of less than 5 hectares were considered by the locals to be non-commercial ponds, while those over 5 hectares were commercial.

Prawns and milkfish were generally grown in the two types of fishponds. Crabs and *tilapia* were two species usually collected from fishpond canals. The canals joined the fishponds together and were a source of saltwater from the lake or river. The crabs and *tilapia* provided additional income for the owners. Some locals acquired a permit from the Municipal Government to farm mussels in lake *Tinagong Dagat*. Others collected oysters from the lake. It was not necessary to get a permit to dive for oysters. Like rice farming, fishing provided a stable income for some locals in Linayasan. However, the barangay officials did not have accurate statistical records. The locals provided figures of their income during interviews but agreed that they were not accurate; they were guessing. The locals did not keep records of their income. This was a traditional practice of subsistence families. This led to confusion when the researcher of this case study had to rely on the statistical figures given by the locals. The only option was to obtain narrative and descriptive accounts of information from the locals, but not to place too much faith in them.

For example, a review of the *1994 Altavas Municipal Socio-economic Profile* provided some figures on fish production in the municipality. From each hectare, 0.8 to 1.0 metric tons of milkfish was produced. Between 0.5 to 0.8 metric tons of prawns, 40 metric tons of mussels or 20 metric tons oysters were processed (*1994 Altavas Municipal Socio-economic Profile*: 24). The high quality prawns were sent to Manila to be processed for export. The milkfish and low quality prawns were sold in the local market. However, there was no comprehensive data on fishery production at the barangay level. In Linayasan, available data would have been useful for locals to compare their productiveness with other livelihood projects. For example, the information could have provided some comparisons when new livelihood projects were introduced. An example could be the fruit trees orchard project introduced by the Center.

Using the figures quoted by the Linayasan barangay captain, and based on his previous experience in his own four hectare fishpond, an income of PhP20,000.00 to
PhP30,000.00 (US$514.13 to US$771.21)\(^{64}\) per harvest was possible. However, he argued that any income depended on the prevailing prices. The barangay captain emphasised that fish quality was the major determinant for higher prices. This was often affected by weather conditions like droughts and heavy floods. He claimed that the income was enough to pay for the labourers and other necessities to raise prawns and bangus milkfish. However, the barangay captain did not mention the clear profit from the fishpond. Instead, he mentioned that the amount earned was used to support his family and he also kept his small butchery business running in the barangay. Like other small fishpond owners, the barangay captain did not depend entirely on the income from the fishpond. He also had rice fields and traded farm produce to gain a little income. His coconut plantation also provided some income for his family. Other fishpond owners had retail trade outlets or sari-sari stores too.

An elite, many of whom did not live in Linayasan, owned the commercial fishponds. The size of the fishponds varied from 5 to 25 hectares or more. According to some locals, the gross income from these fishponds ranged from PhP50,000.00 to PhP150,000 (US$1,285.35 to US$3,865.04) per harvest. This income was huge when compared with the income of the barangay captain’s fishpond. Interviews with locals indicated that there were about three local families who owned commercial fishponds in Linayasan. These families employed some of their relatives as caretakers of their fishponds. The fishpond owners spent more time in other business activities outside the barangay. The key informant of this case study, who was closely related to the barangay captain, claimed that the caretakers were usually provided with houses near the fishponds so they were able to better look after the fish. The caretaker and his family lived in the house. His wife and children also worked to maintain the fishponds.

Overall, the husband, the traditional ‘head of the family,’ had the power to impose any activities he liked on the members of his family. His wife and children needed to maintain the fishpond. The key informant explained that while the husband was the manager of all the work involved in the fishpond, the wife was more responsible for the selling of the harvest. The reason, the key informant explained, was because women had

\(^{64}\) There was an average exchange rate of US$1=38.90 pesos in 1998 (Europa Publications, 1999: 1031).
more patience in running retail businesses. The payment, or the percentage share of the harvest that the caretaker and his family received, was dependent upon an agreement made between the owner and the caretaker. The key informant maintained that in some cases caretakers received a monthly salary and were provided with a 10% share of the profits. Other caretakers entered into other arrangements, such as having the fishpond owners provide finance for the education of the children of caretaker. Sometimes the amount of profit shared from the harvest depended on the social relationships between parties, the owners and caretaker. The mutual agreements and unspecified conditions for profit sharing made it difficult to determine the income of those families involved in fishponds and deep-sea fishing activities.

A study of fishing activities similar to those of locals in Linayasan was conducted by Lopez-Gonzaga et al. (1995) in Punta Salog, the coastal barangay in northern Negros Occidental Philippines. Lopez-Gonzaga et al. indicated that men dominated fishing and women were responsible for fish vending. In Punta Salog where their study was conducted, there were beliefs and values that prohibited women from actually fishing. They maintained that:

The women’s monthly period creates kamalasan (bad luck) at sea;..., Women are buwisit (jinxed) in the sense that they are palahambal (talkative) and buwa'an (liars). The men believe that if this is the attitude of women at sea they will never catch any fish;..., Women cannot stand the kating-naw sa lawed (cold weather in the [at] sea);..., and... Women have to care of her [their] children especially at night (Lopez-Gonzaga et al., 1995: 36).

This account acknowledges the difficulties women encounter in the fishing industry. In Linayasan, a group discussion was conducted with one of the less affluent families whose livelihood was mainly from fishing. The participants were the husband, wife and their children. The family had been engaged in deep-sea fishing. The husband said:

In fishing you need to have ngaga-lakas-bob [patience and confidence]. If I did not have that I could not catch fish. You must be strong enough to overcome the waves and cold at night. Fishing takes time. My three sons and I leave here [referring to his house] at 4:00 in the afternoon. We return at 7:00 in the morning. Sometimes we spend from 14 to 16 hours at sea. Every night we fish, depending on the weather. In one night sometimes we can make one thousand pesos. That is a good income. But we did not get that amount every day. Sometimes we get only two hundred pesos. You know! Depending on seasons. During the off season in fishing, we work on fishponds. My sons collect mussels and crabs to sell so that we can buy rice. I do not have a rice field to cultivate. We do not have land to cultivate. There are other families
who also do fishing. I have my own small fishing boat. My son uses it and my wife at the barangay market sells the fish.

[His wife explained]...I have had experience of going fishing with my husband. It was dangerous for me. Especially when I went with them and the weather was bad. You know! I was terrified of the waves and the strong wind. Our fishing boat was very small and not strong enough for heavy waves. But I had confidence that nothing would happen to us. My husband and sons have been fishing for many years already. They have enough experience. But I do not want to go with them again. I am prepared to work on the farm rather than go fishing. I collect mussels, oysters and crabs there in the river. That provides an extra source of income. I do the fish vending and that is only within the barangay.

Fish vending was one of the livelihoods of some women in the barangay. Interviews indicated that there were about 15 women who engaged in fish vending every day. Most of their husbands were engaged in deep-sea or trawl fishing. Some women retailed fish for cash or credit in the barangay. A group discussion was conducted with the five fish vendor women who sold fish in the stalls alongside the roadway. The fish stalls had open walls with thatched roofs. The stalls were not equipped with freezers to store the fish. Instead, the fish were arranged on a table made of bamboo and displayed for sale. The women rented and used the stalls on a day-by-day basis:

We usually have fish or shrimps from the fishermen. We buy the fish for cash but if we don’t have money, we ask for credit and we pay the fishermen after selling it. Each of us sell about ten to fifteen kilos every day. We sell milkfish at PhP25.00-PhP30.00, prawns at PhP30.00, and crabs at PhP25.00 per kilo. We spend from four to five hours here. If we could sell ten kilos a day, then, we earn about PhP45.00. We gain Ph5.00 for every kilo we sell. But sometimes we do not recover our capital. Our income has to be enough to pay our credit with the fishermen.

In the discussions, one woman explained that her seven-year-old daughter helped her with the fish vending business. Her task was to distribute fish to their neighbours and to collect the cash paid. She further explained that if her daughter could not do the job she hired the children of relatives to do it. The children were paid according to the amount of sales they made (commission) and were also given some fish to take home. Another woman stated that she was a fish vendor because, according to her, such a livelihood was simple and accessible and her family did not have land to cultivate. The woman who led the group discussion insisted that fish vending provided the women an opportunity to earn their living.

However, this woman argued that the local fish traders dominated the business and therefore reduced the economic opportunities of the women. The traders had capital and
direct contact with fishermen. She explained that most of the fishermen sold their fish to the traders who provided the capital necessary for the continuation of their fishing. Then, the traders distributed the fish to the women to sell in the barangay markets. The woman alleged that the traders sorted the low quality fish sold to be sold in the barangay. The best quality fish was sold for a higher price locally or sent to the commercial fish traders in town. The low quality fish was sold in the barangay at a very low price. Consequently, that provided little income for the women fish vendors. She mentioned that it was necessary for them to sell all their fish because storage facilities were not available. Most of the women acknowledged that they had to drop their prices in the afternoons in order to sell all their stock. The next discussion will be focussed other sources of income in Linayasan.
Plate 17. Examples of Fishing Livelihood in Linayasan. Upper: Woman with her three-year-old daughter collects clams in the Talon River. Below: The group of fishermen have just arrived from fishing and the three women are relatives who sold the fish in the Linayasan Public Market. The photos show the traditional livelihood practices of men and women in local fishing activities (Photo: R. L. Saladar, 1998).
16.4 Kaingin

*Kaingin* or slash-and-burn farming was a traditional farming method in upland areas in the province. This method of farming, if practised continuously, was considered harmful to the environment because of the erosion and depleted resources of soil nutrients. Most policy makers had criticised *kaingin* as being unacceptably destructive to the environment. This issue had long been controversial in the history of the rural agricultural development in the province and other parts of the country.

In Aklan, the province where the fieldwork of this case study was undertaken, *kaingin* could be easily detected during the summer in the mountain areas. In the late afternoon, in particular, there were plumes of smoke in the mountains. In this area, the upland farmers cut down trees and burned them. The area gained was used for rice and other crops for their subsistence. Like other provinces, the national, provincial and local governments were actively involved and implemented various programmes to minimise *kaingin*. However, because of the limited area of land available for agriculture and the increasing population, *kaingin* remained an enduring practice and aggravation to the policy makers of the government.

In Linayasan and Sibalew, some farmers also practised *kaingin*. However, it was not always for their subsistence but for various other reasons. As well as the reasons provided previously by Sibalew farmers, there were farmers in Linayasan who argued that the existence of *kaingin* was because it was simple to follow, less expensive, and suitable for landless farmers to obtain some sustenance. *Kaingin* was also used to clear a space inside coconut plantations to provide income. The coconut trees were planted ten metres apart and the land between the trees was cleared and utilised through *kaingin*. Like the *kaingin* of other farmers in upland areas, the Linayasan farmers described the various activities involved in this method of farming. This included cutting and burning of shrubs and trees when the cut vegetation had dried. This was done inside the coconut plantation to open the space of land between coconut plants to plant rice, corn, cassava and banana. The area of *kaingin* was from 0.25 to 0.50 hectares. This was small when compared with the *kaingin* in other barangays located in the mountain areas. In the mountain area, the area of *kaingin* ranged from 1 to 2 hectares as noted by the researcher in Feliciano, the other barangay where the fieldwork of this thesis was undertaken.
Previously, it was discussed in the Sibalew case study that there were several reasons for locals to justify the practice of the *kaingin*. The locals were aware of the consequences of this method of farming for the natural environment. Reasons for the continuation of the practice were the expansion of orchard plantations, limited lowland areas for rice and the pressure for land due to increasing numbers of families returning to Sibalew from Manila.

In Linayasan, the locals stated other reasons for *kaingin* in their barangay. One farmer who practised *kaingin* was interviewed. He claimed that *kaingin* was not as rampant in Linayasan as it was in other barangays, because of fishing. He noted that three or five families occasionally practised *kaingin* in their barangay. In most cases, the farmer said that those families were from remote areas and it was those not established in Linayasan, or recently arrived, that used *kaingin*. But once the families had become established in the barangay, they tended to engage in fishing rather than *kaingin*. He suggested that fishing was a more lucrative source of income. The farmer argued that *kaingin* was practised only to utilise available family labour. He explained that once the *kaingin* was completed the husband returned to fishing. The area was left to the wives and children who planted and maintained the crops. The farmer outlined his activities in his *kaingin*:

I started to prepare my *kaingin* in the month of February. I cleaned up a small area inside my coconut plantation. The area was about half a hectare. I left the slashed vegetation for a month to dry. Then, I burned it early in May. I planted upland rice before the rainy season came. This was in the middle of May. I used a *tagad* [sharp stick] to make the holes for the rice seed. Then, I also planted cash crops such as beans, taro, corn, cassava and vegetables. When I had planted the area, I left the *kaingin* and I worked on my rice field. When I completed my work on the rice field, I returned to the *kaingin* to do the weeding. The rice in the *kaingin* was harvested in September. After the rice harvest, I planted some banana and left it to grow. But the problem in my *kaingin* was that rats and insects destroyed the plants. That's why I used chemicals to kill the pests. Not like ten years ago when I never used chemicals but harvested more sacks of rice.

Similar to this situation is the study conducted by Fujisaka and Wollenberg (1991) on the upland farming practices in Calminoe and Magsaysay in the northern part of the Philippines. According to Fujisaka and Wollenberg, the farmers in Calminoe and Magsaysay planted upland rice and tomatoes on newly opened, cleared and burned land. However, the farmers were forced to discontinue growing rice because of seedling maggot (*Alterigonia oryzae*), leaf spot (a Helminthosporium disease), acid soils, rats, birds and weeds (Fujisaka and Wollenberg, 1991: 118). In like manner, the farmers in
Linayasan also mentioned that they had encountered the same problems in their *kaingin* and also in rice farming.

It was mentioned in the early paragraphs of this section that there were criticisms of *kaingin*. Policy makers argued that this type of traditional farming had detrimental environmental effects: causing soil erosion, a loss of soil fertility and the siltation of creeks and rivers. However, many Linayasan farmers disagreed with those views on *kaingin*. Farmers claimed that they were aware of the consequences of *kaingin* on the environment. But those farmers lacked the technology to utilise the vacant areas inside coconut plantations. They could only cut and burn the shrubs and trees to provide space for rice and other crops to grow. Other farmers claimed that *kaingin* involved less capital, only seeds and chemicals, and less labour than modern farming practices as they observed in the Sloping Agricultural Land Technology demonstration farm introduced in Linayasan.

A landless farmer, who performed *kaingin* on the land of his relative, claimed that he preferred the *kaingin* method of farming because even his young children could help with the work. *Kaingin* was simple and did not require the use of commercial fertilisers, because the ashes of the burned leaves supplied organic fertiliser to the plants. Such knowledge of the advantages of burning by farmers in Linayasan was replicated in the claims made by Quitzon (1989) who outlined the significance of burning slashed vegetation in *kaingin* for the crops. Quitzon claimed that burning the vegetative cover of an area intended for planting made the soil fertile. It made plants more robust and the growth of weeds was retarded (Quitzon (1989: 40).

Like rice farming and fishing, the income of farmers involved in *kaingin* was problematic to determine. This was so because these farmers did not have records of their income. The main reason, the less affluent farmers claimed, was they were concerned more with providing food for their families. They considered making farm records was additional work for them and served no useful purpose. Farmers did not bother recording their income. Instead they explained that the growth of crops they had planted was an indication of the likelihood of future family sustenance. However, it was noted that the future sustenance was of immediate importance to the farmers. The past results, or records of those results, was of no consequence to them at all. Elsewhere, a study by
Serrano (1990, cited in: Toribio and Orno, 1996: 52) in the northern part of the Philippines indicated that kaingin could provide an income of more than PhP5,000.00 ($US190.76)\textsuperscript{65} per household. However, this income, according to the Linayasan farmers, was not enough money to provide for a family with six children, without other sources of income as well.

The more affluent farmers had a particular concern for increasing the income of their farms. The researcher of this case study noted that those farmers had kept updated records regarding their farming and information about their income could be obtained easily. The researcher expected the more affluent farmers to keep up-to-date, accurate and comprehensive records. But the more affluent farmers argued that keeping records of their income was as difficult for them as it was for the less affluent farmers. The interviews with the more affluent farmers in Linayasan revealed two issues regarding the recording of their income. The first issue was the reluctance of farmers to make records because they felt it was not necessary considering the small size of their farms. The second reason was that farmers were hesitant to provide their actual income to avoid paying higher tax to the government. The farmers felt the land tax paid yearly to the government did not help them improve their farming methods. Instead, the tax was used in the infrastructural development projects of the government. Similar arguments were offered by the locals in Sibalew during the interviews.

In Linayasan, although some farmers recognised the advantage of *kaingin*: simple and inexpensive, other farmers argued that *kaingin* could only be productive for one year. In the following year, the farmers indicated that their harvest of the produce had decreased to the extent that the labour they rendered was not compensated by the amount of good produced. The farmers claimed that they could use only one site for *kaingin* every year, otherwise they needed to apply expensive commercial fertiliser to the plants. The farmers had decided that instead of buying fertiliser after the harvest of rice and corn, they planted banana and fruit trees to minimise the problem of soil erosion and to utilise the area as a useful source of income. The final comment by Linayasan farmers was that *kaingin* was not a profitable type of farming in their barangay. They claimed that *kaingin*

\textsuperscript{65} There was an average exchange rate of US$1=26.21 pesos in 1996 (United Nations, 1997: 295).
had been one of the livelihoods in Linayasan to utilise the space available in coconut plantations.

16.5 Coconut Plantations

Another source of livelihood examined in Linayasan was income earned from coconut plantations. The 1996 provincial profiles showed that the Municipality of Altavas had a total area of 3,519 hectares of coconut plantations (1996 Provincial Socio-Economic Profile: 76). From this area 2,223 tons of copra was produced every year. Those statistics were not consistent with the records indicated in the 1994 Altavas Municipal Profile reviewed. The Municipal Profile indicated that Altavas had a total area of 3,107 hectares of coconut plantations (1994 Altavas Municipal Provincial Socio-Economic Profile: 16). Of this area, the average copra production was 10 tons-per-year and the coconuts produced 4 croppings-per-year. It was noted that the Provincial Profile used imperial ‘ton’ while the Municipal Profile used metric ‘ton’.

The inconsistencies of coconut statistics in those documents were similar to the rice and fisheries records discussed previously. Although variations in production or yields of a particular crop could differ every year, the significant differences claimed in land used exclusively for coconut plantations were a critical discrepancy in the data. It meant there was inadequate evaluation and monitoring between the municipal and provincial bodies. More careful attention could have improved this deficiency in the documentation of the agricultural crops and production.

In Linayasan, observations showed that most of the hilly areas of this barangay were planted with coconuts. Linayasan locals estimated that the majority of the coconut plants already matured, at 50 to 75 years, were planted by their great grand parents. Many coconut plants were not as productive as they used to be. The farmers cut those matured coconut trees, trunks were processed into lumber and sold to the traders of construction supplies. The traders, wholesalers, sold them to commercial retail traders in urban areas. However, some lumber was used to build houses in the barangay.

Interviews with Linayasan locals revealed that with the demand for coconut lumber as a substitute for timber in the construction business, the production of coconut was
threatened. Most matured coconut plants were harvested and the local farmers maintained the young plants as a future source of income. However, locals argued that some farmers cut their coconut plants even though they were not mature enough to process the trunks into lumber because of the demand in the market.

In an interview with the barangay captain, he acknowledged that the production of coconut lumber provided additional income to some farmers and employed a few locals in their barangay. However, the barangay captain argued that there were two major problems in copra production driven by the demand for coconut lumber. The first problem was that there was rampant cutting of the coconut plants. Some of the trees were not even mature enough to be used for lumber. The problem, the barangay captain emphasised, was that the number of coconut bearing plants had decreased and reduced copra production in the barangay. The second problem was that lumber produced from young coconut trees affected the quality of coconut lumber sold by the traders in market. The barangay captain agreed that the price of high quality coconut lumber from mature plants was higher than lumber produced from young coconut plants. The price differential had discouraged some farmers from cutting young coconut plants.

However, the barangay captain was aware that some farmers still cut the young coconut trees, particularly those not producing well, and the trunks had been processed as lumber to earn income. The barangay captain concluded that coconut lumber production did not actually provide any real economic advantage to the Linayasan farmers. This form of livelihood offered opportunities to traders of construction items to exploit the coconut plantations to gain more profit for their business.

The barangay captain complained that in Linayasan there was no inventory of agricultural crop production. The previous administration had kept records before he took over the administration of the barangay. The barangay captain discussed this during a session with members of the barangay council. The researcher had attended this session, and noted that the barangay captain revealed that they did not have records on the actual number of farmers who had coconut plantations. He explained that there were surveys conducted by the Philippine Coconut Authority. But the Philippine Coconut Authority had not furnished them with the results of the survey.
The barangay captain explained that the Philippine Coconut Authority introduced a coconut rehabilitation programme in Linayasan. Under the scheme, the Philippine Coconut Authority provided loan assistance to farmers who had coconut plantations. The loan was intended to be used to buy coconut seedlings and to pay expenses, such as labour and fertiliser, during the replanting of plantations. However, the barangay captain insisted that the programme had not been monitored properly. He contended that there were farmers who received money from the Philippine Coconut Authority and spent it on other purposes, such as buying food or household items.

The barangay captain notified the researcher of this case study of the inconsistent supervision of the programme. He intimated that there were areas inside the coconut plantations that were open land. To make the area productive, the barangay captain alleged that some farmers' practised *kaingin* and vacant areas were planted with upland rice, corn, taro, cassava and sweet potato. Long-term crops were also planted, such as rambutan, oranges, pomelo, and bananas. After the harvesting of upland rice and cash crops, the long-term crops remained. The combination of banana, lanzones, jackfruit and coffee developed into another distinct form of farming inside the confines of the coconut plantations, called the coconut-based-multi-story-cropping system.

This method of farming in the plantations concentrated on the efficient utilisation of vertical space above the ground using different kinds of plants. The plantation has multiple layers of canopy from the different varieties of fruits that were produced. For example, on the top layer of the area the remaining coconut plants produce nuts for copra. At a lower level other plants used the space available for lanzones, jackfruit, coffee and banana. Some portion of the plantation was planted with bamboo that produced poles used for the construction of houses. Interviews indicated that there was no study yet on the coconut-based-multi-story-cropping system to determine the productivity or the appropriateness of the practices regarding this method of farming in Linayasan.

Orno (1996) conducted a study on the multi-storey-cropping system in the northern part of the Philippines, which indicated that coconuts and lanzones bear fruit after 15 to 20 years and have a productive life of at least 30 years. The study showed that in one hectare bearing coconut-lanzones-banana, with 200 coconut trees, 200 lanzones and at
least 500 banana plants, a farmer could earn PhP2,000.00 every 45 days from coconut alone. The income from lanzones was in the vicinity of PhP30,000.00 per-year (5kg/tree at 30 pesos-per-kilo) and at least 500/week from banana. This system of production gave the farmer an annual gross income of at least PhP70,000.00 ($US2,670.73)\textsuperscript{66} (Orno, 1996: 98). This was considerably higher than any Linayasan farmer claimed to have earned.

The annual income from the coconut-based-multi-story cropping system model studied by Orno (1996) was convincing. But not one of the farmers interviewed in Linayasan mentioned they had an income of PhP70,000.00 a year. They had an income ranging from PhP15,000.00 ($US572.30) to PhP30,000.00 ($US1,144.60) per hectare a year. However, it was not clear from the interviews whether such an income was actually obtained by the farmers. This was because of inadequate records. Most farmers interviewed argued that such an income was unrealistic and varied depending on the age of the coconut trees, the weather and the current prices of coconut products. When interviewed, the farmers explained that their current production had decreased because of the frequent occurrence of droughts and typhoons. They also claimed that their income was affected by the fluctuation of prices due to the Philippine peso devaluation.

An interview was conducted with a fifty-five-year old woman who owned a five-hectare coconut plantation. The woman explained that she inherited the coconut plantation from her parents. When her husband died her son, who was not married, managed the coconut plantation. She explained that her son planted cacao, jackfruit, coffee, lanzones and bananas under the coconut plantation. Her farm resembled the coconut-based multi-story cropping system described by Orno (1996). In addition to the earnings from coconut that was harvested three times a year, her son had introduced a variety of other plants so that they could get extra income. She estimated her income at about less than PhP10,000.00 ($US381.53) per harvest. But she argued that the income was decreasing due to the effect of drought on the coconut trees. The growth and productivity of crops such as cacao and lanzones were also affected.

\textsuperscript{66} There was an average exchange rate of US$1=26.21 pesos in 1996 (United Nations, 1997: 295).
Further, the woman intimated that work on the coconut plantation using the coconut-based-multi-storey copping systems, required the participation of the family members in a joint effort. However, she stressed that the participation of family members varied according to the economic status of the household. She cited examples of more affluent households where the husband was responsible for the coconut plantation while the wife attended business. Relatives were usually hired to harvest coconut and process copra. She further explained that in less affluent families, who only owned a small plantation, all family members were involved. The husband did harvesting, and the wife did the cutting of nuts for sun drying with the help of their children.

The final statement of the woman was that the coconut plantations provided various incomes to farmers in Linayasan. The income derived not only from copra and lumber from coconut trunks but also from other plants like banana, coffee, bamboo and fruit trees such as jackfruit, lanzones. Many other plants could be grown inside the plantations to produce extra income. She suggested that converting matured coconut plantations into mixed-crop-plantations would be possible and could enhance the economic utilisation of the land. However, she argued the prevalence of droughts and the soil depth was necessary in any evaluation. Those types of plantations were located in the hilly areas. The ground was rocky with shallow soil that could affect the growth of particular plants. Other farmers discussed similar issues during interviews.

16.6 Homegardens

Homegardens were also one of the means of income in Linayasan. This type of livelihood was not to produce direct income but to supply vegetables needed by the families. As in Sibalew, many Linayasan locals had their small gardens in their backyards. The areas of the gardens varied from 100 to 300 square meters, enough to grow vegetables for the family. However, the family could sell any superfluous produce to their neighbours. Although such income was promising in Linayasan because of access to the town market, the inadequate water supply, especially during summer, prevented commercial production.

Traditionally, the lack of water prevented locals from investing more time in gardening. Instead, the locals grew whatever seeds or stalks of vegetables were available in their
backyard with less attention and care than was ordinarily required, particularly by commercial growers. Interviews revealed that in Linayasan the type of plants grown in the gardens indicated the socio-economic status of households in the barangays. For example, the more affluent households grew orchids and ornamental plants, not for sale but for themselves. The less affluent households grew vegetables such as beans, tomato, eggplants, ginger, sweet potato, lemon grass and even herbal plants to supplement the needs of their families.

Regardless of the social status of the households, observations showed that the plants grown also helped distinguish which gender was directly involved in looking after the gardens. Informal discussions with women in Linayasan indicated that where the plants were well maintained and where more ornamental plants were grown, wives did more of the gardening. The converse was also true. However, some women argued that their husbands could do better landscaping of the garden than they could. Others argued that outside work to earn income was more important than landscaping the garden, particularly for the less affluent families. Still others suggested that gardens with mostly herbal plants indicated that someone in that particular household could be the traditional healer of the barangay.

In the interview, a less affluent woman claimed that even with a small garden, she was able to sell some of her produce in the market. She explained the importance of gardening to her family:

I have only a small area of garden. It is like a refrigerator. I grow vegetables needed everyday by my family. I am busy in my household work. But I always give time to the garden. It's a small garden in the backyard of my house, but it helps to save money. I wanted to sell some vegetables in the market, but I did not grow enough for them to be profitable. The area was too small. I had only limited space because the land was owned by my uncle. That's why I could not expand the area of my garden. I had to ask permission from my uncle if I needed more. What's the use of a big area if I could not manage it. I thought the area was enough to provide for my family. I had vegetables and I also grew herbal plants for when my children had headaches, for example.

Her husband suggested that gardening was a hobby for their family. He asserted that all his children were involved in helping in the garden if they did not have work outside. He claimed that regardless of the economic status of the family, the wives were usually responsible for looking after the garden. The husbands were responsible for working on
the farms and outside the barangay to earn money. He claimed that gardening in Linayasan was not a profitable business because of the drought and the high cost of seeds, fertiliser and chemicals needed to grow vegetables for commercial production.

Vegetable traders in the Linayasan public market disagreed with this argument. They explained that a glut of vegetables coming from other places affected the local market price. The traders stressed that the glut discouraged many farmers from growing vegetables commercially. Instead, they planted vegetables needed by their families. The traders claimed that Linayasan was accessible to the market and had the potential for an agricultural business. But the lack of credit assistance and limitations of marketing facilities, such as packaging and storage, deterred vegetable farmers from commercial production.

Vegetable production was a topic discussed with the barangay captain. In Linayasan, the captain said, different agencies conducted vegetable production training to support the rural nutrition programme of the government. The barangay captain criticised the programme for its lack of credit assistance to support the farmers. 'Besides that,' the captain argued, 'the seeds promoted are not available locally.' He also mentioned that the rural bank had provided low-interest agricultural loans to the farmers but only a limited number of them had access. The main reasons farmers had not obtained loans, the barangay captain thought, was the bank documents required and procedures, which were too complicated, particularly for less affluent farmers. 'Farmers must submit a project proposal to the bank before the loan could be released to them.' Moreover, the bank required a collateral document such as a land title in case the farmers could not repay the loan. These phenomena provided opportunities for local moneylenders from the more affluent relatives or traders. The barangay captain noted that very few farmers were interested in getting loans for growing vegetables commercially because of unfavourable weather conditions in the area.

In discussions with one family about gardening, arguments occurred between the husband and wife interviewed on their perception of the significance of the garden to their family. The husband argued that it helped establish his social relationship with their neighbours. He claimed that whatever his family produced they shared with their neighbours. In exchange, their neighbours also shared their produce with his family. This
exchange of produce built the social relationship of families in the barangay. However, his wife claimed that the sharing of produce did not always mean good social relationships between families. She argued that the practice could also create social conflict. She insisted that giving vegetables free of charge had not built social responsibility, but had developed dependency in the neighbours who always came and asked them for vegetables.

Linayasan interviewees raised many issues related to vegetable production. Some problems were similar to the findings of other studies conducted in the northern part of the Philippines (Toribio, 1996; Lewis, 1992). Lewis's (1992) study documented the development of vegetable production in the municipality of Buguias, the center of the vegetable markets located in Benguet province. This province had temperate climatic conditions favourable for growing vegetables. Vegetables such as cabbages, carrots and potatoes were supplied to the market in Manila. The study by Lewis indicated that with the opening of feeder roads in remote areas in the municipality, gardening expanded rapidly. This rapid increase in gardening was due to the fact that the condition of the new soil was favourable for gardening due to abundant organic matter, a good water supply and a lack of pests in the area (Lewis, 1992: 189-93).

Lewis further mentioned that although the road development in remote areas of the municipality provided an opportunity for some farmers to expand their gardens, the local farmers had to remain small operators. Lewis claimed that their limited knowledge and capital militated against their taking advantage of the new opportunities. Lewis mentioned that outsiders who had capital undermined the opportunities the road had brought to the municipality. These outsiders provided the local farmers with capital to develop new garden plots and introduced the sharecropping system. Lewis concluded that the opening of roads in remote areas brought "new entrepreneurs" like sari-sari stores and some locals employed as storekeepers that changed the economy of the inhabitants (Lewis, 1992: 189-93). These findings reflected the situation in Linayasan where the more affluent families dominated the economy.

Toribio (1996) conducted a case study about the indigenous rice paddy system in Bontok, close to Lewis's (1992) area of study. Toribio's research indicated that the traditional production system at Bontok involved a different indigenous land-use system.
Rice paddy and cash-vegetable gardening were the main industry of the inhabitants. Toribio described the integration of a village economy with a market-oriented economy that transformed traditional gardening into intensive vegetable production. He explained that land in the village became scarce, posing a problem for farmers who were unsure whether to favour gardening which was more economically rewarding with maturity at around 45 days, or rice growing which matured in seven months (Toribio, 1996: 33). These findings again reflected the problems faced by Linayasan farmers.

Overall, in Linayasan, the limited land and unfavourable weather conditions discouraged farmers from venturing into commercial vegetable production. Some locals regarded homegardens as a means of income while others perceived them as a source of supply for their families. Accounts from locals suggested that the types of plants grown in the gardens could help distinguish the gender directly involved in this kind of livelihood in Linayasan. Interviews also revealed that the plants grown also indicated the social status of households. The local healers could be identified by outsiders through various kinds of herbal plants grown in the garden. Finally, arguments between husband and wife, and neighbours were described. The provision of vegetables could help establish good social relationships or develop dependency by other families.

16.7 Raising Animals

Animal raising was another source of income popular with the locals in Linayasan. This was a backyard enterprise for less affluent families, with production exclusively for home consumption. Swine and poultry were raised in Linayasan. Goats were also raised but were not as popular as hogs and chickens. Large animals like buffalo and cattle were raised as draft animals to cultivate the land. A few farmers kept cattle for commercial purposes and some fattened cattle in Linayasan. Accounts from locals indicated that the municipal government also introduced the cattle dispersal programme in various barangays, including Linayasan, but locals responded very slowly to cattle breeding, mainly because of the longer period of time involved.

In Linayasan, as in Sibalew, swine raising was principally a family activity. In general women took most of the responsibility to manage the work involved. Housewives prepared local foods, for example banana bunches, taro leaves and rice bran, and fed the
swine. They cleaned the pigsty, and in all those activities the children were involved as well. When the hogs were fat after a maximum of six months the swine were sold to the butcher. But before the housewife could sell the swine, consultation with her husband was necessary to determine the appropriate price and to decide which buyer the animal would be sold to. This was because the swine belonged to the whole family and was not exclusively owned by the housewife, despite their responsibility to care for the animals. Interviews revealed that there were families who butchered their swine and the meat was sold in the barangay public market. In this case the husband, assisted by sons, did the butchering job. The wife would then sell the meat and her daughters usually assisted. The housewife, in the traditional Filipino manner, kept the income earned by the family. Linayasan women treated swine raising as a part-time job that generated extra income for their families.

Elsewhere, two case studies conducted by other authors were reviewed (Shields et al., 1996; Paris and Luis, 1991). The findings of those authors suggested that there were similarities in the swine raising traditionally practised in Linayasan when it was assessed with the practices in other barangays. In barangay Sta Barbara at Pangasinan, in the northern Philippines, Paris and Luis (1991: 133) observed:

Large and small animals were either brought or obtained through the sharing or paiwi system. This was a sharing system in which the owner provided the animal while the caretaker was responsible for care, medicines, feeds, breeding and other expenses. If the owner and the caretaker decided to sell the animal, the initial value of the animal would be deducted from the sales and the differences shared equally. If a female cow produced offspring, the first-born calf would be given to the caretaker while the mother remained the property of the owner. This sharing agreement was practised more in cattle raising because the rate of turnover for cattle was faster than for carabao.

In swine raising, piglets of the first furrowing were divided equally by the owner and the caretaker. Another sharing arrangement divided the proceeds from the sales of pigs equally between the owner and the caretaker. They did not deduct the initial investment before dividing the profits, as in the case of the cattle-sharing arrangement. The feeds and care were all borne by the caretaker (Paris and Luis, 1991: 133).

In accounts similar to those quoted from Paris and Luis, in the two villages on the southern coast of Leyte in the Philippines, Shields et al. (1996: 163-67) examined the hog raising, alima system. They explain that the alima system had been traditionally used in the rural livelihood of poor women in the villages of Napo and Tubod. They viewed the system as one way for women to get access to hogs during times of crises, and to
access credit from the more affluent families who provided them capital to buy new breeds of piglets.

Women in Napo and Tubod have long depended on hog raising through the alima system as a major home-based enterprise. Hogs are sold for cash for household subsistence, to pay debts, or to finance other income-generating activities; they may be slaughtered for annual celebrations; or they may be bred. Some households even used alima to enlist other families to take care of their animals in times of stress, allowing them to avoid selling their livestock (Shields et al., 1996: 163).

The findings of their study showed that when the new breeds of hogs were introduced to the village, the native hogs were gradually displaced in the market (Shields et al., 1996: 164). The new breeds of pigs were popular because they attained a heavier weight and tasted better than the existing local breed. Consequently, the introduction of the new breed of hogs, and the associated costs, was detrimental to the production of native hogs. The new pigs were not suitable for an income-generating project for the poor families. Shields et al. explained:

The unfortunate side effect of the promotion of these new hogs in Agbanga, with the accompanying emphasis on production for the market-place, is that it has undermined hog raising as a viable income-generating option for women. Women engaged in hog raising through alima relationships with hog-owning households were unable to switch as easily to raising the finely bred hogs. Most Agbanga households cannot afford to raise them. Unlike the native hogs which had evolved to make the best of local feed sources and resist local diseases, the new hogs require expensive store-bought medicines and feed supplements in order to survive and grow (Shields et al., 1996: 164-65).

Similar to those accounts quoted from the two studies conducted outside, there were issues within the household regarding conflicts over the ownership of animals between the husband and wife, as discussed by Linayasan locals. This was particularly so when it came to the ownership of large animals like buffalo and cattle. Paris and Luis (1991: 133) indicated in their study that large animals like carabao and cattle were registered in the husband's name, unless the head of the household was a widow (Paris and Luis, 1991: 133). This was similar in Linayasan. Small animals like chickens, swine and goats usually belonged to the housewife as of a customary right. The husbands were responsible for looking after buffaloes as draft animals. If husbands had to work outside the barangay, the wives looked after the animals in addition to the hogs and chickens. But when the animals were sold, the wives received the money to be used for the family as in the Filipino tradition.
In Linayasan, a sixty-one-year-old widow was interviewed. She explained the significance of raising animals for her family. She remembered that when her husband died, she took over looking after the cattle with the help of her unmarried son:

I did not want my son to look for a job in other places. I needed him to look after the farm and the animals left by his father. His father died two years ago. Nobody could help me except him. His brothers and sisters had their families and lived in Manila. He was the only one not married. When my husband died, I did not allow my son to go to his brother in Manila to find a job there. I am too old. I could not manage our farm and animals without him. He had to look after the cattle and coconut plantation. He grazed the cattle on the coconut plantation. That was a good place to graze the cattle this summer. It's too hot for animals to graze in an open area. The coconut trees provided shade for the cattle.

Our problem here in Linayasan is the limited space to graze animals, especially when in summer the grasses die and water is a major problem. You know! My son used the leaves of the banana and dry rice hay to feed the cattle. He did that every day. In the afternoon, he took the cattle from the coconut plantation and kept them in our backyard at night. A supply of grass for cattle was our main problem. That's why you see very few families with cattle in the barangay. But many families raise hogs or chickens in their backyard.

My son did the work on our farm and looked after the animals. I was busy in my small business selling fish in that place where we met yesterday. Although I get just enough to live on selling fish, I want to keep the four cattle left by my husband. That's why I did not want my son to go to Manila. He had to look after our animals. You know! He also raised hogs and chickens. And that helped us in the anniversary of his father. When the families of his brothers and sisters had their vacation last year, we had a family reunion and there were many visitors. If we had not had hogs and chickens, we would not have had anything to butcher for that occasion. A family reunion costs money but if the family have animals to butcher that reduces their expenses. That's why there are many families in the barangay who keep animals in their backyard. The purpose is not only for occasions but also that they can sell the animals when the families are in economic crisis.

In group discussions with Linayasan local officials, the participants claimed that the households raised animals, particularly swine, for various reasons. Reasons given were, for subsistence; family occasions such as birthdays, weddings, reunions and such like, fiesta celebrations and for emergency needs of the family. The barangay captain explained that the Department of Agriculture introduced the animal dispersal programme in Linayasan. The main purpose of the programme was to improve the quality of hogs raised by the local people. A major component of the project included the training of the participants. After training, new breeds of piglets were provided to the participants by the Department of Agriculture. Although the new breed of piglets was free to farmers, according to the barangay captain, there were criticisms from the participants of the programme. The barangay captain considered the programme was of more benefit to
more affluent, rather than the less affluent families as the more affluent had the necessary capital to ensure success. He explained that only the richer families could buy commercial feed and medicine, or had the money to pay for veterinarian services.

The barangay captain further argued that although many piglets were produced and could be bought to the barangay, the less affluent families still preferred the native hog. He insisted the native hog did not incur such high costs, it could be fed with household leftovers, and agricultural surpluses such as rice or corn bran, root crops, slices of banana trunk and other local plants. The barangay captain claimed that the native hog had also developed resistance to diseases. Local herbal plants could also be used to cure illness if the pig became unwell. He argued that the new breed of hog was inappropriate within the existing economic conditions; that the native hog was more suitable to be raised by poor families. This was similar to the findings of Shields et al. (1996) previously described.

The staff of the Department of Agriculture stationed at Altavas conducted a group discussion relating to animal dispersal. The participants were the head of the department and four of his staff. It focused on issues involved in the animal dispersal programme. A brief summary of the discussion follows:

Since the 1980s, we had been implementing an animal dispersal programme. We encountered several problems and issues. There were farmers who only wanted to get the new breed of hogs and who were not specifically interested in the success of the project. These people were less educated. They were given training. At the beginning of training they were very interested. But once they got the piglets, we noticed that their attendance at meetings decreased. You know! That was very frustrating for us as government employees. We did not know what the local people thought about the project provided to them by the government.

One unpleasant experience we had was that six months after we had distributed the piglets some of the recipients intended to kill the animals for their subsistence. The justification for this action was to be that the hog died because of disease. But they had been butchered for their fiesta. Another problem we encountered was that when the hogs were ready to sell or butcher, the recipients did not feed them properly and the hogs became ill. They delayed reporting that to our office that the animal was unwell and left the matter until it became serious and too late to effect a cure. But we introduced a new policy to our animal dispersal programme. The recipients must have completed the training before they were given piglets. They had to sign a contract to return a share of the profit to the department after producing the offspring. They must also regularly attend meetings. If they did not comply we could confiscate the animals and give them to the other farmers.

An interviewed woman who was one of the participants in the animal dispersal programme claimed that hog raising was a potential source of income in the barangay.
However, she argued that there were issues about how other families raised animals in their backyard. She explained that there were families that raised the hogs in a small piggery. Other families raised hogs in an open area surrounded by bamboo fences. Sometimes animals strayed and damaged the plants of their neighbours. This created misunderstandings between the families:

The local barangay people raise various kinds of animals: Hogs, chickens, ducks, goats, cattle and buffalos. I have noticed there are families that let their young children look after such animals. You know! The children are too young to manage the animals [aged from eight to thirteen-years-old]. Children need to play with their friends. It is difficult for children to look after big animals like buffalo and cattle. They are too young and not ready to manage animals. But they are forced to do it because their parents work on farms to get money to live on.

When the animals stray onto the plants of their neighbours the parents blame their children for not attending the animals properly. That's what usually happens in this barangay. Some families did not want to pay for the damage caused by their animals. Instead, they insisted that it was the negligence of their children. I think it was not the fault of the children. It was the responsibility of the parents to look after the animal and they must pay for the damages.

The final comment from the barangay captain on animal raising, particularly swine, was that it was a popular practice for locals but there were various problems as well. He confirmed that there were many cases related to straying animals reported to his office. The barangay captain had perceived that the problem occurred when some families let their animals roam at night to reduce the cost of feed and this caused considerable ill-feeling. Neighbours felt that such a practice gave an economic advantage to those who did this but the outcome of such a strategy was detrimental to them. The barangay captain detailed cases settled in his office through giving advice; without money being involved. If the barangay captain could not solve it, the case was forwarded to the municipal court to settle. The barangay captain claimed that animal raising was a potential livelihood for the locals but limited land and the smell from pigs created some problems in the barangay.

16.8 Backyard Orchards

The last example of sources of income examined in Linayasan was the backyard orchard. This type of livelihood in Linayasan was not productive and the locals had limited knowledge on how to improve their existing fruit trees grown in their backyards. Accounts from Linayasan farmers indicated that the low harvest from the fruit trees was
due to poor quality plants and a lack of technology to manage the orchards properly. The situation of orchards described by the farmers was similar to the condition of fruit production in Sibalew in 1983, before the College introduced demonstration farms in that barangay.

In Linayasan, interviews with farmers revealed that not all, but the majority of them, lacked motivation to engage in fruit tree production. The farmers suggested four major reasons for this. First, the farmers claimed that the long period of maturation necessary before the fruit tree produced an income deterred any investment in time and money in the improvement of the orchards. Second, the soil nutrient deficiencies in hillside areas were acknowledged because of the excessive soil erosion. Third, the harsh local conditions and limited water supply during summer were detrimental to the growth of fruit trees. The final reason was the lack of good quality stock and finances. Farmers were not prepared to try to improve the existing orchards in their backyards. How the College addressed those problems when assisting the farmers in Linayasan will be examined in the next chapter.

In 1998, ocular cross-transit investigations\(^7\) around the area of the barangay showed that there was one example of an established rambutan plantation in Linayasan. The area of the plantation was about three hectares. The biggest orchard seen in Linayasan was observed during the fieldwork. The plantation owner was a member of one of the most prominent families in the barangay who lived in the town. As he lived about five kilometres from his plantation, he had a caretaker to look after the plants.

In an interview, this farmer mentioned that he had derived an income of PhP45,000.00 ($US1,526.97)\(^8\) from the previous rambutan harvest in 1997. The farmer mentioned that in subsequent years he expected production to decrease due to the droughts that badly affected rambutan. He explained that his interest in the orchard project developed when he had been in Sibalew in 1992. He had been impressed with the rambutan and calamansi orchard projects in this barangay. It was about thirty-five kilometres from his farm.

\(^7\) An observation of what is growing in the community over the line-of-sight: a rapid appraisal.

\(^8\) There was an average exchange rate of US$1=29.47 pesos in 1997 (Europa Publications, 1999: 1031).
A year after he had visited Sibalew the farmer explained that he had started the rambutan orchard on his own farm. He explained that because he lived in the town about five kilometres from the orchard, he had hired a relative as caretaker to look after the orchard. The farmer provided him with a house to live in that was located within the orchard. He also constructed a small poultry house for the caretaker's wife to raise native chickens in. However, it was not clear in the interview how they shared the income from the poultry and the orchard. The farmer explained that the caretaker was paid of PhP75.00 a day to maintain the plants. He also provided the caretaker with an option to work on other farms to earn extra income. The family of the caretaker was also allowed to plant vegetables and other cash crops for their subsistence. In the interview, the orchard owner said:

I established three hectares of rambutan orchard on my own farm. But it was not an easy task. It involved hard work and money. I had to learn the techniques and management of the orchard. I had been in Sibalew and that helped develop my interest in establishing the orchard. I had talked to different farmers who owned orchards to get ideas from them. I did not rely on what they [other farmers] said to me. I developed my own techniques of management suitable for my farm. You know! I live in the town quite far from this orchard. That's what I did in my orchard. I left the orchard to my caretaker. We had worked together in the orchard. I trained him also from what I had learned from my earlier experience.

Although I lived in the town I was always on this orchard very early in the morning to observe the plants. Insects could only be seen in the morning and that's a good time to examine the pests attached to rambutan flowers. Many farmers here did not know about them. They left their farms to the caretakers. That's what happened to some farmer co-operators of ASCA. You know! The caretakers had limited ideas if you don't teach them. I trained my caretaker about what to do on the orchard. Teaching them to underbrush and prune the branches was not enough. I trained my caretaker to understand what we had done on the orchard. That's why he knew what he needed to do even when I was not around. I think my orchard would not have been established like this if I only relied on my capital without building a good relationship with my caretaker. Without my caretaker, my investment would be wasted. Especially as I lived so far from my orchard.

The orchard owner further mentioned that his orchard was a center of attraction to other farmers, not only in the barangay, but also from neighbouring barangays where they had also started their own orchards. This, according to him, created some concern about future over-supplies of rambutan in the local market. He argued that although he earned a profit from his orchard, the money he had invested was not yet recompensed. The successive long droughts and the increasing numbers of farmers engaged in orchards in other barangays made him worried about the future earnings from his rambutan orchard.
The rambutan orchard described above was developed privately by the farmer as an example for other farmers to copy. It began in 1993 in Linayasan, about 5 years before the fieldwork was undertaken (1998). However, not all, but most farmers were interested in improving their own orchards. In an interview with the owner and caretaker of the orchard they agreed that other farmers were free to visit their orchard. They explained that the information regarding their experiences in the orchard was also freely shared with other farmers. However, the example of their orchard had not positively led to the improvement of the orchards owned by other farmers. Instead, the owner and caretaker claimed that other farmers though that the establishment of rambutan orchards was appropriate only for more affluent farmers. The requirements of intensive labour and higher capital investment were issues raised by less affluent farmers opposed to the project.

The less affluent farmers in Linayasan grew from three to five varieties of fruit trees in their backyards, an ocular cross-transits investigation inside the barangay showed. Fruit trees like mango, pomelo, citrus, guava, rambutan and lanzones were grown in the backyard traditionally. It meant that any seeds or seedlings available were planted in the backyard without taking into account the correct spacing or making allowances for future growth. The principle of such a practice was based on the bahala na system, which means the seedlings were planted regardless of what might happen to the tree spacing within the orchard in the future. Consequently, after three years the orchard produced poor quality fruit and little income due to over-crowded plants. This system was commonly used according to the locals in the interviews. It was not a systematic arrangement of plants and consequently the results were poor.

In hillside areas, locals revealed that fruit trees were grown only to supplement their income. They were grown in addition to the major crops planted by farmers: - banana, coconut, bamboo and cash crops like corn, cassava, beans and other legumes. When cash crops were harvested, such as corn, cassava and beans, the locals revealed that the intercropped fruit trees like mango, rambutan, avocado, lanzones and citrus were not cared for properly by farmers. Less attention was given to those plants; growth was very slow due to lack of maintenance. The soil underneath the plants and in the surrounding area was left uncultivated. The vacant space between the plants was grazed by cattle or buffalo and caused physical damage to the plants. There were farmers who claimed that
the slow growth of fruit trees in the hillside areas was because of the thin layer of soil. This was due to the rate of soil erosion that caused the paucity of organic nutrients in the sloping areas.

However, during summer there were arguments from locals that the growth of plants in hillside areas was severely affected by the lack of water. The distance to the available water caused farmers problems. The barangay officials identified three problems crucial for the improvement of fruit production in Linayasan. The first problem was the lack of good quality seedlings available for farmers to plant. Second was the farmers’ limited technical and managerial skills to successfully run the orchard. The final argument of the barangay official was that there was insufficient assistance provided by the government to locals. In addition, the officials argued that the adherence to the bahala na values inherent in traditional practices encouraged farmers not to exert more effort to improve their orchards.

For example, in an interview with a less affluent farmer who had a backyard orchard: mango, citrus, rambutan, avocado and pomelo trees, he explained that those plants grew through his method that he called the bahala na system. The success of the trees was either suwerte (luck) or malas (bad) because he did not have enough knowledge of the technical requirement of the trees. It meant that he ‘did not care’ about the plants; they could either provide a ‘good’ income to his family or produce ‘bad’ result in his backyard. This farmer explained that his orchard had developed from the seeds thrown into their backyard. The seeds were allowed to grow until healthy seedlings could be selected. Mango, citrus, rambutan, avocado and pomelo trees that were not planted at the same time resulted an uneven growth of the plants.

The farmer further complained that the mango plants shaded the citrus, rambutan, avocado and pomelo plants. In this mixture of plants, mango was the biggest and tallest. It suppressed the growth of the other plants. Secondary crops such as banana, cassava and taro were planted in the backyard and increased the density of the vegetation. The farmer acknowledged these problems and thinned the growth by cutting some branches to provide space for the other plants to grow. When the farmer performed the thinning, he said that some of the plants grew quickly but others responded very slowly. The
farmer thought because he had planted different varieties, then he could increase his income.

The less affluent farmer had expected to be able to harvest various fruit and root crops. However, the fruit was not big enough to sell in the market and was of low quality. The farmer maintained that the produce he obtained from his backyard helped in the subsistence of his family. This account was similar to stories related by other less affluent farmers interviewed. Those farmers acknowledged that the backyard orchard could be a potential source of income in Linayasan. The less affluent farmers argued against the improvement of their backyard orchards because they preferred to go fishing or undertake general work outside the barangay. This was particularly so after the harvest of coconut plantations and rice fields. The less affluent farmers maintained that fishing or general work could be found outside their farms and provided cash for the immediate needs of their families.

In an interview with a less affluent farmer, the ex-barangay official claimed that prior to the Center introducing the orchard demonstration farms in 1993, there were rambutan and calamansi plants already growing but they were not properly maintained. According to this farmer, the locals were familiar with the demand for rambutan and calamansi in the local market. Because of the demand, the farmer explained that there were farmers who had attempted to establish rambutan and calamansi orchards. He had also tried to establish an orchard and explained that because his land was small he had only planted about 20 calamansi, but it was a start. After two years, there was widespread leaf spot on local calamansi and his plants were infected, as were the plants of other farmers. The farmer insisted that the leaf spot damaged the calamansi plant and severely affected the income of other farmers but the action taken by government did not reach them. The other farmers did not have crop insurance, nor was his calamansi insured.

According to the farmer the loss of production from the calamansi was compounded by increased oil prices. This had then increased the cost of fertiliser and chemicals needed for the maintenance of the orchard. Because of this problem, the farmer explained, many of them were discouraged by the damage created by pests in their orchards. He recalled that some farmers attempted to combat the leaf spot by spraying fungicides on their calamansi orchards. However, the leaf spot had spread rapidly and it was difficult to
eradicate. He said that other farmers complained that they had not received any assistance from the government to compensate them for the losses incurred. The farmer also mentioned that some farmers attempted to replant their orchards but when the drought reoccurred the newly planted seedlings all died. The final conclusion of the local farmer was that many of them were frustrated with the leaf spot and had no interest in investing any more money in orchard projects.

16.9 Summary

The local livelihoods and other sources of income examined in Linayasan were discussed in this chapter. Rice farming and fishing were the two main occupations of Linayasan locals. Other sources of income were from kaingin, coconut plantations, homegardens, raising animals and backyard orchards. Examination of those livelihoods was crucial for the analysis of the response of locals to the agroforestry projects assisted by the Center in Linayasan, from 1993 to 1995.

Seventy-nine Linayasan farmers relied on rice farming as a major source of income. The rice produced was mainly for the family’s subsistence. The ricefields were not irrigated and the rice was cropped twice a year. The limited water supply was a major problem when improvements for rice production were sought. In other barangays with irrigated ricefields, three crops were produced a year.

Like other barangays, the rice farming in Linayasan had been a family venture: all members of the household were involved. Exceptions were the very young children who were not ready to work in the fields and old family members whose health prevented them from working on the farms. The reciprocal labour system was still practised by some Linayasan farmers, especially during rice planting. In the planting period, money was tight for the majority of the Linayasan farmers. Local traders were the main source of cash or credit. Other farmers borrowed from their affluent relatives for their farming capital.

The limited water and a lack of capital were the major problems in rice production in Linayasan. The account presented from the widow farmer was an example of the intergenerational issues that prevail in rice farming in Linayasan. Her account brought
together issues as diverse as cultural beliefs and practices, farming technology and the different ideologies that were embraced by old and young farmers. An analysis of those issues described by the widow farmer raised crucial issues for technology transfer. The introduction of such technology must be to be compatible with the traditional farming methods of local farmers.

The sharing of rice produced through the farmer/tenant relationship, 'share tenancy agreement,' was one of the traditional methods of rice production in Linayasan. Rice-producing farmers belonged to more affluent families and employed poor relatives as tenants. Under the share tenancy, there were legal and mutual agreements between the landowner and tenant for the sharing of the rice so produced. However, the legal and mutual agreements were always controversial: the demands of reciprocity were inevitable, for example, they sometimes led to conflict between the landowner's and the tenant's families. Sharecropping arrangements were described in the literature and were used in this chapter to show the similarities that existed in Linayasan in the traditional farming methods.

Statistical reports from the International Rice Research Institute showed the dramatic increase in rice production in the Philippines between 1967 – the 1990s. The report showed that production began to increase in the 1960s with the experimentation of new grain varieties, to support the objectives of the Green Revolution to increase rice production. From the central experiment station, the Institute developed new rice varieties that were soon dispersed through trials in agricultural colleges and universities throughout the regions. In the 1970s, when the impressive results of such varieties became known, and huge amounts of funding became available, the new rice varieties were disseminated and rapidly adopted by local farmers. But the sudden adoption of new rice varieties created unforeseen consequences for the social structure and traditional cultural practices of rural communities in the Philippines. The changes to the local social structure and the consequences to traditional cultural practices in rural farming communities brought about by the new technology and the promotion of new rice varieties were not studied until later, after the discovery and the spread of the technology.

The displacement of the traditional rice varieties by modern varieties concerned some of the Linayasan farmers. New varieties of rice required expensive commercial fertilisers
that not all farmers could afford. There were Linayasan farmers who still preferred traditional rice varieties. They criticised the higher costs incurred with the new rice varieties. Linayasan farmers claimed that the traditional rice varieties required less fertilisers and chemicals and had an inherent resistance to local diseases and pests. However, the resistance of the traditional rice varieties to local insects had been reduced because the excessive applications of inorganic fertilisers and commercial chemicals had increased the immunity of most of the local insects.

Many authors had studied the impact of new farming technologies on rice production introduced to rural communities. In the studies reviewed, various authors mentioned issues that were similar to the issues related by the Linayasan farmers. Frequent arguments from farmers regarding modern rice varieties focused on the displacement of traditional varieties, the higher costs involved in the cultivation of modern rice and the adverse effects of excessive use of fertiliser and chemicals on their local environment. It was noted that the old varieties took four months from planting to harvest. The new varieties took only three, meaning that an extra harvest could be obtained each year. Further, the new varieties had shorter stalks, meaning that the plants were less susceptible to wind damage.

Other issues, of a more social than technical nature, included the displacement of local labour by machinery; that caused hardship to many of the less affluent families. Linayasan farmers acknowledged the increased rice production through the introduction of modern varieties. Many studies generally emphasise that new rice varieties, using fertilisers and all other things considered, doubled rice production when the harvest was compared with traditional rice varieties and methods of farming. However, the introduction of modern varieties favoured the more affluent farmers who could afford to buy the requirements needed and who had the finance to purchase the new varieties. The less affluent farmers that produced rice were restricted by having a limited area of land to cultivate, limited access to new technology, a lack of capital and owned poor farming implements. The less affluent farmers were relatively unaffected by the technical or economic progress.

Fishing was another major industry discussed with Linayasan locals. In 1998, a survey by the Center showed that there were 24 households engaged in fishing. In Linayasan,
Fishing and fishponds provided a stable source of income throughout the year, unlike rice farming where income was generated only twice a year. Although most fishponds were of a limited size, there were also large fishponds owned by the commercial traders in the barangay. These fishponds provided employment for some locals, particularly the owner’s relatives, who looked after the ponds.

Prawns and milkfish were the products commercially produced in Linayasan. The best quality fish was sold for export while low quality fish was sold in the local market. The locals indicated that income from fishponds varied from fifty to one hundred and fifty thousand pesos per harvest. This figure was inaccurate and there were inconsistencies in the reported data as reviewed in the socio-economic profile of provincial and municipal levels. For example, in the case of commercial fishponds, there were mutual agreements between the owner and caretaker. However, some conditions were unspecified and profit sharing was difficult to determine. Affluent relatives financed the annual income of the caretakers, as well as those families involved in deep-sea fishing.

Linayasan locals collected other products: crabs, mussels and oysters which were abundant in the lake, river and coastal areas. In fishing, local families were engaged in deep-sea fishing and managing fishponds. All household members were involved. However, overall the husband had the power to delegate any activities related to fishing or managing the fishponds. This manifestation of power acknowledged the authority of the husband in family decision-making processes in the local fishing industries. Men had an advantage over women in deep-sea fishing, because generally women did not go to sea. Further, this indicated that men spent more time outside the barangay. That meant that any new projects initiated in the barangay that required heavy work could be affected by their absence. The absence of men from the barangay should be considered when attempting to assist the economic improvement of the Linayasan fishing families.

Studies conducted elsewhere by different authors were examined. Their findings were that men dominated deep-sea fishing activities. In the studies reviewed, there were beliefs and values that prohibited women from actually fishing. Accounts from local families confirmed such traditional beliefs during group discussions. However, women fish vendors argued that men had less involvement in marketing. Accounts from some fish vendor women were described. Fish vending provided local employment and income
for Linayasan women. However, like other local businesses, there were allegations from locals that the traders monopolised the economic opportunity that was supposed to be for the fish vendor women. Issues regarding a lack of capital, lack of storage and processing facilities and no support for the local marketing system were the problems of Linayasan local fishing families. There was little opportunity to improve their earnings in fishing activities.

Other sources of income discussed with locals included kaingin, coconut plantations, homegardens, raising animals and backyard orchards. Those livelihoods provided an income for locals. Like Sibalew, some Linayasan farmers also practised kaingin to open a space inside coconut plantations. They planted cash crops, bananas and cereals for their subsistence. The farmers acknowledged the problem of soil erosion due to kaingin. This farming method was practised to utilise available family labour and the space inside coconut plantations. There were arguments from farmers that kaingin was a simple, inexpensive farming method. It had been practised long ago by upland farmers and therefore was appropriate for disadvantaged farming families. The continual practise of kaingin created soil erosion problems. Persistent use of this practice degraded the hillside areas. This was one of the enduring issues created by the limited income produced through kaingin, which the Center was trying to address.

Coconut plantations were another source of livelihood examined. Copra and lumber from coconut trunks were the main products from the plantations. The harvesting of matured coconut plants for lumber decreased the number of bearing plants and reduced copra production in Linayasan. The demand for coconut lumber in the local market had led to the cutting of young coconut trees and affected the quality of coconut lumber sold by the traders in market. The coconut lumber production did not actually provide any real economic advantage to the local farmers but favoured the traders.

Accounts from Linayasan locals showed that there was a coconut rehabilitation programme introduced by the Philippine Coconut Authority. Loan assistance was provided to some farmers but the response to the replanting of coconut plantations was slower than the Philippine Coconut Authority had expected. Inappropriate mechanisms for monitoring and evaluating had created an ineffective programme, the Linayasan locals believed. Plants like banana, fruit trees, shade producing crops like ginger and
other plants were also grown in the coconut plantations to supply additional income but there were some technical problems. There were coconut plantations situated on rock, with shallow soil, and many plants could not survive the long summer. Long droughts were also a major problem in coconut plantations.

Homegardens, raising animals and backyard orchard also provided income for Linayasan locals. Those livelihoods were very common. The tasks involved in these three livelihoods were complex and connected to other livelihoods. Accounts from Linayasan locals suggested that the types of plants grown in the gardens could help distinguish the gender directly involved in this kind of livelihood. There were locals who claimed that the plants grown also indicated the social status of the households who owned the garden. The local healers could be identified by outsiders through various kinds of herbal plants grown in the gardens. Finally, arguments between husband and wife, and neighbours were described. It was shown that the provision of vegetables could help establish good social relationships or conversely, develop dependency by parasitic neighbouring families.

A limited source of water, a glut of vegetables coming from other places affected the local market price. Lack of credit assistance and limited marketing facilities were the issues discussed. Local traders suggested that packaging and storage deterred them from investing in commercial vegetable production. Accounts from locals also indicated that agencies had conducted training in vegetable production to improve rural nutrition. Again, lack of capital, no credit assistance and the complicated procedure to access financial institutions produced limited results. Studies conducted elsewhere by other authors were also examined. In the northern part of the Philippines a study indicated that traders undermined the economic opportunities of locals in vegetable production. The study further indicated that local vegetable growers in their area had to remain small operators for the reasons mentioned above. The Linayasan locals raised similar issues.

Animal raising was another source of popular income discussed with the locals. Like other livelihoods, there were social and cultural problems associated with animal raising in Linayasan. The large animals, buffalo and cattle, were raised as draft animals. Husbands were more responsible for large animals. Swine and poultry were the common property of households: the wife’s part-time job that generated extra income for their
families. When husbands had to work outside the barangay, the wives looked after all the animals. Overall, when the animals were sold, the wives also received the money and kept it to be used for the family. That was one of the cultural practices of the Filipino family.

New breeds of hog were introduced in Linayasan. But the native hog remained more viable for less affluent families. The native hog had also developed resistance to disease. Some locals argued that local herbal plants could also be used to cure illness if the pig became unwell. The new breed of hog introduced was not suited to the existing economic conditions of disadvantaged families. High cost for commercial feeds and medicine was required when raising new breeds. That was the main criticism of the animal dispersal programme. Animal raising was a potential livelihood in Linayasan. However, the locals suggested that limited land space, the smell from piggeries and the damaged to plants caused by stray animals caused argument. The technology and economic aspects were not the only issues in local animal production.

Backyard orchards were the last example of sources of income discussed in this chapter. Most of the Linayasan households had orchards in their backyards. The orchards were planted with poor quality plants and were not properly managed. Accounts from Linayasan locals suggested four major reasons for the poor management of orchards in this area. First was the long period of maturation necessary before the fruit tree produced an income. This deterred any investment of time and money in the improvement of the orchards. Second, was the soil nutrient deficiency in hillside areas. This was due to soil erosion. Third was the harsh local conditions and limited water supply during summer. This was detrimental to the growth of fruit trees and had been an enduring problem in Linayasan. The final reason was the lack of good quality stock and financial assistance. There was assistance extended but it had received a limited response from locals.
Plate 18. Sources of Water in Linayasan. Upper: Women gather around the artesian well, the main source of water. The supply is reliable throughout the year, and meets the requirements of over fifty households. The well is a meeting place for women, a site of extensive social interactions, especially early in the morning and the evening. Lower: Locals wait for water to seep into depression dug in the bed of a dried stream. A local cultural courtesy is to queue until those who arrived first have sufficient water for their needs. Some locals may wait for up to two hours for their turn to collect the water (Photo: R. L. Saladar).
Linayasan barangay officials offered suggestions for the improvement of fruit production in their barangay. The officials re-emphasised the importance of good quality seedlings that should be made available to all local farmers. The officials claimed that Linayasan farmers had limited technical and managerial skills to successfully run orchard projects. The barangay officials condemned the government for failing to take action over the ongoing projects. The locals, who expected too much from the project, experienced wasted time and frustration.

In general, the analysis of the accounts of Linayasan locals revealed bahala na attitudes and abuse of reciprocity. This deterred many locals from exerting more effort to improve their livelihoods in order to improve the living conditions of their families. In conclusion, the ineffectiveness of previous projects confused Linayasan's locals over the assistance provided by the government to them. Their extensive and diverse previous experiences of governmental assistance were manifest in a different attitude toward such programmes, when compared to the locals in Sibalew. The issues and problems encountered by Linayasan locals had to be acknowledged and addressed for the success of the new projects. The implications of these issues are discussed in the next chapter. In particular, it was necessary to examine the changes and the significance of new technology to the existing traditional cultural practices in the barangay. Changes were brought about through the introduction of the agroforestry projects, like those assisted by the Center in Linayasan.
Chapter Seventeen

The Initial Introduction of the Agroforestry Projects in Linayasan

17.1 Introduction

This chapter presents the results of the fieldwork of the case study that examined the agroforestry projects assisted by the Center in Linayasan. The examination focused on the response of Linayasan locals regarding the technology introduced in the demonstration farms to encourage innovation in the existing agroforestry practices of locals. The issues and problems associated with the establishment of demonstration farms are also examined. The discussion in this chapter is organised into seventeen sections.

Following the introduction, the topics discussed in this chapter include, the reorganisation of the College extension programmes, the recent system of extension programmes and the demonstration projects, the concepts and status of income-generating projects in Linayasan and the selection criteria for recipients of income-generating projects. This is followed by a discussion of accounts from Barangay Demonstration Laboratory Instructors and accounts regarding SOAs. The next section describes the farmers in Linayasan and the more affluent and less affluent farmer co-operators are discussed separately.

Next, accounts from Farmer Co-operators regarding their projects, roles of barangay officials, views from the representatives of the Municipal Government; the change in the management of projects and insights about the limited assistance in Linayasan are all discussed in separate sections. The discussion ends with a summary highlighting how the limited assistance on the agroforestry projects in Linayasan over two years, has limited results for the locals.

17.2 The Reorganisation of the College Extension Programmes

In 1992, the conversion of the AAC into the ASCA was one of several reasons why the establishment of the demonstration farms in Linayasan was different from Sibalew. In
particular, there were structural changes in the supervision and implementation of outreach projects in the rural barangays. The conversion of the College was the most significant recent historical event to affect the whole population of Aklan, particularly staff and faculty members, as well as the development of higher academic learning institutions in the province. Since the late 1980s, during Marcos' regime, various attempts were made to convert this College to a State College but it was not realised during that period. In previous experience, the researcher of this case study endured the complex bureaucratic procedures that existed and the political impediments that hindered the conversion.

On April 10, 1992, Corazon C. Aquino, the President of the Philippines, approved the conversion of the College to membership of the State Colleges (see Republic Act No. 7371, 1992). One significant outcome of the new designation was the increased funding for the College allocated by the national government. The permanent staff, for example instructors were redesignated and they received, as professors, improved salaries comparable with other State College staff. The number of positions increased as well. The conversion of the College, with the increase in salaried positions, increased the economic activity in the province. The increased income tax paid by the college faculty and staff, was an example. Another improvement brought by the conversion was the infrastructure and laboratory facilities. The College policies and methods of instruction, research and extension services were changed dramatically to meet high-level standards similar to those required in other State Colleges and Universities in the Philippines.

Because of the requirement to meet the standards prescribed by the government in the State Universities, there was comprehensive organisational restructuring and some reorganisation of the programmes the College directed. Changes introduced totally reshaped the system of management in the College. Major aspects of the programmes, like instruction, research and extension were departmentalised. Each department had appointed directors, who administered the funding, implemented their programmes and supervised staff activities. One of the departments created was the ERDSC. This Center continued with the extension programme of the College and Center staff continued to supervise the outreach projects and conduct non-formal education programmes in rural barangays throughout the province. Like other departments, the Center had their own staff and its own independent budget allocated from the national government. However,
overall, the president of the College was responsible for the programmes of various departments.

The change of organisational structure and the reorganisation of programmes by the College initiated new policies and systems in the extension programme. The new system demanded another form and style of leadership and bureaucratic procedures for the management of the extension programmes. In particular, this was crucial for the establishment of demonstration farms in the rural barangays. Under the new system, interviews with extension staff revealed that the Center operated the extension programme based on the annual allotment from the national government. This allotment was provided regardless of funding from external agencies. The director of the Center administered the fund to implement the extension programme. The Center had a limited number of extension staff who were conducted various skills training for the locals and monitored and evaluated the activities of trainees in their income-generating projects. The extension staff also assisted the establishment of income-generating projects or demonstration farms in the barangays. However, overall the director, in consultation with the president, controlled the decision-making process.

The improvement of the organisational structure of the Center's extension programme meant the staff involved were highly motivated to provide effective service to the locals in the barangays. In Linayasan, interviewed locals also revealed high expectations that the Center could provide a better service, similar to Sibalew. This was because the locals were aware that the Center had their own budget to finance training and technicians who provided free technical assistance to establish income-generating projects in their own barangays. In Sibalew, during the implementation of the outreach project, the College was heavily dependent on the funding that could be acquired from external agencies. The fund to finance the operation of the extension programme was part of a total allotment of the College from national government to run the three programmes: instruction, research and extension services.

However, despite the financial constraints the College encountered in the 1980s, there were various external agencies that provided financial assistance to the College to introduce different kinds of livelihood projects in Sibalew. Analysis from interviews with extension staff revealed that the previous accomplishments of the College in Sibalew
also brought higher expectations to the locals of Linayasan and other barangays. There were arguments from the extension staff interviewed that in Linayasan their beneficiaries expected the Center to provide full support for the establishment of their income-generating projects in the same manner as had occurred in Sibalew. The researcher of this case study, during the interviews, noted the consequences of the higher expectations held by locals. Most of the interviewees demanded further assistance from the Center. In Linayasan, interviewed farmer co-operators claimed that the limited funding and short duration of the project provided by the Center was just an initial operation to establish the income-generating projects on their own farms, and they expected to have an ongoing commitment similar to Sibalew.

The introduction of orchard demonstration farms in Linayasan was for the same reason as in Sibalew: to improve the earning capacity of locals for a better life. In these two barangays, however, the establishment of the demonstration farms varied in many respects. The farms were developed in a different period of time, and the duration of the project was shorter in Linayasan than Sibalew. The amount of funds invested and the number of external agencies involved in the establishment of the farms were also different. In Linayasan, interviews revealed that farmer co-operators expected more assistance from the Center in the same way that the Sibalew locals had from the College.

In Sibalew, for example, the integration of various programmes and the resources from external agencies to establish the demonstration farms was based on the previous experience of the College. This was from five barangays where the College had applied the rural development strategy of the AEOP. The College had promoted agricultural technology to the local farmers in those barangays. However, the results of the demonstration farms in those barangays had not been convincing enough for local farmers to adopt the technology. Because the College had limited funds, they concentrated their outreach activities in Sibalew. Interviews revealed that to ensure success, the College focused on Sibalew, rather than persevere with other, less motivated barangays. This was different to the circumstances and attitudes that prevailed during the initiation of the demonstration projects in Linayasan.

In Linayasan, a review of annual reports revealed that the introduction of orchard demonstration farms was part of a widespread assistance campaign by the Countrywide
Development Fund in the province (1993 and 1994 ASCA-ERDSC Annual Report). The literature indicated that the Countrywide Development Fund was financial assistance mustered from the “pork barrel” of politicians (Coronel, 1998). Contributors allocated money to assist the financial resources of other agencies in order to accelerate rapid development, particularly in rural areas (Parreño, 1998: 33-55). In 1993, the College was the recipient of the Countrywide Development Fund to help finance the dissemination of non-formal education and the establishment of livelihood projects in the rural barangays (1993 ASCA-ERDSC Annual Report: 3).

Overall, although the introduction of demonstration farms in Sibalew and Linayasan were based on different grounds, the concept of development that the College adhered to and applied as a guiding principle was to assist the locals. The expectations of ‘trickle down’ of technology to other barangay, was similar in these two case study barangays, based on modernisation theory. For example, the provision of technical, material and financial assistance was intended to improve the livelihoods of the locals so they could be self-reliant in their barangay. The expected result was to bring “positive transformation in the quality of life for rural inhabitants” (ACC-AEOP Implementation Plan, 1980: 2). However, the finding of the Sibalew case study suggested that the changed agricultural economy of this barangay adversely affected the traditional cultural practices of locals. The improved utilities gave economic opportunities to the local traders and fewer advantages were provided to the vulnerable locals in the barangay. Other similar issues were also examined in Linayasan.

17.3 The Recent System of Extension Programmes and the Demonstration Projects

In 1993, the conversion of the College significantly affected the existing outreach projects in the barangays. The changes necessitated comprehensive organisational restructuring and a major reorganisation of the programmes. Changes introduced totally reshaped the system of management in the College directed programmes:- instruction, research and extension services. The changes led to new organisational structures, reorganisation of personnel by departments and the hiring of new personnel. Each of the departments developed their own policies to meet the standards prescribed by the government for State Universities.
The ERDSC continued to operate the existing programmes based on their new mission statement. This was “to stimulate rural development through provision of appropriate assistance, and honest concern on [for] the welfare of the least advantage people in the community” (1993 ASCA-ERDSC Annual Report: 2). In 1993, the Center applied systematic strategies to undertake their new role in the rural barangays: - they identified and adopted depressed barangays within Aklan province. This was followed by the provision of non-formal education that included employable skills, seminars and workshops. Upon completion of their training, the trainees were assisted to establish demonstration farms in their barangays. Technology transfer to other locals was expected through an established demonstration farm and by dissemination of information through the publication of materials and a series of radio broadcasts. Interpersonal communications training, such as field trips to demonstration farms, were provided during the training. The service-type extension initiated the provision of free technical assistance and material resource transfers to the locals in the barangays. The Student Outreach farm practice was included in the programme to provide better social interaction between locals and the Center. Finally, there was collaboration and linkage with government and non-government organisation for financial assistance. Those activities were implemented and participated in by the staff of the Center.

A staff of 47 managed the Center operations in 1993. The funding for the remuneration of the staff came from several sources. Of those employed by the Center, 14 were employed on a contract basis and their salaries were paid from the regular allotment by the national government to the Center. There were two Volunteer Information Development Assistants who worked in the Center. The Philippine National Volunteer Coordinating Agency paid their remuneration. Eighteen staff were employed as educators for the FYDP on a contract basis to teach in the non-formal programme of the Center. Their salaries were paid from the Countryside Development Funds. In addition, the annual report also indicated that there were 13 broadcasters who volunteered to share their time to conduct the on-the-air broadcast programme and to help the Center’s continued search for development (1993 ASCA-ERDSC Annual Report: 2-3).
Republic of the Philippines

AKLAN STATE COLLEGE OF AGRICULTURE
Banga, Aklan

ASCA-ERDSC ORGANIZATIONAL STRUCTURE

Figure 7. ASCA-ERDSC Organizational Structure.
The personnel involved in the Center had various academic qualifications and had been trained in the establishment of extension and rural development projects. The Center director had graduated with a doctorate degree in rural development and had attended various training courses in rural development at a local, national and international level. Most of the staff clerks in the office had advanced professional training and postgraduate studies through the College. The majority of the Barangay Demonstration Laboratory Instructors had undergraduate degrees in agriculture and specialised in different fields: the development of agroforestry, crop and animal production, agricultural education and extension services. The instructors had attended various seminars both at local and national institutions studying topics related to their fields of expertise. Interviews with the instructors indicated that some of them had been working in the College for more than five years. The most senior instructor had been employed for almost eighteen years in the extension projects of the College.

Besides the extension programme, the Center also managed the local FM radio station donated by the United Nations Economic, Scientific and Cultural Organisation to the College. The signal could only reach a distance of 20 to 30 kilometres from the station that was located at the Center office. The Center maintained the radio station through the service of 17 members of the Community Media Council. These members represented different sectors and interest groups in the area. In 1993, the radio station operated with 13 volunteers who were broadcasters, broadcasting information on technology, livelihood projects and the extension activities of the Center in barangays. The daily news and current affairs and music programme were also part of the broadcast programme (1993 ASCA Annual Report: 16).

Previously, it was mentioned that the introduction of orchard demonstration farms in Linayasan was a part of widespread financial assistance from the Countrywide Development Fund campaign to assist the rural poor in the province. This financial assistance provided additional funding for the Center to implement their programmes in the rural barangays. For example, the Center was able to conduct short-term skills training courses to out-of-school youth, young adults, local farmers and rural women. The Center assisted those locals who completed their training to establish their own income-generating projects.
A review of the 1993 ASCA-ERDSC Annual Report showed that there were six barangays where the Center implemented extension programmes. Four of those barangays were new members where the Center conducted extension activities (1993 ASCA-ERDSC Annual Report: 7-8). The term ‘new’ in this context meant that the Center had not worked in those barangays before. The annual report indicated:

For the year under review, the Center had established and is in the process of establishing an additional 16 model/demonstration projects on hillside farming systems involving 16 farmers cooperators in addition to its already established projects and farmer cooperators in the previous year. These projects are calamansi orchard, diversified farming system, mixed orchard, native piña for fiber production and mahogany plantation. All these projects are located in the Center’s adopted barangays. These exceeded the target for CY 1993 of having only three (3) additional demo farms per year (1993 ASCA-ERDSC Annual Report: 8).

Excluding those demonstration farms assisted by the Center mentioned above, the Center’s trainees, through the non-formal skills training courses, established their own income-generating projects in their home barangays. The annual report indicated that there were 20 different kinds of income-generating projects that were assisted by the Center (1993 ASCA-ERDSC Annual Report: 9). Of those twenty projects, the annual report showed that there were three different types of income-generating projects established in Linayasan by graduates of non-formal education run by the Center. Three farmers established Agroforestry Projects, three farmers grew ladu and czincom (citrus) in their backyards, and one farmer focused on a rambutan orchard and all projects appeared to be flourishing (1993 ASCA-ERDSC Annual Report: 9). Those farmers engaged in the establishment of income-generating projects had graduated in hillside farming systems and asexual plant propagation.

The 1994 ASCA-ERDSC Annual Report was also reviewed to examine other livelihood projects assisted by the Center in the rural barangays. In 1994, the annual report showed that the Center assisted the two types of demonstration farms established by local

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69 The agroforestry projects referred to, were the orchards located in hillside areas planted with three types of fruit trees such as rambutan and oranges like ladu, czincom and calamansi introduced in different barangays and Linayasan as well. Those projects also used contour lines planted with kakawate as hedges to prevent soil erosion.
farmers: - the Hillside Calamansi Orchard\textsuperscript{70} and the Abaca Farm\textsuperscript{71} (1994 ASCA-ERDSC Annual Report: 7). The demonstration farms were located in different barangays. Those demonstration farms described were established by the Center, the annual report showed that there was assistance provided to the farmer co-operators of other barangays so they could establish and maintain their own income-generating projects. The intention of the provision of free assistance and the establishment of income-generating projects was “to show to the other clients that the technology was possible and appropriate within the limits of the ordinary farmers” (1994 ASCA Annual Report: 8). Table 3 below indicated the demonstration farms assisted by the Center in the rural barangays.

\begin{table}[h]
\centering
\begin{tabular}{|c|c|}
\hline
Farms & Technologies \\
\hline
Hillside Calamansi Orchard & Sloping Agricultural Land Technology \\
\hline
Abaca Farm & \\
\hline
\end{tabular}
\caption{Demonstration Farms Assisted by Center}
\end{table}

\textsuperscript{70} The Hillside Calamansi Orchard used the basic principles of the Sloping Agricultural Land Technology. The annual report indicated the general characteristics of a Hillside Calamansi Orchard: “Using the sloping agricultural land technology with kakawate along the contour lines, an area of about 1.5 ha. in Barangay Feliciano about 5 km. from the College was now fully planted with calamansi. This model ... serves as an example to hillside farmers on how to conserve their soil and make the hillsides productive, likewise, as [a] source of planting materials for the farmers” (1994 ASCA-ERDSC Annual Report: 7).

\textsuperscript{71} In the Abaca Farm, the general characteristics and features of this demonstration farm were described thus: “an area of about 1 ha. coconut farm in Barangay Rosario, Malinao about 35 km. from the College was developed and intercropped with abaca. The area was now fully planted. This farm is expected to be the model of its kind in this part of the province and likewise the resource of planting stock for the farmers” (1994 ASCA-ERDSC Annual Report: 7).
Table 4. Farmer-Based Demonstration Farms/Projects Assisted by the Center.

<table>
<thead>
<tr>
<th>Location Barangays/ Municipalities</th>
<th>Distance from the College (km)</th>
<th>Number of Projects*</th>
<th>Nature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feliciano, Balete</td>
<td>5</td>
<td>15</td>
<td>Hillside planted with calamansi, rambutan, banana, other fruit trees, cash crops and native piña for fiber</td>
</tr>
<tr>
<td>Polocate, Banga</td>
<td>5</td>
<td>12</td>
<td>Hillside planted with calamansi, rambutan, banana, other fruit trees, cash crops and native piña for fiber</td>
</tr>
<tr>
<td>Rosario, Malinao</td>
<td>35</td>
<td>4</td>
<td>Hillside planted with forest trees, abaca fruit trees and other cash crops</td>
</tr>
<tr>
<td>Odiong, Altavas</td>
<td>28</td>
<td>4</td>
<td>Hillside planted with fruit and forest trees and other cash crops</td>
</tr>
<tr>
<td>Linayasan, Altavas</td>
<td>26</td>
<td>7</td>
<td>Hillside planted with fruit and forest trees, banana and cash crops</td>
</tr>
<tr>
<td>Bacyang, Madalag</td>
<td>20</td>
<td>1</td>
<td>Hillside planted with fruit trees</td>
</tr>
<tr>
<td>Bakhao Sur, Kalibo</td>
<td>10</td>
<td>1</td>
<td>Crab and Bangus Culture</td>
</tr>
<tr>
<td>Tabayon, Banga</td>
<td>1</td>
<td>1</td>
<td>Paper mache, T-shirt printing and food processing</td>
</tr>
</tbody>
</table>

Note: * The demonstration farms or income-generating projects were established by the farmer co-operators and the Center provided the planting and fencing materials and technical assistance free to them (1994 ASCA Annual Report: 64 and 1994 ASCA-ERDSC Annual Report: 8-9).

In 1993 the annual report also indicated that as well as administering the demonstration farms, The Center had conducted 32 skills training courses throughout the eight municipalities of the province as part of the FYDP as discussed in the Sibalew case study. There were 724 people who had taken the training: out-of-school youth, rural women, small farmers and unemployed adults (1993 ASCA-ERDSC Annual Report: 11). The Center also extended post-training assistance to trainees interested in establishing their own income-generating projects. Such assistance included distribution of free planting materials and technical assistance to their recipients. A review of 1993 ASCA-ERDSC Annual Report indicated that The Center had dispensed 4,000 mahogany seedlings and 100 grafted rambutan. The marcot seedlings distributed included 1,500 calamansi, 548 ladu and 4,000 native piña suckers and 2,500 assorted fruit trees to local farmers.

In 1994, the Center increased the distribution of planting materials to the clients. In this year the Center dispensed 10,000 mahogany seedlings, 600-grafted rambutan and 500
rambutan seedlings. The marcot\(^2\) seedlings distributed included 2,000 calamansi, 1,500 ladu and 1,500 czincom. The Center also distributed 2,000 abaca suckers and 2,500 native piña suckers and about 500 assorted fruit trees to local farmers. The Center arranged a special scheme for the local farmers. They needed to return double the number of original plant stock when their projects became productive, for distribution to other farmers (*1994 ASCA-ERDSC Annual Report: 12*).

In 1996, the decreased allocation to the Center also affected their extension activities in the rural barangays, (shown in Table 4 in the last part of this section). Interviews with instructors indicated that despite the financial constraints the Center was able to maintain some demonstration farms in the barangays. However, there was a reduction in the number of casual labourers who assisted the farmer co-operators and the Center's supervision of the demonstration farms in the barangays was reduced. The number of educators decreased and the Center conducted a limited number of training courses and reduced the number of out-of-school youth, rural women, small farmers and unemployed adults who assisted in the rural barangays.

However, despite the structural changes and the significant accomplishments of the Center, a review of the previous reports indicated that no study had yet been conducted to examine the response of the beneficiaries of income-generating projects assisted by the Center. The previous experience of the researcher of this case study showed that some policies were quite effective but others were less effective in addressing the needs of the locals. In a similar manner, there were arguments from locals who claimed that the privileges provided by the College to Sibalew locals should have been extended to locals in other barangays. Such arguments were thoroughly examined in the previous Sibalew case study.

In Linayasan, for example, it was mentioned previously that there were three farmers in agroforestry projects, three farmers grew ladu and czincom in their backyards, and one farmer focused on a rambutan orchard (*1993 ASCA-ERDSC Annual Report: 9*). In 1993, all those income-generating projects appeared to be flourishing in Linayasan. The

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\(^2\) Marcot and grafted seedlings were asexually propagated from the best quality of mother plants.
farmers engaged in the establishment of such projects had graduated from the hillside farming systems and asexual plant propagation through the Center’s skills training courses conducted under the non-formal education programme. The training course was conducted in Linayasan from the 4th of October to the 4th of December 1993, with the enrolment of 3 males and 7 females. All those enrolled completed the training (1993 ASCA-ERDSC Annual Report: 12). The training was based on the FYDP strategy that was also tested in Sibalew.

In 1994, the annual report indicated that the Center conducted another skills training course on asexual plant propagation in Linayasan. The training was conducted from September 3rd to the 24th with ten participants. At the same time there was a Barangay Demonstration Laboratory Instructor who assisted the trainees to establish their income-generating projects/demonstration farms. In the same year, the annual report indicated that there were 35 SOAs fielded in the barangays. Of these, there were seven students assigned to Linayasan involved in the dissemination of the technology to the locals. The other SOAs were fielded in Polocate, Feliciano, Rosario and Odiong, the other barangays co-operating, selected by the Center (1994 ASCA-ERDSC Annual Report, p. 13). The manner in which the SOAs were fielded in Linayasan was similar to the strategy that was applied in 1983 in Sibalew. Table 4 below indicated the Center profile and summary of accomplishments from 1993 to 1998. The table shows that in 1995 the Center had received the highest allotment from the National Government and this was decreased by more than half in 1996 and 1997 respectively.

<table>
<thead>
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<tbody>
<tr>
<td><strong>A. Resources/Personnel</strong></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Appropriation or Budget</td>
<td>867,000</td>
<td>935,000</td>
<td>1,189,000</td>
<td>819,000</td>
<td>819,000</td>
<td>938,000</td>
</tr>
<tr>
<td>Philippines Pesos (PhP)*</td>
<td>31,969</td>
<td>35,404</td>
<td>46,247</td>
<td>31,348</td>
<td>27,800</td>
<td>24,113</td>
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<tr>
<td>Community Development/External Funds</td>
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<td>581,760</td>
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<td></td>
<td>550,000</td>
<td>54,983</td>
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<td><strong>ERDSC-Income Generating Projects</strong></td>
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<td><strong>2. Personnel</strong></td>
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<td>Contractual Instructors/Labourers</td>
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<td>13</td>
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<tr>
<td>BIDANI Extension Assistance</td>
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<td>2</td>
<td>2</td>
</tr>
<tr>
<td><strong>3. Other Personnel</strong></td>
<td></td>
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<td>Community Media Council Members</td>
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<td>18</td>
<td>18</td>
<td>17</td>
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<tr>
<td>Volunteer Broadcasters</td>
<td>15</td>
<td>14</td>
<td>15</td>
<td>15</td>
<td>21</td>
<td>31</td>
</tr>
<tr>
<td>VIDA (Local Volunteer)</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>VSO (Foreign Volunteer)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Educator</td>
<td>18</td>
<td>7</td>
<td>8</td>
<td>1</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Student Outreach Agent</td>
<td>16</td>
<td>36</td>
<td>40</td>
<td>40</td>
<td>-</td>
<td>-</td>
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<tr>
<td><strong>B. Accomplishments</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Adopted barangays</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Barangays served with skills training and barangayan</td>
<td>18</td>
<td>36</td>
<td>35</td>
<td>36</td>
<td>36</td>
<td>36</td>
</tr>
<tr>
<td>Municipalities covered by extension programme</td>
<td>8</td>
<td>13</td>
<td>15</td>
<td>16</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>In-campus resource centers/demo farms maintained</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Off-campus resource centers/demo farms maintained</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>5</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Farmer-based demo farms established/assisted/maintained</td>
<td>16</td>
<td>45</td>
<td>53</td>
<td>54</td>
<td>68</td>
<td>50</td>
</tr>
<tr>
<td>Employable skills training courses conducted for OSYs, rural women and unemployed adults</td>
<td>32</td>
<td>32</td>
<td>19</td>
<td>11</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Clients (farmers, OSYs, rural women and young adults) trained in short skills training courses</td>
<td>745</td>
<td>277</td>
<td>356</td>
<td>165</td>
<td>57</td>
<td>155</td>
</tr>
<tr>
<td>Resources materials extended to clients (planting materials)</td>
<td>11,825</td>
<td>21,000</td>
<td>91,800</td>
<td>25,000</td>
<td>51,000</td>
<td>15,850</td>
</tr>
<tr>
<td>Clients extended lectures/assisted/guided on study tours to extension project</td>
<td>-</td>
<td>1,000</td>
<td>1,470</td>
<td>387</td>
<td>814</td>
<td>909</td>
</tr>
<tr>
<td>Hours radio broadcast on community development programme</td>
<td>-</td>
<td>4,600</td>
<td>4,600</td>
<td>4,600</td>
<td>4,624</td>
<td>4,624</td>
</tr>
<tr>
<td>Barangayan sa Himpapawid or community on the air and Kantahan, Kasadyahan sa Kahanginan conducted</td>
<td>8</td>
<td>28</td>
<td>45</td>
<td>33</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Number of radio programmes per week broadcast</td>
<td>13</td>
<td>32</td>
<td>32</td>
<td>36</td>
<td>36</td>
<td>38</td>
</tr>
<tr>
<td>Community Media Council and Broadcaster Meeting Conducted</td>
<td>-</td>
<td>6</td>
<td>10</td>
<td>10</td>
<td>6</td>
<td>-</td>
</tr>
<tr>
<td>GO and NGO having their radio programme played on the radio</td>
<td>-</td>
<td>4</td>
<td>9</td>
<td>12</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Linkages with other agencies</td>
<td>-</td>
<td>16</td>
<td>23</td>
<td>23</td>
<td>23</td>
<td>23</td>
</tr>
</tbody>
</table>

17.4 The Concepts and Status of Income-Generating Projects in Linayasan

In 1998, fieldwork was conducted in Linayasan to examine the demonstration farms that were assisted by the Center in this barangay. The examination focused on the response of Linayasan locals regarding the technology introduced by the demonstration farms to encourage innovation in the existing agroforestry practices of locals. The researcher of this case study conducted seven weeks of fieldwork in Linayasan from early May to the middle of June 1998. During this period, there was a series of formal and informal interviews with locals. The researcher also attended informal group discussions with locals, barangay council meetings, participated in various cultural activities, like visiting two grieving families and attended the barangay fiesta celebration. Those experiences provided an in-depth and broader understanding for the researcher to view the local cultural and political practices in Linayasan. Ocular transit observations around the barangay, particularly in the demonstration farms, were assisted by the Center. All those activities provided the researcher with a vignette of the livelihood and the lifestyle of Linayasan locals, which was different to the local lifestyle in Sibalew.

The researcher of this case study felt that seven weeks living with locals in Linayasan, was not long enough to examine all the social issues and problems that existed in this barangay. However, the experience gleaned by the researcher provided a clear understanding of the demonstration farms assisted by the Center. For example, the introduced technology on those farms, the livelihoods that existed in the barangay, the programmes introduced by other agencies to the locals and the traditional cultural practices of the locals in this barangay. All those aspects provided basic information to the researcher that helped to elicit the opinion of locals regarding the demonstration farms, in particular the issues and problems experienced by the farmer co-operators and other locals regarding the demonstration farms and the technology introduced.

The findings of a review of annual reports suggested that the Center assisted seven income-generating projects in Linayasan. This included three agroforestry projects, three ladu and czincom orchards and one rambutan orchard. The non-formal education graduates of the Center established those projects. In the interviews with instructors, it was revealed that the concept of the Center providing free technical and material
assistance to their graduates to establish income-generating projects in the barangays was based on three main concerns. The first reason was that the assisted income-generating project would be expected to provide a source of living for the graduates. Second, the establishment of income-generating projects would serve as demonstration farms to be replicated by the other locals. The introduced technology on the demonstration farms would be expected to trickle down to the other locals in the barangay. Finally, the third reason was the proliferation of technology, e.g. seedlings from demonstration farms into other farms which would lead to the improvement of the existing agroforestry practices of locals in the barangay.

Those three reasons provided by the instructors in the interviews were consistent with the four problems addressed by the Center stated in the project proposal reviewed: poverty, unemployment and underemployment, juvenile delinquency amongst the out-school-youth and the low productivity and income in rural barangays. The implementation of the project proposal took one year from 1993 to 1994 and was funded through the Community Development Fund assistance. Within this limited period and through the provision of free labour services, technical and material assistance, the Center expected five outputs from the various income-generating projects introduced to locals in the rural barangays. The first expected output of the project was that juvenile delinquency amongst the out-school-youth would decrease. Second, increased economic activity based on the growing number of sustainable livelihood projects. Third, improved capability of clients to become micro entrepreneurs. Fourth, desirable values toward work, environment preservation and national development. Finally, the fifth output of the project the Center expected was increased productivity and income of the rural poor (ASCA-ERDSC, 1993). It meant that the assistance by the Center for locals to establish their own income-generating projects was not specifically targeted only for Linayasan locals but also to assist locals from other barangays.

As in other barangays where the Community Development Fund income-generating projects were implemented, the Center expected that those five outputs mentioned above could also be brought to Linayasan. However, the findings from interviews with Linayasan locals revealed that the physical condition of the fruit trees planted in the income-generating projects in 1998 was not good enough. The three-agroforestry projects described in the annual reports were located in hillside areas. Those projects
were not well attended by the farmer cooperators during the fieldwork, unlike the Sibalew projects which were properly managed.

In Linayasan, one of those three-agroforestry projects showed that the \textit{czincom} plants seemed to be flourishing. But the \textit{czincom} plants were still in the early stage of producing income. The contour lines planted with \textit{kakawate} hedges to prevent soil erosion, as in the Sloping Agricultural Land Technology, were also promoted in those projects. However, the farmer co-operator removed the contour lines because of the difficulties of maintaining the hedges and the lack of income. Much land was covered by contour lines; it was labour-intensive to maintain. These were the two main concerns of the farmer co-operators. In the other two-agroforestry projects, the kakawate planted on the contour lines was also gone and the plants were unattended by the farmer co-operators for various reasons.

The five income-generating projects were planted with mixed fruit, ladu, czincom, calamansi and rambutan plants. The area of those projects was less than a hectare located in slightly rolling land. Of those five projects, three produced little income and two projects were not properly managed. In three projects more czincom and ladu were growing than in the other projects. Those plants showed they were a viable source of income but they were still not producing the amount expected by the farmer co-operators. On the other two projects there were many missing plants. Those remaining were unattended and the land was used for grazing.

Aside from the seven income-generating projects, two other projects were visited during the fieldwork that was not mentioned in the annual reports of the Center. These two projects were located in the farmer’s backyard within an existing old coconut plantation. A few orange trees such as ladu, czincom and calamansi were growing poorly in a space between the coconuts because those plants were over-shaded. Accounts from the owners of those projects indicated their intention to establish income-generating projects. Because of their work outside the barangay the plants were not cared for properly. Like the other plants in their backyard, the remaining ladu, czincom and calamansi grew poorly because of the lack of maintenance.

<table>
<thead>
<tr>
<th>Farmer Co-operators</th>
<th>Types of Projects and Sources of Labour</th>
<th>Estimated Area (hectare)</th>
<th>Conditions of the Projects During the Field work</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>More Affluent</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farmer 1</td>
<td>Hillside Orchard With caretaker and hired labourers</td>
<td>0.7</td>
<td>Five rambutan are growing with many missing hills of planted plants and the contour lines also missing</td>
</tr>
<tr>
<td>Farmer 2</td>
<td>Fruit tree orchard With family members</td>
<td>0.4</td>
<td>Seven calamansi and three rambutan were growing with many missing hills of planted plants</td>
</tr>
<tr>
<td>Farmer 3</td>
<td>Fruit tree orchard Hired labourers</td>
<td>0.5</td>
<td>Four calamansi plants were growing, all the Rambutan planted died and the area used for grazing</td>
</tr>
<tr>
<td>Farmer 4</td>
<td>Hillside Orchards With caretaker and hired labourers</td>
<td>0.7</td>
<td>Twenty-five calamansi were growing, some missing hills of planted plants and contour lines gone</td>
</tr>
<tr>
<td>Farmer 5</td>
<td>Hillside fruit tree With caretaker and hired labourers</td>
<td>0.5</td>
<td>Forty plants of ladu and czincom were growing but the contour lines removed</td>
</tr>
<tr>
<td><strong>Less Affluent</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farmer A</td>
<td>Hillside Orchard With family members</td>
<td>0.8</td>
<td>Ten calamansi plants were growing with many missing hills of planted plants and the contour lines are also missing</td>
</tr>
<tr>
<td>Farmer B</td>
<td>Fruit tree orchard With family members</td>
<td>0.4</td>
<td>Two rambutan were growing with vines and grasses growing and the area utilised for animal grazing</td>
</tr>
<tr>
<td>Farmer C</td>
<td>Fruit tree orchard With family members</td>
<td>0.5</td>
<td>Fifteen czincom plants were growing with many missing hills of planted plants and inter-cropped with vegetables</td>
</tr>
<tr>
<td>Farmer D</td>
<td>Fruit tree orchard With family members</td>
<td>0.4</td>
<td>Rambutan and calamansi planted all had died, the area left open to grazing animals and there were coconut trees.</td>
</tr>
</tbody>
</table>

Note: Information indicated on this table was based on individual interviews and discussion with the farmer co-operators and project observations in 1998.

Overall, the opinion of locals concerning the interim results of the income-generating projects fell far short of meeting those five outputs expected by the Center in this barangay. There were suggestions from farmer co-operators that they needed further technical and financial assistance to produce the expected income from their projects. There were arguments from the farmers that one year of assistance from the Center to train and assist farmer co-operators to establish income-generating projects was not enough time to make their income-generating projects productive. In the same manner, there were arguments from some locals that they acknowledged that fruit trees take three to five years to produce an income and there existed alternative forms of livelihoods that
could provide them an easier means of income. Fishing and fish vending were examples of existing livelihoods described by locals.

In general, interviewed locals argued that the length of time to produce an income affected the desire of farmers adopting the new technology introduced in the demonstration farms that was supposed to be necessary to improve the profitability of their existing agroforestry practices in Linayasan. In interviews with barangay officials there were suggestions that the Center failed to consider other means of income in Linayasan prior to the establishment of the demonstration farms in the barangay. Those arguments forwarded by locals were crucial for design of income-generating projects suitable for addressing local problems, rather than using Sibalew as an example.

In Linayasan, there were many issues on the demonstration farms that were interrelated to each other and surrounded by social, economic, political and cultural problems that existed in this barangay. The issues raised by groups of farmers, fisherman, local women, traders, officials and the young people were complicated and difficult. It was not easy to determine the appropriate income-generating projects, particularly to improve the economic condition of poor families in this barangay. In income-generating projects assisted by the Center, there were issues regarding the biased and subjective distribution of assistance in the barangay. In general, there were criticisms from some farmer co-operators that the introduced technology in their income-generating projects was too labour intensive to maintain the plants and contour lines planted to prevent soil erosion.

Other farmer co-operators claimed that the location of their projects was not suitable for the fruit trees introduced because of the salty wind that blew from the direction of their fishponds. Some farmer co-operators insisted that because of their engagement with other livelihood activities they failed to maintain their projects properly. There were barangay officials interviewed who claimed that because there was not space available, the planting materials provided to farmers were planted in their backyards. However, because of the density of other plants in their backyards, particularly coconut plants, there was considerable shadow that caused growth retardation of the seedlings planted. All these issues will be examined in the following sections within this chapter.
The findings from all interviews suggested that the one year of intensive extension activities of the Center in Linayasan was not enough time for farmer co-operators to develop their skills or competently manage their income-generating projects. The main issues to emerge in the interviews were the owner of the income-generating projects expected a reasonable financial return from the plants with less investment of capital or labour. For example, farmer co-operators mentioned that their income-generating projects were exhausting to manage compared with their traditional farm work. Other farmer co-operators felt that they did not have enough time to work on their income-generating projects because they needed ready cash for the subsistence of their families. The farmer co-operators criticised the long wait to get an income from calamansi, czincom and rambutan. There was a farmer co-operator who explained his disappointment with the contour lines in his projects because they reduced the available space to be planted with cash crops. Most of the farmer co-operators complained about the lack of capital to buy fertiliser and chemicals necessary to maintain their income-generating projects properly. The limited water and stray domestic animals were common problems on the projects. Finally, there were arguments from farmer co-operators during the interviews that long periods of drought and frequent typhoons caused damage to their plants and the failure of other projects.

As well as the reasons provided by the farmer co-operators and locals regarding the situations that prevailed in the income-generating projects, there was conflict over the distribution of assistance and claims that the poor families in Linayasan were excluded. This was the stated primary objective of the Center, to assist the rural poor, and the Center attempted to address this through income-generating projects. However, there were several complex aspects to be considered before the benefits from the income-generating projects could reach poor families in the barangays. This was because of the land area needed to establish the income-generating projects and the regular attention to the plants and extra capital needed to purchase fertiliser and chemicals. The poor families were limited in those crucial areas but they were the prerequisites of the Center. If the poor families were to take advantage of the assistance available they had to fulfil obligations to participate in the income-generating projects introduced. But because of their limited capital, the poor families had less confidence in the success of the projects, unlike the more affluent families who provided extra capital to maintain the plants.
Consequently, the interviews revealed that the process involved in the distribution of assistance was selective. The majority of recipients were the more affluent farming families: barangay officials who had power and economic advantage in the barangay. Those families could easily afford the prerequisites needed to establish the income-generating projects. However, to have focused on the more affluent families to establish model income-generating projects contradicted the Center’s mission statement. The Center claimed, “to stimulate rural development through provision of appropriate assistance, and honest concern on [for] the welfare of the least advantaged people in the community” as stated in the 1993-1998 ASCA-ERDSC Annual Reports.

Besides the problems over the requirements needed to establish the income-generating projects, some groups of actors involved in the implementation of such projects in Linayasan experienced specific problems. The actors that were directly involved worked in the field. There were farmer co-operators and the members of their families, instructors and barangay officials. Some farmer co-operators hired caretakers to maintain their projects. Other Center staff and the representative from the municipal government were also involved in the implementation of projects but concentrated more on monitoring and the decision-making process. The differences of those actors in social backgrounds, levels of education, experiences, economic status and the ability to muster political power in the barangay, reduced trust in the system of implementation of the projects. The researcher of this case study observed this during the interviews in which the various actors elicited diverse ideas and raised confused opinions with the other actors involved in the projects. The farmer co-operators, particularly the more affluent actively participated during their meetings but some actors argued that those farmer co-operators did not directly work on their income-generating projects. The Barangay Demonstration Laboratory Instructors claimed that the less affluent farmer co-operators were passive in discussions of their problems during meetings.

The passive interaction between the farmer co-operators and other actors in the meetings led to a failure to elicit issues crucial to the improvement in planning, decision-making, monitoring and evaluation of the projects. There were comments from farmer co-operators that the actual role of some actors involved was not clear when they started their projects. This implied an example of the conventional extension procedure driven by a ‘top-down’ approach that reduced the level of active participation by farmer co-
operators. In particular, the access of farmer co-operators to higher level decision-making was limited. This was because of the form of organisational structure participants were required to follow. The communications passed through several bureaucratic layers before the information reached a higher level. Consequently, the inadequate information available within the Center meant many aspects that were necessary to improve the income-generating projects introduced in Linayasan were effectively ignored. Therefore, recording the experiences of various actors involved in the projects, is useful to provide new insights on the mission of the Center. Consideration of the accounts would further improve their methodology when assisting the ‘least advantaged’ locals through the implementation of income-generating projects in rural barangays.

17.5 Selection Criteria for Recipients of Income-Generating Projects

In 1993, the Center introduced the income-generating projects as new means of income for locals in Linayasan. The implementation of projects started through the development of skills training of a small group of local farmers on particular farming methods and techniques to produce their own planting materials: - hillside farming systems and asexual plant propagation. The dissemination of technology and the varieties of fruit trees introduced during the training were the two main reasons for the projects. Increased productivity in hillside areas and improved agroforestry practices were expected from the training provided to locals. Ten Linayasan locals participated in the training. Of those, the Center’s annual report indicated, seven participants established income-generating projects on their land. They were assisted by SOAs. Two additional projects had been discontinued early. The other three participants did not establish any projects. Interviews indicated those farmers were interested to learn the techniques in asexual plant propagation but not to establish income-generating projects.

In September 1994, another skills training course on asexual plant propagation was conducted. Ten local participants attended the training and all completed the course. However, there was no indication in the Center’s annual report that they established any projects. The criteria for the selection of the adopted barangays of the Center and the guidelines to select beneficiaries for income-generating projects were not thoroughly described in the annual reports reviewed.
In interviews, the Center staff and the instructors described the Center’s procedures for skills training in rural barangays. Such procedures were based on the strategy of the FYDP. The College had adhered to this strategy in Sibalew and other barangays when promoting projects. Interviews indicated that the skills training on hillside farming in Linayasan was also similar to the Sibalew course on Sloping Agricultural Land Technology. The training encompassed 120 hours of instruction within a period of three months. The training focused on the construction and cultivation of contour lines using the ‘A’ frame and included the layout of the area for planting. The Center promoted ladu, czincom, rambutan and calamansi in the training, as well as in the income-generating projects.

The instructors noted that the skills training began by organising the participants in consultation with barangay officials. Those officials informed locals of the Center’s non-formal programme in their barangay. There were consultations also between the Center’s staff, barangay officials and the representatives from the municipal government of Altavas. This was normal bureaucratic operating procedure. The instructors acknowledged the dialogue was not primarily to elicit the problems and needs of locals. Instead, the purpose of the consultation was to promote the opportunity of assistance that locals could obtain from the skills training and income-generating projects promoted by the Center in the barangay.

Accounts from the Center’s director indicated that twenty participants attended the training in hillside farming systems in Linayasan in 1993-1994. The participants were local farmers, out-of-school youth and rural women. However, it was not clear during the interview the proportions of farmers, out-of-school youth and rural women who attended. Instead, the director emphasised that barangays’ officials identified participants. It was suggested those officials knew the problems in their barangays and they had more knowledge about locals than Center staff. Therefore, it was convenient for the Center to have the barangay officials identify farmers for training. For this reason, the director insisted that barangay officials who were interested in attending the training and willing to establish income-generating projects were also given consideration. This was because barangay officials were local leaders who had key roles and were more likely to bring success to the Center’s non-formal education programme. A similar selection process had occurred in barangay Sibalew.
When interviewed, the instructors explained that while the training was progressing those farmers interested in establishing the income-generating projects on their land were identified. As in the account from the Center’s director, they did not know who actually selected those Linayasan farmers who established income-generating projects. The instructors described the criteria of the College used to identify farmer co-operators in Sibalew, which was also similar in Linayasan. The official process was based on (1) the location of the farms on hillside and marginal land (2) accessibility of farms for visits by other farmers, and (3) the willingness of the land owner to adopt the technology promoted by the Center. The ‘official’ criteria provided by the instructors and the Center’s director provided an account of ‘what should have been’ as opposed to ‘what actually occurred’ in reality. In other words, there were conflict between the ‘official’ and the ‘actual’ selection process, as discussed with the instructors and noted during field observations.

For example, the Center’s director emphasised that the three criteria prescribed by the College were difficult to implement in the field. The director explained the problem was because of the large number of farmers in the barangays who wanted to acquire free planting material and technical services from the Center. But they were not interested in having income-generating projects. The director also mentioned that limited funding was a major constraint: it was impossible to assist all the farmers in the barangays. Because of such problems, the director explained that the barangay officials had been given the power and authority to identify farmers who had available land and were willing to use the technology introduced. Such a strategy, the director claimed, was referred to as the concentrated or focus-centered-approach, a conventional extension method. The Center’s director explained:

The change agent does not cover the whole area at once but limits his operation to a limited area or projects. He works closely with a limited number of individuals known as cooperators, with the hope that the new information or ideas would later on radiate to the other farmers in the community. It is suited to areas newly covered by a technician or change agent (Bullo, 1998:1).

Since the 1980s, the College had been using this type of conventional approach. The Center based the extension programme in Linayasan on a similar scheme to that used in Sibalew where instructors were sent by the College in Sibalew to assist the small group of farmers. The instructors were ‘extension agents’ who organised the training and
assisted the farmer co-operators to establish the demonstration farms on their land. The College assigned SOAs to help in the establishment of the demonstration farms. A similar strategy was applied by the Center to assist locals in Linayasan and other barangays.

### 17.6 Accounts from Barangay Demonstration Laboratory Instructors

Accounts from instructors interviewed revealed that at the start of the establishment of the income-generating projects in Linayasan, most of them were involved. This established the projects quickly using *bayanihan* with the former co-operators as in Sibalew. After the training and the income-generating projects were established, the Center assigned one instructor to regularly assist the farmer co-operators and monitor the projects. Other instructors were introduced to the programme temporarily to facilitate the procedure. Those instructors stationed in other barangays were called upon as and when their labour services were required.

In Linayasan, the instructor assigned to the project had been working for about five years as a contractual employee of the College in the outreach programme. He completed an undergraduate degree in agroforestry at the College as a working student. Prior to his employment in the Center, because of the demand for his specialities and the rich experience he had gained working in various income-generating projects during his studies, the Philippine National Volunteer Service Coordinating Agency employed him and paid his allowances. He was designated the Volunteer Information Development Assistant and assigned to work in the outreach programme of the College. In 1992, after the conversion of the College and the reorganisation of programmes, he was promoted to the position of a contractual employee by the Center as a Barangay Demonstration Laboratory Instructor.

His contract with the Center was renewable, he explained in the interviews. However, because he was employed on a contract basis, other privileges that permanent employees were entitled to were denied him. His salary was about PhP4,000.00 or US$102.83 per month, very low compared with the salary received by the regular clerical employees: about PhP5,000.00 in the College. As well as low remuneration, his travelling allowance was also limited. He did not have insurance for his family despite the risk he took
working with locals not familiar to him. His family, two young children and his wife, lived in the barangay next to Linayasan, about three kilometres from the site where he supervised the income-generating projects. His assignment in Linayasan allowed him to live with his wife and children after work. He was unable to spend the weekends with his family because the SOAs fielded in Linayasan required his supervision. The time he managed to spend with his family was very limited, but he preferred the arrangement rather than living away from them in the barangay.

In the interviews, the instructor maintained that the initial step in the establishment of the income-generating projects in Linayasan was the training of farmers. The training, according to the Instructor, comprised not only lectures for the participants but the establishment of the hillside farming system following the principles of the Sloping Agricultural Land Technology. The Center expected him to accomplish this within three months. The training was conducted for eight hours every Saturday and Sunday. It included group discussions and fieldwork. The participants were trained in asexual plant propagation such as budding, grafting and in-arching of fruit tree seedlings. The skills provided to the participants, the instructor explained, were necessary for them to reproduce planting materials for the expansion of their income-generating projects later. The seedlings produced could then be sold to other farmers in the barangay.

Related to the accounts of the Instructors was the experience described by one of the farmer co-operators, the owner of the income-generating project where the technology on the hillside farming system was introduced. This farmer co-operator, called Farmer A, described how she became a farmer co-operator, and how her farm was selected by the Center as the training site. She provided the following account:

I was one of the farmer co-operators of Center. I was called by our barangay to attend the seminar. At the seminar, the barangay captain introduced the director of the Center to the participants. The director explained their proposed project in our barangay, and I was convinced of the importance of Sloping Agricultural Land Technology in the control of soil erosion. Many local people were interested in the technology, but my farm was a high priority because it was located near the main road and close to barangay hall. The land is not very hilly. There are gentle slopes, and the director wanted to develop this land into a model farm using the Sloping Agricultural Land Technology. He advised us that if we were willing, we could undergo such training. He asked for our consensus for a commitment, and we promised to support the project.

We underwent training in hillside farming. We learned how to locate the contour lines using the ‘A’ frame. We also visited the project in Sibalew, and saw plantations of
calamansi, citrus and rambutan. This farm was very productive, and we were keen to have the same results here in our barangay. Then, after the training, the Center provided the seedlings to the participants, including myself. The seedlings were citrus and rambutan and we planted them during the training on my demonstration farm. About 36 seedlings of citrus and rambutan were given to me by the Center. They were free and I was also given some calamansi, but I am unable to remember how many calamansi plants there were because some died. We have an agreement with the Center that once the plants in the demonstration farms are ready to be propagated the College would graft the seedlings in exchange for the planting materials given to us initially.

Farmer A acknowledged in the interview that the soil on her farm was marginal. She explained that the ground was poor, covered with shrubs of no economic value at all. The area had been used for grazing cattle and there were a few banana plants scattered around the site. By the time the training ended, she explained that her income-generating project served as a model for hillside farming. The project was planted with calamansi and rambutan plants. The contour lines were also planted with kakawate, an abundant leguminous plant that grew in the barangay. On the project site, where the interview was undertaken, observations by the researcher of this case study noted that the project of Farmer A no longer existed. It had been located on a site that was ideal for a 'model farm' for Sloping Agricultural Land Technology. The farm had an area of about 0.70 hectare, with from 20 to 30° slopes. It was located near the main road, the barangay hall and the basketball court. Many people had easy access to visit the project. A few stunted calamansi plants grew in the area. It was also observed that the contour lines and the land where the project had been established were abandoned to grazing animals. The unsuccessful establishment of the project, despite the provision of assistance that included planting materials and labour provided by the instructor and the SOA, caused disappointment and concern to the researcher. This was discussed with the instructor assigned by the Center to assist and monitor the projects in Linayasan.

In the discussion, the instructor maintained that he had worked intensively with the farmer co-operators from 1993-1994 to establish the projects in Linayasan. The expenses for the training of the farmer co-operators were paid by through the Center from the Community Development Fund. The instructor described his experiences at the time he had started to conduct training, the field trips of participants to other barangays with income-generating projects and his other activities in Linayasan. He explained that the field trip was part of the training of the farmer co-operators and Sibalew and Feliciano were the two venue barangays. These two barangays had model farms that the Center
also wanted to replicate in Linayasan. The Instructor described his experience during their field trip in Sibalew:

The field trip to the barangay in Sibalew one Saturday was interesting. When we were there, the farmers were very excited because it was the fruiting season of the rambutan. It was good timing for our field trip. I took the farmers around the barangay and they were impressed with the rambutan plantations. You know how it looks? When rambutan is ready to harvest *nagapola lang* it's very colourful. You can see the yellow and dark red fruits, just like an ornamental plant. The farmers asked me if they could have similar kinds of plantations in Linayasan. I told them that was why we were there. I said to them: "have a look around and talk with the owners, get ideas on how they manage their farms."

Because we had the whole day in Sibalew, the visiting farmers brought their lunch. But many of them had not eaten their lunch, because they ate too many rambutans. The fruit was free so they ate as many as they wanted. The barangay captain gave a one-hour informal lecture to the farmers about the College project. There were questions raised by the farmers to the barangay captain about the development of orchards. I remember one of the many stupid questions asked by the farmers. He wanted to know if they could obtain free grafted seedlings of rambutan to take home. The barangay captain replied that he could give one grafted seedling free to each farmer if they bought a kilo of rambutan for PhP25.00 a kilo. The price in town was PhP35.00 per kilo. Although the barangay captain sold the produce at a lower price he was making a profit during our field trip. He took this opportunity to make sales he otherwise could not have made.

About halfway through the final period, near the termination of funding for Linayasan in 1994, the instructor explained that the Center assigned SOAs to conduct outreach projects in this barangay. The outreach projects undertaken by the students in the barangay were an integral part of their training and they were assigned to work with the farmer co-operators. The instructor outlined some of his activities during the training of the farmers. He stated:

I organised the training of farmers in Linayasan. I think that was the October of 1993 and the second training was conducted near the end of 1994. I am unable to remember how many farmers attended, as some of them were quite irregular. Some farmers sent their children to attend the lectures, undertake the practical work, and join the field trip to Sibalew that created some interest. The purpose of field trips was to let the farmers see what was going on in other barangays that were assisted by the College. The purpose of such training was not only to train farmers, but also to assist the interested participants to establish their own projects that served as the demonstration farms in the barangay...

...that was what the Center expected from participants. After a three-month period, we established one demonstration farm before the other farmer co-operators began their own income-generating projects. I stayed most of the time in the barangay and I had days off on Monday and Tuesday to be with my family. I had to work weekends because those were the days when the SOAs worked with the farmer co-operators on the income-generating projects. I went around the different farms to monitor the problems that beset the farmer co-operators. If there was a problem I referred it to
the Center office during our monthly meetings. For example, the farmer co-operators needed fertiliser, additional seedlings and there were problems concerning specific activities. I had referred all such problems to the director so he could take the appropriate action. I did not want to make my own decisions otherwise if the solution I suggested was wrong, they could blame me. I did not want to lose my job, you know! I am only a contractual employee.

During the training it was agreed that farmer co-operators and SOAs would work together every Saturday and Sunday in one of the income-generating projects established during the training. During the weekdays the individual farmer co-operators worked on their own income-generating projects with the help of their children and I assisted them. When the SOAs returned to the barangay that was the time the students helped the farmer co-operators. I had a regular schedule to visit the seven income-generating projects. It was a very tiring type of job but I enjoyed working with the people.

The instructor mentioned that he was mobile in the barangay helping the farmer co-operators to establish the projects. Once established, he moved again to other farmer co-operators within the barangay. He insisted that although he had attended the Center's regular meetings his involvement in decision-making was very limited. The Center's director controlled the decisions. The instructor gave details of his assignment in Linayasan:

I made a schedule of activities with farmer co-operators. For example, I organised the schedule of their fieldwork. I arranged speakers for the lectures. But most of the time I was the one who gave lectures to the farmers. In plant propagation like budding and grafting, the College provided an expert who lectured the farmers. During the training I organised the bayanihan. The farmer co-operators were aware of that. I also monitored the progress of the projects, and submitted reports to the Center office. If there was a problem I referred it to the Center office during our monthly meetings.

Although the instructor was competent to organise the farms, he encountered challenges in his dealings with farmers. The Instructor recalled his experiences when helping Farmer A:

At the beginning her family were very co-operative and worked well with us on her income-generating project. This continued until we planted the calamansi and rambutan. I had expected that her family would maintain the plants we gave. But a different outcome eventuated and our expectations were not met. The SOAs and I were considered the 'labourers' on her income-generating project. When I worked with the SOAs on her income-generating project, her three children were there also, but they did not help us. They worked only whenever they wanted to. I did not feel that her children were interested in working on the project. I did not know if her husband understood what we were doing for his family. The husband was also present every Saturday and Sunday. He saw us doing weeding, cultivating and pruning to maintain their project. But he did not help us either. Instead, he just went round the area talking to us. The fact that he did not participate in the work indicated to me that he did not really understand what we were doing to help his family. The saddest
experience I had was when I heard humours that we were the 'labourers' on his income-generating project and that the labourers were from the Center. That was insulting to the SOAs who were helping his family. I talked to his wife about it because she was our farmer co-operator. I did not know if she discussed this issue with her husband. But I continued helping her family to maintain the income-generating project until my work was terminated in Linayasan.

In the early stage of the income-generating projects the instructor noted that the farmer co-operators experienced difficulty when they tried to work unassisted on the land. The work was very laborious for one person to undertake. Much labour was needed for the under brushing of sites, staking, hole digging, layout of contour lines and planting. Because of this, the Instructor explained that he organised the bayanihan system to form the Students Outreach Agents and the farmer co-operators into one group. The group members worked together in one income-generating project once a week, either Saturdays or Sundays. The rotation included the seven income-generating projects. He explained:

Our activities in bayanihan included weeding, cultivating and pruning of hedges on the contour lines. It was hard for individual farmer co-operators to do this alone. With a group the work on the hedges was completed quickly. That's what we did in bayanihan: we worked together. The group that worked on the farms had some social interaction during the lunchtime. The SOAs and farmer co-operators had their lunch together. Some farmer co-operators would tell stories about their experiences while others discussed the problems of their projects. There were farmer co-operators more concerned about the life-styles of other people rather than their own. You know! It was good social interaction, and the farmer co-operators learned from each other. And the SOAs also shared with each other what they had learned from the farmer co-operators. If the farmer co-operator was not able to attend the bayanihan they sent their son or daughter to share their labour with the group.

One of the major issues raised by the instructor in the interview was that the farmer co-operators had participated passively on the income-generating projects. He was particularly concerned that the members of the more affluent farmer co-operators relied on their caretakers and the Students Outreach Agents to maintain their income-generating projects. The instructor explained the more affluent farmer co-operators were busy in their small businesses. He argued that he did not have the power to demand attendance during bayanihan on the income-generating projects. As for the more affluent farmer co-operators, most of whom were barangay officials, their poor attendance was related to concurrent official obligations in the barangay. The Instructor declared:
The barangay officials were busy, not only with their official functions but also in their personal businesses generating income. There were many instances when they did not attend the work undertaken in our bayanihan. They, instead, would send their care-takers. But, you know! The caretakers were only the labourers. But anyway it was good the caretakers were there to share their labour on behalf of farmer co-operators. Although the caretaker learned from what we were doing, the problem was the caretakers could not make any decision about what should be done on the income-generating projects. The information learned by the caretakers during the bayanihan must be passed first to the farmer co-operators before it could be proposed for the field. That's why I needed to deal with the two people: the caretakers and the farmer co-operators. I remember there were farmer co-operators who informed me that they could not attend bayanihan because they needed to attend parties, fiestas and family parties. You know! They were active on such parties. But, when it came to work on the income-generating projects, many of them were active and good only at the beginning. The attendance of farmer co-operators on the income-generating projects was decreasing and difficult to maintain. The farmers alleged that I was being paid for my attendance at the bayanihan, whereas any advantage, when the farms become productive, to them was ignored. That was what I experienced in Linayasan.

After the first round of bayanihan in the nine demonstration farms, the instructor noted that the attendance of the farmer co-operators participating in the joint work was decreasing. When the SOAs had completed their fieldwork the farmer co-operators did not continue the bayanihan. The individual farmer co-operators worked on their own demonstration farms. The instructor claimed that the two-year duration of his work in Linayasan was not long enough to raise the consciousness of farmer co-operators on the importance of bayanihan. The bayanihan was formed originally to provide a strong labour force to undertake the heavy work.

However, continuation of the bayanihan would have meant that work for all farmer co-operators could have been performed more effectively and efficiently. The instructor emphasised that bayanihan also developed some negative attitudes in some farmer co-operators. An example described by the instructor was that farmer co-operators relied on the labour services of the SOAs who maintained the demonstration farms. The instructor concluded that the presence of SOAs helped the farmer co-operators to maintain their project. But some of the farmer co-operators considered the work of SOAs to maintain the plants a part of their training in community development. Therefore, SOAs were responsible for the maintenance of the income-generating projects introduced by the Center.

Finally, the instructor expressed the difficulties encountered in his work during informal discussions. He experienced tension in attempting to accomplish his task in accordance
with the expectations of the Center. One major concern was the decreasing maintenance by farmers. The instructor mentioned that he was worried because the weed grasses grew quickly and covered whole areas of the projects affecting the growth of the crops. He maintained that after the training of the farmer co-operators, and when their income-generating projects were established, maintenance such as cutting grasses and other work necessary for plants were crucial. However, many farmer co-operators failed to manage the projects properly.

The instructor argued that the farmer co-operators were not yet competent to understand the major activities involved in the management of their projects. He noted that the farmer co-operators were prepared to work on other activities that required less labour and would provide them with an immediate income. He said that the fruit trees planted for the income-generating projects could be a source of income, but those plants took three to four years to produce. In this period, the instructor argued, most farmer co-operators did not have other regular sources of income, no subsidy from the government, and therefore, they needed to obtain income for the subsistence of their families. In this regard, the instructor emphasised that there was conflict between the immediate needs of the farmer co-operators and the length of time that their income-generating projects took to produce income.

In addition to dealing with farmer co-operator managerial issues, the instructor also mentioned that he was worried about the lack of proper care given to the plants and the appearance of the projects for visitors. The instructor asserted that this was because there was no definite schedule for College or agency officials to visit the projects. He argued that projects inadequately maintained would not fulfil the expected performance criteria of the Center in Linayasan. Also, the instructor emphasised that the expectations of his work by the Center worried him because of concerns with the security of his temporary position as the Barangay Demonstration Laboratory Instructor.

In conclusion, the instructor argued that his aspiration to be a permanent employee depended on the results of his work. It was necessary to meet the expectations of the Center. The argument was interrelated with problems encountered by the instructor with farmer co-operators. Consequently, the situation created pressure and produced stress for the instructor. The stress reduced his effectiveness to perform his work well with farmer
co-operators. The stress and subsequent effect on the instructor had the potential to jeopardise the overall operation of the project. In general, this account by the instructor could provide new insights into the best possible solution for the Center. The instructor’s account provides new directions well worth exploring. Through such accounts more appropriate assistance may well be provided for the welfare of disadvantaged rural locals of the province.

17.7 Accounts Regarding Student Outreach Agents

Like the Sibalew case study, the SOAs were another group of actors who played an important role in assisting the farmer co-operators to maintain their income-generating projects in Linayasan. A review of the Center’s annual reports showed that there were seven college students who undertook community development work for 40 days in Linayasan in 1994. Their involvement in Linayasan was similar to the Student Internship of the AEOP discussed in the Sibalew case study. Being a SOA was an option for graduating College students. Doing research was another requirement to get an undergraduate degree in the College.

As described in the Sibalew case study, SOAs were required to stay with the farmer co-operator’s family in the barangay every weekend. The SOAs and the farmer co-operators worked together to develop income-generating projects. The SOAs returned to College to attend their classes on school days. After 40 days of community development work, the SOAs were required to write outreach reports regarding their projects and experiences in the barangay. The submission of their outreach report to the Center was the main requirement for SOAs to complete their undergraduate degree.

Prior to the seven SOAs being fielded in Linayasan, they underwent a one-week in-campus-training course at the Center in Banga. Interviews with instructors who conducted the training revealed the differences between the previous training of SOAs the College fielded in Sibalew in the 1980s, and the Center’s students assigned to the assisted barangays like Linayasan in 1994. During the opening of the outreach project in Sibalew, the instructor indicated that the training of students was more focused on general extension methods.
In 1993, the instructor emphasised that the training for the SOAs fielded in the barangays was focused on the development of their technical skills for income-generating projects for local employment after graduation. The Center introduced income-generating projects in the barangays. In the 1980s, the demonstration farms were replaced by income-generating projects, a similar idea but marketed differently to emphasise the new ideology of self-reliance and increased productivity. The training involved instructing students in techniques necessary for agroforestry and nursery establishment, management of fruit tree orchard plantations, poultry and swine raising, asexual plant propagation and organic gardening. The SOAs had lectures on group dynamics and discussions on the activities they were to undertake in Linayasan. The instructor insisted that the technical skills training of SOAs on the different income-generating projects would provide them alternatives in order to let them select particular types of income-generating projects. In particular, the project would be matched to the farmer co-operator's and the SOA's interests.

In 1995 and 1996, the Center's annual report showed that 40 SOAs were fielded in different barangays. However, in 1997 and 1998 SOAs were no longer an alternative for the graduating students. Instead, research or a thesis presentation was the major prerequisite for a degree. Interviews indicated that this was because of the changed College policy to align themselves with other State Colleges to meet the standards required by the government. Another reason presented by interviewed College staff was that employers did not readily recruit the students who graduated with SOAs experience. This also disadvantaged graduates who had written a thesis. For a thesis, the work involved scientific calculation and analysis. The work was more difficult than the descriptive accounts portrayed in the reports produced by the SOAs. For this reason there were arguments from College staff and faculty that the training of students through the SOAs scheme was no longer suitable for students wanting work in local industries. The College agricultural curriculum was revised to make it more suitable to the employment demands of employers in local industries.

Although the experiences of graduates who undertook community development work was considered inferior to thesis work as far as local employers were concerned, the role of SOAs made a considerable contribution in promoting agricultural technology and students were recognised by the barangay locals. For example, in Linayasan the farmer
co-operators provided accounts regarding the SOAs on the their income-generating projects. They claimed that the SOAs cleared sites, developed contour lines, staked, ploughed, planted fruit trees, mulched, watered and weeded the land. In the farmer co-operators’ homes they cooked, fetched water and tended gardens. The SOAs socialised with relatives and friends of their farmer co-operators, drinking coconut wine and playing basketball during their free time. The SOAs kept a diary of what they experienced in those activities: work accomplished and problems encountered in their fieldwork. This material was used to write the outreach report project.

The farmer co-operators further indicated that the Center fielded two batches of SOAs in their barangay. The first group, composed of seven students, assisted farmer co-operators to start income-generating projects in 1994. This was followed by the second group, composed of three SOAs who assisted farmer co-operators in weeding, cultivating, applying fertiliser, composting, mulching and integrating organic methods of farming in their income-generating projects. The SOAs supplied their own food and the farmer co-operators provided free board. Interviews indicated that the purpose of home-stays was to establish understanding social relationships between students and farmers. Homestays provided the opportunity for the student and farmer to make plans and arrange a schedule of activities for their project. The activities undertaken by the SOAs linked the farmer co-operators and the Center. This relationship allowed the Center to operate the extension programme, particularly the introduction of income-generating projects.

In 1997, the discontinuation of the SOAs reduced the manpower of the Center and their assistance to the farmer co-operators in the barangays. For the 1997 year, College staff indicated that the reduced allotment from the national government severely limited the funding for the training of SOAs and their projects. In a review of outreach project reports produced by the SOAs, there were aspects of the internship of the SOAs discussed below that were crucial for the strengthening of the College’s agricultural curriculum and the Center’s extension programmes.

The Review Committee of the College curriculum had to work within the national guidelines to standardise the course offerings and less attention was given to previous programmes. For instance, evaluation of the result of outreach project reports produced by the SOAs could be useful to determine the effectiveness of previous programmes.
within the local agricultural industry. In the conventional manner, the Evaluation Committee who examined the results of the outreach project reports were preoccupied with marking the papers in view of the requirements for a degree, rather than paying too much attention to the content, particularly criticisms or suggestions by students. However, the details in the reports could have helped the Evaluation Committee examine the effectiveness of the extension programme.

However, the outreach project reports of students were not reviewed thoroughly or utilised to examine the weaknesses of SOA activities in the barangays. Previous experiences of the researcher of this case study indicated that the SOAs had written their outreach project reports in several stages. First, the student wrote a narrative report regarding their project assisted by their technical advisor who was also the instructor. The English adviser assigned by the Committee on Outreach Project Reports also assisted. The members of this Committee examined the project report of each student to assess the work for the conferral of his or her undergraduate degree. Farmer co-operators were not involved in the evaluation of the outreach project reports produced by the SOAs. If the farmer co-operators had been involved in the assessment or review of the project report produced by the students the farmer’s opinions and comments would have been beneficial for first, the quality of the report by the student and, second, the improved effectiveness of future programmes.

There was a strong possibility that the technical adviser wanted to produce an optimistic result for the income-generating projects and guided the content of the outreach report of the student. Such a strategy by the adviser was probable, rather than eliciting the problems experienced by the students and farmer co-operators in the projects. However, the elicitation of problems was contrary to the existing structure and standard patterns used by the Committee to guide the production of outreach project reports.

Another issue that negatively influenced the trustworthiness of the outreach project reports was related to the traditional cultural practice of Filipino social ethics in the writing of reports. The SOAs had little training in dealing with such sensitive issues. The students were very aware that their reports could affect the social relationship with the farmer co-operator they worked with. Generally, the SOAs avoided controversy as far as possible in order to maintain the reputation of the Center and the extension programme.
The consequence of their concern was that many issues they encountered during the projects were not documented in their reports. Another possible reason problems were not described by students within their reports was that criticisms could result in a delay in processing them. Students may have been concerned that their outreach reports might not be approved or they could not graduate if the report presented was not consistent with the expectations, local academic conventions, and standards required by the Committee. There were interesting accounts intimated by the farmer co-operators that could have been useful in the reports of the SOAs. However, those accounts could not be found in the outreach project report reviewed. In Linayasan, for example, a more affluent farmer co-operator, Farmer 3, who was also one of the barangay officials, outlined the activities of SOAs in their project:

I did not have any land area available for the income-generating project. I have only a homestead plot. I was given by the Center a SOA so I used my father’s land. My father had a vacant backyard suitable for an orchard. I asked the SOA to assess the small area, about half a hectare, to see if that could be used as the site of the project. When the SOA first saw the area, he thought it was not big enough for the income-generating project. Then I asked him to assess another area in Cabogao. We travelled there and my SOA said that it was okay, but I know that the poor soil in that area was problematic because even the cassava planted in the area grows only two feet in height. The SOA evaluated the soil as being very poor. We liked the SOA he was active and hardworking. He took soil samples in Cabogao including some in the small area first looked at in my father’s place and asked the Center to analyse them. He asked somebody in the Center about the area we had identified in Cabogao. I do not know who he asked. Maybe he asked the instructor there. However, the SOA was told that the income-generating project should only be located in Linayasan, and we could not use the area in Cabogao, despite being very close: it was only on other side of the river.

We made our decision that we would use the area close to my father’s house. After we had identified the area, we started the project. But I did not hear any comment from my SOA about the area. He did not say anything about it. I worked with the SOA and the labourers on the project. The instructor assigned a supervisor for the student who was also observing the development of the project and monitored our work. My SOA helped us in land clearing, and I think the most important thing the SOA did was to follow-up the supplies I had requested from the Center when he returned to attend his classes at the College. I did not have enough time to do this. I had many obligations in the barangay and I needed to look after my family income. The appropriation of supplies in the Center takes time. I did not know if I could get the supplies within one day. If we had a telephone then we could have called the Center office to arrange and then uplift supplies on the day. That’s our problem: the time involved in communicating with the Center to get supplies.

Most of the farmer co-operators interviewed acknowledged the significant contributions of SOAs in the establishment of their income-generating projects. However, the findings of interviews suggested that the farmer co-operators had limited awareness of the value
or knowledge of the students and failed to understand the learning opportunity provided by the SOAs. The analysis of interviews indicated that individual farmer co-operators had different perceptions regarding the role of the SOAs in their projects. In general, there were arguments from farmer co-operators that the outreach activities of the students were a form of labour assistance for their income-generating projects provided by the Center. Some farmer co-operators indicated that the SOAs were their means to access benefits available at the Center.

There was a farmer co-operator who also acknowledged that the outreach activities of SOAs were training for the students. It was an opportunity for the students to conduct projects and to write project reports of their experience when living in the barangay. This farmer co-operator explained that most farmers had been farming for about 25 years in farming. Other farmer co-operators had been farming with their parents since they were young. He argued that the methods the SOAs introduced to grow fruit trees were already known to him. The farmer considered that the project was simply a trial project on his farm. He argued that the new method of growing fruit trees was no better than those locally practised in their barangay. He explained that the new technology brought by the SOA was an experiment. He clarified in the interviews that the income-generating project assisted by the Center was not an immediate means of producing income. Such arguments illustrate the contradictions between the farmers and the organisers over the term 'income generating projects'. The farmers tend to think in terms of 'immediate or a short period' of time, while the Center considers the term in a longer time frame. For example, the fruit trees that were in the packages of training and technical assistance take three to four years to produce, but were used in income-generating projects.

Instead, the farmer co-operator claimed that it was a trial project by the Center in collaboration with local farmers. The SOAs and the instructors were the promoters of the new technology through income-generating projects. The farmer co-operator emphasised that while he learned from the project, particularly from the instructor, he also taught the SOAs some of his methods of farming. He claimed he had not actually learned much from the students. Finally, the farmer co-operator acknowledged that his ideas regarding the income-generating projects were unpalatable to the promoters. But he suggested that there were many things that happened in the field. These required proper evaluation to clarify and to avoid confusing other farmers. He related his concerns regarding the
Center-assisted projects in Linayasan. Such comments implied that the Center’s role in research and evaluation of their projects in collaboration with many other departments in the College could be of service overall.

Another example of an account regarding the important role of SOAs unfolded during a discussion with the instructor. The instructor described his experiences when he conducted group discussions with farmer co-operators and SOAs in Linayasan. The instructor stated:

We worked not only on the projects, but we also had discussions on the problems and issues in the barangay. Most often I heard farmer co-operators talking about the financial problems of their families. Some of them discussed issues that revolved around the barangay. There were many gossip and ‘grapevine’ stories, especially concerning politics. The SOAs also talked about their experiences of their studies, finances, assignments and their work at home. But the SOAs did not talk about the hillside farming, the Sloping Agricultural Land Technology much when the farmer co-operators asked them. This was because the SOAs had limited experience and they were just learning how to do it in Linayasan. The farmer co-operators had more experience in farming, although some SOAs had experienced farming with their parents. The difficulties were not easy for the SOAs. They found it hard to argue against the ideas of the farmer co-operators. Cultural factors such as differences in ages and experiences meant the SOAs were, in the eyes of farmers, amateur extension agents. Most of the farmer co-operators were conservative in their ideas. Farmer co-operators often thought that their ideas were always true because of their local experience. Moreover, the SOAs stayed with the family of farmer co-operator. The SOAs were concerned to avoid misunderstandings with his/her farmer co-operator.

In the College, one of the employees gave details of his experience when he was a SOA in Feliciano, the other barangay where the fieldwork of this thesis was conducted. Although the accounts provided by this employee were taken beyond the boundaries of Linayasan, the employee’s comments were similar to the arguments presented during the interviews with Linayasan farmers who did not have income-generating projects. The employee claimed:

When I did my fieldwork I went to the barangay every Friday. I stayed in the house of the farmer co-operator. I brought my own food and bedding. I enjoyed the company of his family. We had fun cooking, playing and sometimes I attended the parties of their relatives. I learned more about the family of the farmer co-operators: their problems, work, plans, daily activities and more. I think that was four years ago now.

Regarding my project on his farm, we developed the Calamansi orchard plantation. We planted about two hundred Calamansi plants on his farm. They get income from the plants now four years after planting. I had not experienced problems working with the farmer. But sometimes it could not be avoided that I did the work on the orchard alone. The farmer co-operator was sometimes not there. He was a carpenter and he
worked Monday to Friday building. The only time he could work in our orchard projects was every Saturday and Sunday.

I liked my farmer co-operator; he was very co-operative. But many other SOAs from my class had problems with their farmer co-operators. I noted that many farmer co-operators left their SOAs to work on their farms while the farmers were drinking coconut wine with their friends. Other farmer co-operators gave the responsibility of the SOAs to their young children, while they worked for other people to get an income for their families. That's what happened in the demonstration farms: there were co-operative and not so co-operative farmer co-operators.

At the College, there were staff members who had experience as technical advisers for the outreach reports. The technical advisers described the complications regarding the specialisation of students who became SOAs and their activities in the barangay. Interviewed advisers argued that the SOAs fielded in the barangays mainly conducted their projects but also helped to facilitate the maintenance of other projects introduced to the local farmers. Some advisers claimed that there were SOAs engaged in various activities like weeding, applying fertiliser and training farmers in asexual plant propagation. Those tasks were not directly related to the outreach projects that some students wanted to undertake in the barangay.

For example, interviewed College staff explained that some female students who had specialised in homemaking-education became SOAs. Those students, it was argued, were supposed to be focused on assisting the households of farmer co-operators to improve their hygiene, nutrition, health and such like, but those students were also involved in maintaining projects. According to the staff member interviewed, this had happened because the training of SOAs was not for specialisation but general community development work. The instructor acknowledged this issue raised by the staff member during the interviews. The instructor explained that the main reason SOAs were involved in maintaining the projects was because the students were fielded and worked with farmer co-operators based on the purpose of their training, instructions and policies of the Center.

In Linayasan, an interview with one of the more affluent farmer co-operators, Farmer Three explained that the second batch SOA assigned to him had been interested in hog raising. The SOA has not been able to pursue her plan to develop the backyard piggery project because there was no funding available from the Center office. The farmer co-operator explained that he understood the difficulty of getting funds from the Center.
Because of this, he offered to provide the capital to buy the piglets for the proposed outreach project of the SOA. The farmer co-operator explained that the arrangement with the SOA was that his family would look after the piggery when the student was in school attending classes. The income from the backyard piggery project would go to the farmer co-operator and the student would be given a share once the hogs were sold. But the proposed outreach project of the farmer co-operator and his student was not implemented. Instead, the farmer co-operator explained, the SOA maintained the orchard, his income-generating project because the period of time SOAs stayed with his family was too short for their backyard piggery project.

Accounts like those related by the farmer were not to be found in the project reports of the SOAs reviewed. A review of the outreach project reports revealed that the SOAs were prescribed a similar structure of reporting. The outreach project reports were produced following the standard pattern that was used also in the reports of the SOAs assigned in Sibalew. A profile of farmer co-operators, a discussion of the type and characteristics of the project introduced, the outline of activities and experiences encountered by the SOAs and the recommendations for the future success of the projects were presented in the reports.

The findings of a review of the reports showed that the outreach reports were limited in scope, optimistic and focused on encouraging farmer co-operators to co-operate and participate in the development projects introduced. The discussion on the condition of project was limited based on initial establishment on the farm. Most of the reports concluded that the SOAs had successfully convinced the farmer co-operators to permanently adopt the introduced project. The last part of the outreach reports presented lists of common problems the SOAs encountered. Lack of financial support, limited planting materials and limited time to work in the projects were common problems listed. The outreach reports also indicated some limited recommendations, particularly addressed to the farmer co-operators to undertake in their projects.

Overall, a review of the outreach project reports revealed criticisms that were not thoroughly discussed, particularly the issues and problems experienced by the SOAs in the barangay. As one of the farmer co-operators commented, the report on the projects was made for officials to read and mark. The farmer co-operator mentioned that he had
not seen the outreach project reports produced by the SOAs assigned to him. He
explained that many of the farmer co-operators also indicated that they were interested in
knowing the recommendations made in the report. However, because of the work the
students had performed on their farms, the farmer co-operators considered that the report
of the SOAs was important to them. The farmer co-operators concluded reluctantly that
SOAs produced project reports to get their degrees: not to describe the difficulties they
had encountered in the barangays.

17.8 Assisted Farmers in Linayasan

In Linayasan, one of the aspects investigated during the fieldwork of this case study was
the experiences of farmer co-operators or local farmers assisted by the Center to establish
income-generating projects. The findings of interviews revealed that nine farmers tried to
establish small orchards as income-generating projects. However, a review of the annual
reports indicated that the Center had seven farmer co-operators in Linayasan. Interviews
with three farmers indicated that the other farmers were not on the Center’s lists of
farmer co-operators because the projects were discontinued. In the interviews, work
away from the barangays and not having enough time to regularly attend training and
meetings were the main reasons given by the two farmers to discontinue with their
projects.

In this case study, the researcher considered those two farmers were members of the
farmer co-operators who attempted to establish their income-generating projects. Overall,
the researcher conducted interviews with nine farmer co-operators in Linayasan. Interviews
revealed that seven farmer co-operators had established their income-generating projects. The differences of the farmer co-operators were observed in many
ways: the number of members in their households, ages, number of years farming, levels
of family income, education, sources of income and in the scale of farming they
undertook in the barangay (see Table 7).

Some variables were less important while other variables, such as the level and sources
of family income, the education of individual farmers and the scale of their farming,
were crucial for the potential success of their development. For example, when those
variables were applied to determine the response of the farmer co-operators regarding
income-generating projects it contradicted the general mission statement of the Center as stated in the annual reports. Analysis from accounts of farmer co-operators revealed complex information that was difficult to generalise. Difficulties were encountered when accounts from farmer co-operators were contrasted with others to establish a general conclusion regarding their response to questions on income-generating projects.

There were similarities in livelihoods and sources of income: farming, fishponds, trading businesses, small sari-sari stores, wage labourers, general workers raising animals or gardening. However, of those farmer co-operators, five could be considered more affluent. As well as the livelihood and sources of incomes indicated in the table, those farmers operated at a larger scale. Their trading and sari-sari stores sold larger quantities of products and made higher profits when compared to the four farmer co-operators who belonged to less affluent families. The researcher of this case study noted that differences in economic status appeared to influence farmer co-operators' responses when the interviews were conducted.

For instance, the arguments forwarded by farmer co-operators claiming they did not have enough time to work in their projects were presented for various reasons. Some farmer co-operators claimed they were engaged in various activities to obtain an income. These included fishponds and trading business. Other farmer co-operators explained that they needed immediate cash for the subsistence of their families. The arguments illustrated the crucial need for work outside the barangay and that meant farmer co-operators could only spend a limited time working on income-generating projects. The researcher also observed the varied responses of the farmer co-operators during interviews. The standard of living and social status of farmer co-operators were directly related to their arguments and experience of income-generating projects. This observation led the researcher to distinguish and classify the nine farmer co-operators into two groups: - the more affluent and the less affluent farmer co-operators. Table 7 below outlines some distinguishing characteristics of the nine farmer co-operators in Linayasan.
Table 7. Profiles of the Farmer Co-operators.

<table>
<thead>
<tr>
<th>Farmer Co-operators</th>
<th>Age</th>
<th>Sex</th>
<th>No. of Household Members</th>
<th>Level of Education</th>
<th>Position in Barangay</th>
<th>Livelihood and Sources of Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>More Affluent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farmer 1</td>
<td>55</td>
<td>Male</td>
<td>6</td>
<td>Completed high school</td>
<td>Municipal counsellor</td>
<td>Farming, sari-sari store and trading business</td>
</tr>
<tr>
<td>Farmer 2</td>
<td>61</td>
<td>Male</td>
<td>5</td>
<td>Uncompleted high school</td>
<td>Barangay captain</td>
<td>Farming, fishpond, hog fattener/butcher</td>
</tr>
<tr>
<td>Farmer 3</td>
<td>42</td>
<td>Male</td>
<td>5</td>
<td>Completed high school</td>
<td>Ex-barangay official</td>
<td>Farming, fishpond, buy and sale business</td>
</tr>
<tr>
<td>Farmer 4</td>
<td>65</td>
<td>Male</td>
<td>6</td>
<td>Completed Elementary</td>
<td>Ex-barangay captain</td>
<td>Farming, sari-sari store business</td>
</tr>
<tr>
<td>Farmer 5</td>
<td>78</td>
<td>Male</td>
<td>3</td>
<td>Uncompleted elementary</td>
<td>Not barangay official</td>
<td>Farming, have allotment from children</td>
</tr>
<tr>
<td>Less Affluent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farmer A</td>
<td>49</td>
<td>Female</td>
<td>7</td>
<td>Completed College</td>
<td>Member, local organisations</td>
<td>Farming, hog and chicken raising, wage labour and gardening</td>
</tr>
<tr>
<td>Farmer B</td>
<td>49</td>
<td>Female</td>
<td>6</td>
<td>Uncompleted elementary</td>
<td>Member, local organisations</td>
<td>Farming, wage labour, gardening and small sari-sari store</td>
</tr>
<tr>
<td>Farmer C</td>
<td>61</td>
<td>Female</td>
<td>8</td>
<td>Uncompleted high school</td>
<td>Member, local organisations</td>
<td>Farming, wage labour, fish, vegetables vendor</td>
</tr>
<tr>
<td>Farmer D</td>
<td>29</td>
<td>Male</td>
<td>5</td>
<td>Completed high school</td>
<td>Member, local organisations</td>
<td>Farming and wage-labour in fishpond and general works</td>
</tr>
</tbody>
</table>

Note: Information indicated on this table was based on individual interviews and discussion with the farmer co-operators and field observations in 1998.

17.9 The More Affluent Farmer Co-operators

In general, the five more affluent farmer co-operators had considerably more social and economic advantage in the barangay than the poorer group. The more affluent farmer co-operators (Farmers One to Five) had been barangay officials; some of them were incumbent officials during the fieldwork in 1998. Farmer five was, at seventy-eight-years-old the oldest member of all the farmer co-operators, an exceptional age for a working farmer. Farmer Five was the only farmer in that group that had not been a barangay official. Interviews with the more affluent farmer co-operators indicated that most of them owned from two-to-five hectares of land. Sometimes relatives of those farmer co-operators managed the farms as tenants or hired labour. The sharing of farming income between the farmer and tenant depended on traditional social and cultural arrangements and the types of crops produced. For example, Farmer One...
explained that in rice production the produce could be divided equally after deducting all the capital expenses. Farmer One intimated that other farm owners gave 75% of the rice produced to the tenant and 25% was kept by the owner but the tenant, under this arrangement, would incur the capital expenses. However, crops such as coconut, banana and cash crops were different and the financial arrangements depended on negotiations between parties, the landowner and tenant.

As well as farming, the five affluent farmer co-operators were engaged in home-based businesses, usually trading by buying and selling farm produce grown by other farmers. The farmer co-operator’s family members ran their business. For example, the wife acted as sales manager and the children were helpers, while the husband supervised the farms. Income produced from trading and the farm was deposited into family savings. Some monies were spent on food, clothing, education, social and recreational occasions and for helping some of the disadvantaged relatives.

In the interviews, there were arguments raised by the more affluent farmer co-operators who maintained that they provided financial help to the disadvantaged locals in the barangay. Some affluent farmer co-operators argued that disadvantaged locals claimed that the assistance extended was too little. However, the affluent farmers also had economic pressures to attend to for the welfare of their own families. In an interview, Farmer Five emphasised that if one member of the family improved their income, the disadvantaged relatives and some locals as well, expected more help from the family in accordance with the social and cultural practices of traditional Filipino rural lifestyles.

For example, Farmer Five cited his experiences in his orchard project during the interviews. He claimed that because he could not afford to maintain the project, he hired his grandson to do maintenance. Farmer Five paid for his labour but he argued that his grandson did not work very hard on the project. He accused his grandson of being too lazy to work in the project and said he was only good for asking for more money. Farmer Five maintained that his grandson argued that the project was not necessary for the farmer because he also received an allowance from his children in Manila. He said that his grandson insisted that because he had some money it was not necessary for him to work so much on the farm. The grandson’s advice had an ulterior motive. The intention of his grandson was to demand extra allowances for food on top of the salary already
being paid. Other more affluent farmer co-operators interviewed encountered similar
problems.

In the interviews, while the five members of the more affluent farmer co-operators
claimed to have helped their disadvantaged relatives, they were particularly concerned
for the economic improvement of their families. For example, more money was invested
for the education of their children, improvements were made to their trading businesses,
the acquisition of new properties increased and the purchase of modern household
appliances was continuous. The acquisitions of new properties brought status and
influence for the more affluent farmer co-operators. Land ownership allowed them to
maintain power over disadvantaged locals in the barangays. It meant that the affluent
farmer co-operators exercised some social control over locals to their own economic
advantage. An example was the social arrangements between farm owners and tenants.
The tenant managed the farms, carried the risks and was responsible for improving
farming practices in order to improve productivity. While the tenant exercised the
responsibility of being the manager of the farm, the farmer co-operators employed
themselves in their small family businesses to meet their daily needs. The tenant,
however, made a living solely off the income of the farm, sharing with the owner some
of the profit.

Through their affiliation to barangay politics, the more affluent farmer co-operators had
access to the resources and services of external agencies. This gave them a considerable
advantage over the less affluent locals. Being barangay officials, the members of affluent
farmer co-operators had the opportunity to attend seminars and conferences conducted by
local government and other agencies. An example was the local seminars and
conferences on the implementation of guidelines and policies of the 1991 Local
Government Code. Under this Code, barangay officials were empowered to initiate the
development plan and control the development projects inside the barangays. In the
barangay social structure, the position of the officials provided them with social networks
to access information within and outside the barangays. Their social networks were
beneficial in linking them to other affluent families outside, and made them influential
within the neighbouring barangays. There was considerable political and economic
advantage for the more affluent group, observation by the researcher during the
fieldwork of this case study showed. It was noted that farmer five was not a barangay
official and did not have access to official advantages. But he did have strong connections with other officials and relatives outside the barangay that provided him some advantage.

Another advantage to the more affluent farmer co-operators was the close links with relatives outside the barangays. The links between barangay locals and relatives abroad were important for social and economic activities in Filipino cultural practices. For instance, elderly Farmer Five had sons and daughters employed in professional positions in Manila who provided finances for his needs. He claimed that most of the barangay officials were relatives. Some relatives, as well as his children, did help the extended family. He had helped financially and through making connections for them in Manila while others were arranged work abroad. Farmer Five emphasised that because he had helped so many people, some of his relatives considered him as an adviser. They referred information to him and other families when their children sought work in Manila. He suggested that some families in Manila whom he had advised sent gifts to him: T-shirts and chocolates. Because of this, he mentioned that he was pleased to help others. His close connections with relatives in other places facilitated assisting locals seeking employment. He claimed the financial support he received from his children and his links with relatives abroad provided him with the power to access outside resources. In that way an old man could contribute even though he was not really strong enough to work on his farm any more.

17.10 The Less Affluent Farmer Co-operators

Unlike the more affluent families, the four less affluent farmer co-operators (Farmers A to D) were disadvantaged in Linayasan. Like the five members of the more affluent farmer co-operators, the Center assisted also four less affluent farmers to establish backyard orchards, income-generating projects, as a means of providing them with an alternative source of income. Interviews with this group of farmer co-operators revealed that they were all close relatives. The three women were in-laws and one of their members was the eldest son of one member of this group of farmer co-operators. Other than the family lineage of those four less affluent farmer co-operators, most of the barangay officials were also their relatives and many of their relatives belonged to more affluent families. However, their own parents’ disadvantaged family backgrounds left
them no financial resources to use. The relationship between the less affluent farmer co-operators and relatives like the barangay officials and those more affluent kin were synergetic. This meant that the four members of less affluent farmer co-operators had the ability to work with their more affluent relatives to be more successful because of the kinship relationships.

However, being disadvantaged the less affluent farmer co-operators had only limited access to economic opportunity and privilege from external sources other than relatives who belonged to affluent families. The four members of the less affluent farmer co-operators did not have regular sources of income. The husbands of two women were wage earners, while the husband of the other woman had a permanent job in the provincial capital. In interviews, less affluent farmer co-operators indicated that most of their children were still studying at high school but some had enrolled in the local university. Their eldest children had completed a degree and obtained permanent positions in Manila.

For example, in the interview with farmer A, she stated that her son who worked in Manila sent money to them for food, medicines and tuition fees for the younger bothers and sisters who were still at school. She considered that the money from her son in Manila was important, especially at the beginning of school terms and also during the planting season. Farmers B and C provided similar accounts. Two of the young children of Farmer D were not yet ready to go to school in 1998. Farmer D explained that like other young farmers, he did not have a permanent source of income. Sometimes he worked in construction or helped in the fishpond owned by his relatives. He also cultivated the riceland owned by his parents. The rice produced provided for his family’s basic needs.

Like many of the less affluent families in Linayasan, the three farmer co-operators, Farmer A, B and C occupied less than a hectare of land inherited from parents. Inquiries indicated that the land title for all of the sister-in-laws was still in the name of their parents. It was necessary to begin to process the transfer of the ownership to the occupants and the claimants of the land. They occupied a parcel of land based on traditional social arrangements that had been a common practice found amongst relatives in the rural barangays traditionally. The land included a small area of coconut
plantations, an area of rice fields and vacant space for cash crops and vegetables. The rice fields were cultivated during the rainy season for planting and the cultivation of the vacant space was undertaken after the rice planting or harvesting was completed. The growing of rice, cash crops like corn and other cereals was complicated. There were other activities the families had to contend with. They had to harvest coconut plants, grow vegetables and they also raised a small number of livestock in their backyards. These included chickens, hogs and taking care of buffaloes, their working animals. In general, the animals were raised as a form of insurance to sell when their family needed emergency cash. For example, for payment of tuition fees for their children at school or when someone in the family was ill and needed finances for hospitalisation.

Like the more affluent farmer co-operators, the three women, Farmers A, B and C were also engaged in small businesses. One of them, Farmer B, ran a small sari-sari store selling groceries for immediate use, mainly perishable household necessities like salt, sugar, milk, soft drinks, candy, spices, tablet medicines for headaches and such like, and school stationery supplies. Farmers A and C admitted they occasionally sold the fish caught by local fisherman. The women sold the fish to other locals within their barangay. On the town market day, the three women sometimes bought their neighbours' vegetables, bananas and other crops and sold them in town to earn extra income. Farmer C explained that she bought and sold local produce during the farming off-season when there was less work to perform. She insisted that her small business provided some supplementary income for her family in addition to the small salary received by her husband. Her husband did not have permanent work although sometimes he worked in construction or in the fishpond of their relatives.

Farmer C explained that her husband earned from seventy five to one hundred pesos or about two to three US dollars-per-day. She mentioned that one hundred pesos were just equivalent to the cost of food for her family for one day. She argued that by relying on the income earned by her husband their children could not afford to go to school. Therefore, she emphasised that it was necessary for her to find extra income. Like other women managing small businesses, Farmer C argued there was little opportunity for economic activities they could participate in to find money for the schooling of their children. She claimed that her husband's interest was to improve the farm income. Contrarily however, she claimed the income obtained from the farm was most likely to
be invested in the education of their children. The improvement in farming methods, like the purchase of new farm implements or increasing the amount of farming capital available was a lower priority than the education of their children. This account replicated the argument of Farmers A and B who emphasised the importance of their children’s education during interviews. The table below summarised the other distinguishing characteristics of the two groups of farmer co-operators in Linayasan.

Table 8. Other Distinguishing Characteristics of Farmer Co-operators.

<table>
<thead>
<tr>
<th>More Affluent Farmer Co-operator</th>
<th>Less Affluent Farmer Co-operators</th>
</tr>
</thead>
<tbody>
<tr>
<td>The cosmopolitan group of farmers</td>
<td>The localised group of farmers</td>
</tr>
<tr>
<td>More economic and social advantage</td>
<td>The least privileged farmers in the barangay</td>
</tr>
<tr>
<td>Have diversified sources of income</td>
<td>Have limited sources of income</td>
</tr>
<tr>
<td>Owned from two to five hectares of land</td>
<td>Occupied less than a hectare of land</td>
</tr>
<tr>
<td>Had a caretaker to manage their farm</td>
<td>They are the cultivators of their farms</td>
</tr>
<tr>
<td>Have trading and sari-sari store business</td>
<td>Wage earners such as labourers and fish vendors</td>
</tr>
<tr>
<td>Most children completed university studies</td>
<td>Their children studying in high school/university</td>
</tr>
<tr>
<td>Majority of them are barangay officials</td>
<td>Members of local organisations - not officials</td>
</tr>
<tr>
<td>Have more access to the external agencies</td>
<td>Have little access to resources from external agencies</td>
</tr>
<tr>
<td>Have access to services such as loans/credit</td>
<td>Have limited access to loans and credit</td>
</tr>
<tr>
<td>Locals with power – respected in barangay</td>
<td>They are locals with low profiles in barangay</td>
</tr>
</tbody>
</table>

Note: Information indicated on this table was based on the analysis from individual interviews of farmer co-operators and participant observations in the informal group discussion and meetings with Linayasan locals in 1998.

Like locals in Sibalew, the less affluent farmers in Linayasan considered education as a means of future economic security for the family. The four members of the less affluent farmer co-operators claimed their children's education provided them with an opportunity to improve the economic condition of their families. However, the more affluent farmers voiced different opinions during the interviews. This group of farmer co-operators considered the education of their children was an opportunity to increase their economic and social prestige. Education for this group provided the opportunity to access outside resources, particularly when their children could work abroad. In Linayasan, the two groups of farmer co-operators considered education crucial to the economic development of their families. However, the two groups perceived and defined education based entirely on the current economic condition of their families, and not future eventualities.

Table 7 above outlines the characteristics of the two groups of farmer co-operators. The table indicates and compares the social advantages and disadvantages of the groups. In general, comparing their characteristics would be a crucial aspect of the planning process
before introducing change. For example, such knowledge would be useful at the beginning of the establishment of income-generating projects. There were arguments from less affluent farmer co-operators over the complexity of the work that was required for their income-generating project. They were concerned that there were better economic activities outside farming. For example, construction work or trading often gave the farmer immediate cash, whereas farming took time. Immediate cash was often needed for the school allowances of their children. Other members of this group argued that they had not yet received any return on their investment in the income-generating projects but they still needed an income every day for their family’s needs. They acknowledged that spending time cultivating and cleaning the area for the project was necessary. But income was a more important and pressing issue for the families.

In the informal discussions with the more affluent farmer co-operators, different arguments were presented regarding the viability of their income-generating projects. This group of farmer co-operators claimed they were too busy with other activities and some of their relatives were hired to maintain the projects. The farmers provided all expenses such as costs of labour, fertiliser and chemicals. However, the affluent farmer co-operators strongly emphasised in the interviews that because of long droughts in 1995 and 1996, the growth of plants was severely affected and most plants failed to recover. In 1998, when the fieldwork was undertaken, some affluent farmer co-operators mentioned that they wanted to revive their projects. However, because of the previous problems encountered, they hesitated to reinvest in similar types of projects. One member of the more affluent farmer co-operators suggested that there were important aspects in Linayasan that needed to be developed in order to improve the income of locals. An improvement of the existing facilities such as the barangay public market and the installation of a seafood processing plant were examples cited during interviews.

17.11 Accounts from Farmer Co-operators in Linayasan

The opposing views of the two groups of farmer co-operators regarding the unsatisfactory condition of their income-generating projects raised several questions during the interviews. In general, the findings of interviews with instructors indicated that there was a tendency to focus assistance on a small group of local farmers. However, those showing an interest in the assistance available were disproportionally the already
advantaged: barangay officials and other more affluent farmers. The leadership styles of barangay officials and their power relations with locals were elicited as a strategy and would pre-empt economic and social changes as in Sibalew.

The analysis of the accounts by the instructors indicated that the income-generating projects were most likely intended for the more affluent farmers. Considering the requirements of such projects, such as the amount of land and the length of maturation time before any income was received from the project, usually from three to five years, most of the projects appeared to be inappropriate for disadvantaged farmers. In particular, the projects were problematic for the less affluent farmer co-operators.

Of the less affluent farmer co-operators, Farmer A suggested that the barangay captain instructed her to attend a meeting. At the meeting she was convinced to undertake an income-generating project by the Center's staff. In particular, she relished the opportunity of the skills training, technical assistance and planting materials provided free of charge by the Center to interested locals to establish orchard income-generating projects. In separate interviews, Farmers B and C explained that Farmer A advised them to attend the skill training. These two farmer co-operators claimed that because the training was held in the barangay and the Center provided free technical and planting materials they agreed to attend the training. Farmer D considered his attendance at the training was necessary to acquire good, free planting materials from the Center to plant in his backyard. During the training, he acknowledged that there were times that he failed to attend because of his work. Like other farmer co-operators after their training, Farmer D stressed that with the help of the instructor and SOAs his backyard was fully planted with rambutan, ladau and calamansi.

The more affluent farmers generally argued that having an income-generating orchard project on their land was important. In the interviews, Farmer One mentioned that he asked the Center for the privilege of having an orchard project because he had land available and he could afford to pay for the labour. He thought that because he had the capital and with the technical assistance from the Center he anticipated that he could develop an orchard project that other locals could replicate. Farmer Two, who was the incumbent barangay captain, had a similar intention. Farmer Two claimed that he also wanted to have a good variety of fruit trees from the Center to grow on his farm for
dissemination of planting materials to other farmers. However, Farmer Two mentioned that because he was the barangay captain, he felt ashamed to ask a direct favour of the Center. After the training was completed there were remaining seedlings and he was given some for his project.

In a similar manner, Farmer Two intimated that because of his project the Center also assigned a SOA to work on his project. Farmer Three argued that he received the seedlings from the Center late, after other farmer co-operators had already planted their projects. He stated that he got seedlings from the Center through the SOA assigned to his project. Farmer Three mentioned that the SOA was assigned to him by accident. That happened when he was on duty as a barangay official in the barangay hall when the Center’s staff was conducting a meeting with farmer co-operators to assign SOAs. The agent he was assigned had been unable to secure a position on a farm so he was assigned to Farmer Three. Farmer Four, like Farmer One, was interested and asked the Center for seedlings and a SOA to work with the caretaker of his project. Farmer Five presented a unique account of how he sought assistance from the Center. In the interview, Farmer Five explained that because of his age, seventy-eight-years old, it took him one month to convince the Center’s staff that he should get the seedlings and SOA. Farmer Five indicated that because he was not involved in other activities he did the most supervisory work with the SOA and the caretaker who established his orchard project.

The researcher of this case study was alerted by the arguments of Barangay Demonstration Laboratory Instructors and College staff interviewed to the issue of passive participation by farmer co-operators despite the technical and material support that was provided for their projects. The instructor who had been working on the College outreach projects since the early 1980s tendered his opinion regarding the issue. In the discussion, the instructor cited his previous experiences working with different groups of farmer co-operators in other barangays. He claimed that some of farmer co-operators were reluctant to work on their projects and others worked hard as the participants had in Sibalew.

The instructor argued that this happened particularly in the early stage of the establishment of the projects. He hinted that he had experienced the same problem in Sibalew. He said that the work of weeding, cultivating, pruning of contour lines and
watering of plants was left by the SOAs when they returned to the College to attend classes. He emphasised that the farmer co-operators should have continued to do the tasks left by SOAs while they were absent. However, those duties were left unattended and the SOAs resumed the work when they returned to the barangay. The instructor argued that the passive attitude of the farmer co-operators when they failed to continue the work caused delays in the maintenance of the plants. This affected the management of the projects. Although the SOAs did most of the manual labour for the project, the instructor contended that some farmer co-operators relied totally on the labour rendered by the students. For this reason, the instructor suggested that it was more appropriate to work with farmer co-operators who were strongly committed to the projects rather than those who were only willing to receive assistance. A similar issue emerged in the discussion with the instructor assigned to Linayasan.

In Linayasan some farmer co-operators shared their experiences on the income-generating projects during the interviews. Accounts on the experiences of those farmer co-operators would be useful to understand the passive attitude that existed, particularly in the early stages of projects. A member of the more affluent farmer co-operators, Farmer Three stated:

I notice that those projects in hillside areas used contour lines but they need too much work to maintain the hedges. The hedges on the contour lines need to be trimmed every three months. But the work does not provide any income to the farmer. In my project, I did not use contour lines because of my flat land unlike the other project. But watering the plants and weeding were the most laborious work. Grasses grow very fast, especially during the wet season. I could not graze the animals. The plants were too young.

About other farmer co-operators, I think they were not patient enough like me to wait from three to four years to get income. They wanted the extra income that such a farm could produce but could not wait. I did not agree that they were too lazy to work on their projects. But the people here in Linayasan have many sources of income. For example, they can earn money fishing, farming, buy and sell produce, and by driving the tricycles mahuhi kagid, hasta ti-ti-ting lang, you can live but you need to sacrifice. These activities, however, provide only a small income and are not an investment in the long-term. We chose to earn money instantly rather than wait for a longer-term investment. The choice was made because of necessity and not laziness.

Farmer Three further elaborated his experiences with the SOA who helped in his project. He says:

The labour for my income-generating project had cost me a considerable amount of money. I hired a labourer to clear the area. That labourer had five children and the
three older children worked on the project. His wife worked there as well but the two younger children could not participate in the work. I had provided them with breakfasts, snacks and lunches. Sometimes I provided them with dinners as well, and they went home after their work was finished as they lived close to my project.

The assistance I got from the SOA was not much help. Of course, the SOA came here only on Saturdays and Sundays. And sometimes they came Sunday morning and returned to the College in the afternoon. I understand my SOA was busy trying to study other work that was assigned for his course. Of course, I understand, because my younger brothers and sisters have also been in the school. That's what normally happens: students are always busy. In the first place, College is quite far from Linayasan and the SOAs spend their own money on travel.

In my project, the labourer prepared the land. The labourer together with his five children did that. My SOA follow-up our request for seedlings of rambutan and calamansi in the Center. The seedlings were free, but I bought some extra. I could not remember how many I had got from Center. I think my father said there was about thirty seedlings. Probably that was the number of seedlings we planted. During planting, of course, my SOA was here. I remember it that was Sunday. I'm unable to remember the month exactly. I think that it was June, the beginning of the rainy season. The SOA explained to me how to plant the seedlings and the labourer was also there. But a month after we planted the seedlings the local grasses grew very fast and covered the seedlings. The SOA and I had to work hard to underbrush the whole area of the project in one day. I hired labourers many times to clean the area and to water the plants. A year later, there was a long period of drought, about seven months and that killed many plants. There were only three calamansi plant still growing. Recently all these plants have died because this area has experienced another drought.

A representative of the less affluent farmer co-operators, Farmer A, also explained her experience in her income-generating project. Her project was located on the hillside and the area was less than one hectare. In the area, about ten calamansi plants were growing but there were many missing. On the ground there were marks of contour lines but there were no hedges growing. She stated that the condition of her project was the same as in 1994, during their training. That area had been fully planted and managed properly with the help of the SOAs and the instructor. She remembered:

At the beginning I was very excited to have the income-generating project because I had been in Sibalew during the training. It had just started and I could not say anything about potential problems involving the technology. The plants were growing and I was happy that I could get fruit from the plants in the future. The SOAs and Barangay Demonstration Laboratory Instructor left Linayasan, I encountered problems in maintaining the plants. I was disappointed with my rambutan. I was not able to get any income from that plant. The native grasses grew very fast and I could not afford the time and money to attend adequately to the weeding. My husband could not work on the farm because he has a job outside. The problem is the underbrushing of grasses. I hired labourers to do some. But I could not hire the labourer continuously because I did not have money to pay him.

It might better to plant the banana again [she smiled gently]. Yes, before the area was planted with banana, and it was easy to get income. I might return to plant that area with banana. It is not necessary to continuously cultivate the land, and is therefore not so laborious. The project of the Center was not so much help to us, although we did
get some income by selling fruit. But, it was just enough to cover the cost of labour for our hard work. After about two years I had harvested four hundred calamansi fruit. It helped during that time when the price of rice increased to 45 pesos per kilo. I did not have any problem selling the fruit. But the calamansi plants suffered from the El Niño weather pattern: it's terrible and disastrous for the plants. It's better to grow banana that are resistant to drought. After a year you can harvest banana. It does not need the amount of attention cinnamon and rambutan need.

Farmer B also provided an account of her experience. Her income-generating project was not big enough: about two thousand square meters. Around the area of her project there were old coconut trees, a few bananas and several old fruit trees such as jackfruit and guava. Close to her project there were a number of mahogany trees grown for lumber. In 1998, in her project, the researcher of this case study observed that there were two rambutan and three cinnamon plants growing amongst the vines and grasses. The rest of the plants were missing. In an informal interview while we were walking around her project, she noted:

I had attended the meeting, and when I was there, the director assigned two Students Outreach Agents to my project. The two SOAs assisted me to establish my project in this area. But the plants did not grow well, and I'm very concerned about it. When the SOAs left the project I was not able to maintain the plants properly. You see that there, [she was pointing to two rambutan and three citrus growing] that's the only plants that have survived. I did not get any income from them. My husband works in Kalibo. He is a carpenter and his salary is the main source of our living. He does not permanently work there, in Kalibo, because he also works in our rice field.

At the beginning of the project the plants grew very well. But the long drought killed many plants. Almost all plants here were affected, not only the rambutan, cinnamon and calamansi in our projects. Even the bamboo, you see that there? My children watered the plants, but we were not able to continue to water them owing to the drought. It is too laborious and time consuming and the source of water is quite far from the farm, about one kilometre away. We need water also for our household needs. We recycled the household water for the plants. But it was not enough. My husband had to work in town and the children were busy with their schooling. Ah... the land we occupied still belongs to my husband's father. We don't have legal documents as the owners of it. We haven't actual land title for it. I don't know when they are going to do that because we did not have the money to process the documents.

The accounts described above indicated the various opinions of farmer co-operators regarding their experiences in the projects. Their accounts illustrated some examples of the problems that existed within the families of farmer co-operators. The projects were juggled to fit in with various other activities. The accounts also illustrated the contradiction of the expectations of both parties in the projects. The Center expected that through provision of free technical and material assistance they could provide a source of
income for farmer co-operators. On the other hand, the farmer co-operators expected an immediate return from their income-generating project. The fruit trees took three to four years to mature. That could not directly help the pressing economic needs of the less affluent farmers. The issues were aired by the instructors and staff members interviewed who claimed that the ‘passive attitude’ of farmer co-operators was not unusual in development projects and also occurred when the demonstration farms were introduced in Sibalew.

In general, rural development studies have dealt with the issue of passive participation (Chambers, 1997; 1994a, 1994b, 1994c and 1983; Chambers et al., 1989; Fujisaka, 1993a, 1993b; Tilakaratna, 1991; Oakley and Marsden, 1984; Arnstein, 1969). Those authors examined various issues and problems in participation in development projects in different countries and regions.

In developing countries, Oakley and Marsden (1984: 5) argued that rural areas were perceived to be “lagging behind” the national development effort to improve the agricultural economy in order to support the industrialisation process of a particular country. With previous experiences in such process, Oakley and Marsden explained that the projects and programmes “...designed to smooth the path were formulated by urban administrators and planners and little attention was paid to the rural populations who were regarded as traditional, even primitive, and who, in a paternalistic way, needed to be educated out of their ignorance” (Oakley and Marsden, 1984: 5). Oakley and Marsden looked at the problems of the rural poor, and asserted:

...a philosophy holds the issue of participation as central and is primarily associated with the rural, not only because they are most disadvantaged within society, but also because the rural areas in comparison with the urban areas, which constitute the industrial base, have been relatively neglected by previous development strategies. This philosophy of a “people-based” development “from below” assumes that participation is not only an end in itself but also a fundamental pre-condition for and a tool of any successful development strategy. The failure of past development strategies is fundamentally linked to the absence of this missing ingredient – participation (Oakley and Marsden, 1984: 10).

Oakley and Marsden suggest that the failure of past development strategies could be used to identify missing elements necessary to improve local participation in the development process. Suggestions were consistent with various accounts of farmer co-operators described in this case study. Gleaning experiences of the more and less affluent farmer
co-operators would allow some insight into the interrelated problems in Linayasan. At the same time it is equally important to determine appropriate income-generating projects that are viable and help relieve the pressing economic needs of disadvantaged farming families.

In a case similar to the situation in Linayasan, Bernadas (1991: 10-13) studied upland farmer participation in a farming systems development project in the eastern part of the Philippines. In 1982, this project was initiated with the purpose of improving the living conditions of the resource-poor farmers in selected regions. Bernadas argued that there was a large amount of information and experience to share with others working in upland development endeavours. In particular, Bernadas stressed it was necessary to be aware of the mistakes made in previous development strategies. He suggested:

...development of the most appropriate technical solutions demands working in close collaboration with the farmers in the areas, not only to gain a clear understanding of the problem to be solved, but also to incorporate the knowledge that farmers possess so that "real" solutions can be found" (Bernadas, 1991: 10).

Bernadas further noted that in the projects where his case study had been conducted, many of the social, economic and technical issues that could help determine an appropriate solution were unknown. He argued that "farmers had been excluded from the whole of formulating the problem as well as developing solutions" (Bernadas, 1991: 11). In his study, Bernadas used open-ended interviews with guide topics based on the information elicited during informal discussions, dialogue and meetings with upland farmer-beneficiaries of the projects. As a result of the dialogue with the farmers, Bernadas stated:

...it was discovered that the most immediate and pressing problem facing the farmers was the long fallow period due to the growth of cogon (Imperata cylindrica) in the fallowed areas. Farmers usually had to wait several years before they could reopen the fallowed areas for cropping. This could only be done when the growth of tree, shrubs and some vine climbing plants shaded out the cogon. Also despite the long fallow periods the soils were not regaining their fertility. These problems of long fallow periods coupled with low soil fertility affected the livelihood of the farmers. They had limited areas of land to shift to or expand cultivation on. A technology that made it possible for the farmers to reopen the land after a short period of fallowing with increased soil fertility would allow farmers to meet their food supply needs. What was needed was a technology that would shorten the fallow period and at the same time increase soil fertility (Bernadas, 1991: 12).
The problem described above by Bernadas was similar to the issue raised by the farmer co-operators of Linayasan regarding the types of income-generating projects they were trying to establish. In particular, the less affluent farmer co-operators argued that maturation took three to four years before they could produce an income from the fruit trees in their income-generating projects. The long time to get income deterred farmer co-operators from implementing projects.

According to Tilakaratna (1991: 247-8) the “more deep-seated factors” that led to the people’s dependence on extension agents were the inhibiting social constraints that existed in the environment. The passive participation and attitudes of some farmers led to dependency on others, for example, extension agents, for the success of the projects. The ‘inhibiting social constraints’ that were referred to may be: social inequality, cultural practices such as reciprocity, denial of access to external resources, social positions within the local hierarchy and social control, learned helplessness and many other factors as well. Such constraints pervade society and the difficulties the poor had experienced in their unsuccessful efforts to become self-reliant adversely affected the outcome of many of the projects.

In Linayasan, a similar situation existed for disadvantaged families. Farmer co-operators tended to rely on the presence of the SOAs to help them maintain their projects, contradicting the concept of bringing self-reliance to the barangay. Tilakaratna suggested that the constant presence of the extension agents in the community would be necessary, not just to introduce the new technology but so the extension agents could help in other areas. Tilakaratna suggested they could help “to clear the berries for them, to play a protective role vis-à-vis vested interests, as well as improve the people’s ability to deal with and represent their interest at higher levels of social decision-making and power” (Tilakaratna, 1991: 248).

A considerable amount of literature on rural development studies illustrated the issues and problems, as well as approaches to improve the local people’s participation in rural development projects (Michener, 1998; Biggs and Smith, 1998; Cernea, 1991; Chambers, 1997; Fujisaka, 1993a and 1993b; Chambers et al., 1989). Most writers indicated that the passive participation of local people in rural development projects occurred because of their traditional practices. Oakley and Marsden (1984: 29-31)
contended that there were operational, cultural and structural problems that impeded the participation of the local people in the implementation of projects. The problems that existed in the three areas described by Oakley and Marsden needed to be understood through the rural poor’s perspectives, like accounts of the experiences of the less affluent farmer co-operators in Linayasan. The concept of the income-generating project conveyed promising results to the poor in the barangays. However, collaborations with farmer co-operators and locals to determine the appropriateness of the introduced technology would be useful. Such a strategy is necessary to find alternatives that complemented the existing local technology. Some projects were not suited to the prevailing economic or physical conditions pertaining in the barangay.

Röling (1994: 246) described the traditional approach in technology transfer that had focused on the ‘technology generation’ by scientists. Then, new technology discovered was passed on to local farmers via extension, or in packages for development projects such as the non-formal education programme. Through this approach, he argued that farmers had been considered ‘passive receivers of expertise’ from the outside. Based on such a preconception, Röling observed that the adoption of introduced technology could only be possible under three conditions:

...if technology transfer focuses on farmers who are helped through other sources (such as special projects) to acquire credit and inputs; if technology transfer focuses on rich farmers; or if the technology transferred is carefully targeted to the conditions of designated farmers, which requires collaboration between research and extension, and farmer influence on technology development (Röling, 1994: 246).

Röling further insisted that a crucial element in sustainable agriculture, such as the income-generating projects of farmer co-operators, was continuous observation and feedback from the physical environment. He emphasised that such activities would lead “to the development over time of a body of local data, knowledge and wisdom which grows and becomes more finely tuned and responsive with each passing season” (Röling, 1994: 247). To overcome broader environmental issues, as had been experienced by the farmer co-operators in Linayasan, Röling suggested that “the entire communities not just individual farmers, must become involved in monitoring the condition of natural resources” (Röling, 1994: 247).
Further, Röling suggested that facilitation would be the most important aspect for the sustainability of any agricultural project. However, he argued that the main and most enduring problem was that after the projects were introduced, “the farmers take charge of managing local agroecosystems in a manner consistent with the public good” (Röling, 1994: 248). He argued that the important aspect of an intervention like the income-generating project was to “to create a shared perspective on the problem and help developing [develop] decision-making capacity to deal with it” (Röling, 1994: 248). This could be achieved through a proper approach to facilitation. In Linayasan, the barangay officials played an important role in facilitating the establishment of income-generating projects in this barangay. The accounts regarding the key roles of barangay officials will be examined next.

17.12 Accounts of the Role of Barangay Officials

As illustrated in the Sibalew case study, the leadership styles of the barangay officials in Linayasan would determine, to some extent, the results of the income-generating projects assisted by the Center. However, because of the short length of time the assistance was available from the Center in Linayasan, when compared with Sibalew, the ability of the local officials to facilitate the development assistance was difficult to compare. The College had assisted Sibalew over fifteen years from 1983 to 1998. In Linayasan, the Center assisted the farmer co-operators for about two years from late 1993 to mid 1995. Within the fifteen-year period, the Sibalew officials attended a large number of training courses and seminars. This education empowered them so they were able to competently interact with outside social and political environments. The experience of Sibalew officials working with College staff provided them new perspectives.

In order to develop creative ideas through the College, Sibalew established linkages with the external agencies that provided funding for various development projects. In Sibalew, the locals acknowledged the significant contributions of their barangay officials in the improvement of their economic conditions. Other development agencies involved also recognised the facilitative role the Sibalew officials took in establishing linkages and in the integration of various external programmes in their barangay. This approach to development considered that the local officials would be the key people to promote livelihood projects in rural areas. There were a number of previous studies related to
rural development that described particular examples (see Rikken, 1993; Azucena, 1991; Lamug, 1989, Simpas et al., 1983; Sosmena, 1979; Simpas, 1979; Madigan, 1968).

Although the leadership styles of barangay officials were difficult to compare in the two case studies, there were elements that needed study. In the interviews, all barangay officials acknowledged three important requirements of the Center to assist the locals to establish income-generating projects. The first and foremost requirement was the willingness of locals to have the project. Second, was the availability of land to establish the projects, and the last requirement was that the location of the projects must be accessible for other farmers to visit. The barangay officials indicated during the interviews that they were familiar with those three criteria.

However, an analysis of the interviews revealed that there were cultural practices and human elements that could not be neglected and were crucial to the selection of farmer co-operators or beneficiaries of the project. Like Sibalew, in Linayasan the biased selection of project beneficiaries was an issue associated with the introduction of income-generating projects assisted by the Center. In fact, the majority of the farmer co-operators were barangay officials. A similar case happened when the College started the outreach project in Sibalew.

In the interviews, there were arguments from barangay officials who claimed that any farmers, close relatives or friends, and interested parties could apply to be the participants of a particular project. This had happened in the income-generating projects assisted by the Center and the animal dispersal programme of the Department of Agricultural and other similar projects offered by external agencies. But barangay officials explained that preferences and biases in the selection of locals to be recipients could not be avoided. They emphasised that kinship relationships were one of the cultural elements that affected the selection of the recipient of project.

For example, when the development agencies introduced their projects to the barangays, accounts related during group discussions with barangay officials revealed that they wanted their barangay to get access to the external funding being offered. It became apparent that the barangay officials had not thoroughly studied the objectives that were intended to be achieved by the agency concerned when implementing the project.
Disadvantaged locals were usually not the main consideration of barangay officials in the negotiation for projects. A particular reason for this was the argument by officials who claimed that locals who could be trusted and had resources such as land, labour and extra capital were more likely to be selected. The selected beneficiaries of the projects were at best a compromise regarding the objectives of the external funding agencies.

The issues regarding cultural bias such as reciprocity and kinship in the selection of project beneficiaries were part of a discussion with the barangay captain. Like other officials, the Linaysan barangay captain emphasised there were contradictions incurred through reciprocity and kinship and the legitimate duties of officials performed within the barangay. He explained that the contradiction between *utang na loob* or reciprocity and their duties was that those particular locals who had helped the officials during the election also expected particular attention for their own needs in return. He argued that being Filipino *utang na loob* of the elected officials was a crucial part of their functions that they exercised in the barangay.

However, the barangay captain argued that helping individuals, for example assisting his disadvantaged relatives to get projects from external agencies like the Center, would often be misinterpreted by those in opposition parties as a manifestation of bias and a subjective choice. In a similar manner, the barangay captain argued that when opposition parties held positions in the previous administration similar issues emerged. He explained that being the barangay chief executive or headman was challenging. He was obliged to maintain his commitment to the locals and try to improve his barangay. The barangay captain emphasised that he continually encountered pressures from various groups that he needed to attend to within the three-year period of his administration. The example described by the barangay officials included the expectations and demands of locals for assistance, particularly to get employment outside the barangay. There was also pressure from agencies to submit the reports required, such as the Department of Agriculture, and the Health and Municipal Government, as well as attending regular seminars. This was the case in the skills training conducted by the Center in Linaysan.

The barangay captain stressed that there were other issues as well such as opposition officials interrupting his administration. He acknowledged that, like other politicians, it was always necessary to contend with the pressures that surrounded his duties in the
barangay. He argued that maintaining *utang na loob* and connections with influential officials was necessary to get access to the external agencies that could provide projects needed by the locals. He claimed that relying on the limited allotment from the government was not enough to support the development of his barangay. For this reason, he argued that access to resources from other external agencies like non-governmental organisations was helpful in the development of Linayasan. A similar argument was emphasised by Sibalew officials during the interviews. Limited budget allocation from the government to local officials to administer the development of the barangay was the main issue raised by the local officials in these two case study barangays.

In Linayasan, the barangay captain explained that the established social network between his members, outside politicians and other government officials also provided access to other locals seeking employment outside their barangay. There were officials who mentioned that their connection with outside politicians was helpful when favours were sought, especially concerning employment. In particular, immediate consideration was given when the applicants were relatives and disadvantaged families closely affiliated to officials.

An example was the accounts from disadvantaged families who claimed that a reference letter from their barangay captain or other officials would help to facilitate their transactions in municipal or provincial government offices. This was especially the case when seeking free medicines and medical services, or local employment. Some locals argued that reference letters from the barangay captain would be necessary in the processing of their land title. Some locals argued that even to get bank loans and other assistance from the Government, getting married or working abroad, a clearance letter from the barangay captain was required. Consequently, the power held by the barangay captain would develop debts of gratitude by the vulnerable. In this manner the barangay officials exercised social control and an alliance system for the next election.

In interviews, politics and kinship were two factors that influenced the distribution of income-generating projects across the social structure in Linayasan. It was claimed that the majority of farmer co-operators were also barangays officials. The four other members were in-laws and close kin of most officials. Through patronage and kinship systems a mutual commitment was created that promoted synergetic working conditions
between farmer co-operators. Consequently, situations favourable to barangay officials strengthened their influence with Center staff. This cultural practice displaced other disadvantaged farming families interested in having projects.

The account from the opposition barangay official interviewed provided an example of this. This official explained that whoever the leader was, referring to the barangay captain, a similar system had operated: even before the information regarding the introduced project could spread to other locals in the barangay the recipients had already been selected in the minds of the barangay officials. He explained that first close relatives were asked if they were interested in the project. After that, the other locals were informed. In the interview, opposition officials emphasised that secrecy of information from other locals concerning imminent projects from external agencies was not unusual. It had been practised as one of the political strategies in administering the barangay for many years.

In an informal interview, Farmer Three described his experience when he was a barangay official in 1992 when the Center initiated income-generating projects in Linayasan. Farmer Three explained that after the three-year term of duty, he attempted to run again to continue his role as an official. However, he was not retained as a barangay official. He considered his experience as an official challenging and sometimes frustrating. An example he provided was when he repaired electrical appliances like stereos and televisions and other electrical goods. He had learned such skills when he was young and studied at the technical school. Because he was a barangay official and had made a commitment to help other locals, he offered his services free to repair their appliances, provided the owners would supply the spare parts necessary for the repair.

He emphasised that he was able to help quite a few locals through his special skills. However, he argued that there were instances when he provided money to buy spare parts. But the owners of the appliances had not repaid him the money. He explained that this had happened many times and he was frustrated. As well as mending electrical equipment for the locals, he mentioned that he also helped with administration and worked with other officials to develop development plans for their barangay. He also prepared various cultural and sporting activities, particularly during school holidays. Finally, he felt that his experience being a barangay official was complicated. He
explained that he had wanted to help disadvantaged locals. But he said that he did not know what sort of help would be best for them. He concluded that it might have been better to let the disadvantaged locals develop their own initiatives, rather than always ask officials or affluent families for assistance.

Farmer Five described an example of the influence of kinship in the introduction of a project. The account from this farmer indicated the relationship that linked him to the Center. The Center assisted Farmer Five to develop his parcel of land into a model orchard as one of the income-generating projects. His account illustrated how kinship was used to manipulate the role of the instructor in order to bring assistance to other disadvantaged farming families:

I learned about the project of the College, when the Center's officials and the instructor visited my house. I asked them what they were doing in our barangay, and they explained the hillside farming system to me. That was about the establishment of orchard projects on the sloping land and the use of contour lines to protect the soil from erosion. I asked them what the privileges were that they offered to the people who were interested in their projects. They explained to me that they could provide free seedlings and a SOA to assist in the establishment of the project. Then, I told them that I was interested, because of the free seedlings and the SOA help. I also had land to be developed. The instructor told me that I was not qualified because I was seventy-eight-years old, and he explained that the hillside farming system they had proposed required more physical labour. He suggested that I could not do this labour or be able to pay to have it done. But, I insisted that because they gave projects to the other farmers, they must provide the same for me because we are close relatives of the instructor. The instructor did not want me to be one of their farmer co-operators, but I kept asking him and I told him that I could hire a caretaker because I had the money to pay for it. But still the instructor resisted my request. I got angry about it when higher officials from the Center came here and discussed the issue. I explained to them my interest in their project and they were finally persuaded to let me participate. It took about one month to get the seedlings and a SOA. The student helped my caretaker establish the project. Maybe you have already visited the other farms here. I am proud to say that my orchard is better than orchards established earlier by other farmer co-operators. As you can see, I have removed the *gliricidia*, the plants of the contour lines, because they were too demanding to maintain.

Another example was an account from participants in the animals dispersal programme promoted by the Department of Agriculture. The members of this group discussed several issues. Their arguments were similar to those of the barangay officials. There were members of this group who explained that the animal dispersal programme of the Department of Agriculture was for interested locals willing to participate in and attend the training on hog raising. Some members argued that the animal dispersal programme was for anybody who was interested, who had resources to meet the requirements, and a
commitment to the project. The participants explained that, after training, they would receive a new breed of piglets to raise. The offspring produced were to be sold to the locals to improve pig production in Linayasan.

The problem was that the Department of Agriculture provided only a very limited number of piglets. Because so many were interested in acquiring the new breed of pig, the limited number offered by the Department of Agriculture meant that the distribution of them became a major issue. The participants acknowledged that the distribution of piglets was not an unusual problem: it was common problem for many other projects. The participants reiterated the criteria applied to the animal dispersal programme to overcome such a problem. As well as willingness, available resources and a firm commitment by the participant to run the projects, the first participants to receive piglets were determined by the assigned official from the Department of Agriculture, through consultation with barangay officials. Such a selection process, the participants acknowledged, was consistent with the functions of barangay officials. This methodology was also expected as part of the duties of the representative from the Department of Agriculture. However, participants argued that kinship and political party affiliations with barangay officials influenced the process of negotiation. Some participants argued those close relatives or friends affiliated to the political party of barangay officials were most likely to be given first priority. This is what had happened in the animal dispersal programme, according to the participants. In general, the participants considered kinship and politics were always associated with the distribution of new projects, not only in Linayasan but also in other barangays.

The account from the participants of the animals dispersal programme was similar to the bureaucratic procedures described by the instructor assigned in Linayasan. In 1993, the instructor explained that prior to the skills training when the farmer co-operators were assisted to establish their projects, there was a letter from the Center office sent to the barangay captain to open their extension programme. The instructor explained that the approval the barangay captain conferred was the legal basis for the Center to start their extension programme in Linayasan. In the event that the barangay captain had not approved the letter, or not accepted the projects, the instructor explained that the Center could transfer the projects to other barangays. But the instructor argued that it seldom happened that the barangay captain did not approve the project proposed by the Center.
The barangay captains knew that many other barangays were also interested in the projects.

This legal matter was discussed with the barangay captain during the interviews. The barangay captain acknowledged the importance of the official letter from the Center. He considered that the letter was part of the normal operating procedure of the administration of the barangay. He remembered that the letter was presented during their barangay council meeting to solicit comments and suggestions from other officials. In their meeting, the barangay captain maintained that the members of the council considered the skills training and projects offered by the Center a necessity if improvement of the livelihood of locals was to occur in their barangay. The barangay captain explained that because the council acknowledged the important role of the Center in helping their barangay there was a unanimous decision for the approval of the Center to begin their extension programme.

The barangay captain further explained that during their meeting he and other officials agreed that each of them would identify a representative to attend the skills training scheduled by the Center. He mentioned that information regarding the skills training proposed by the Center was announced though the officials, who informed their relatives, close friends and any other locals who were interested in attending the training. But because most locals were busy working on farms, running small businesses, working in the fishponds or engaged in sea fishing, there were few locals interested in attending the training. The barangay captain explained that some officials attended the training, including those four in-laws who were assisted by the Center to establish their projects.

In Linayasan, one issue raised by the locals interviewed was the slow response by barangay officials to take action over problems that existed in their barangay. One problem described during the interviews was that of stray animals damaging neighbour's plants. The instructor also described this common problem. The Center provided fencing materials for the protection of the projects. The instructor mentioned the that he also brought the problem to the attention of the barangay captain, so he could discuss it with other officials in their council meeting, but there was no reply or action from the barangay officials. The instructors considered that stray animals were associated with other more complex issues: - jealousy over the projects, negligence of livestock, limited
areas of land to raise animals and the economic pressure on disadvantaged families. It was suggested that some families made trouble specifically to gain attention and assistance in the barangay. If there were cases of animals straying reported in barangay captain's office, they were settled through social arrangements between the owner of the animals and the complainant.

The barangay captain in the interviews confirmed that he encountered problems with stray animals in their barangay. He argued that there was a general policy by the government to settle the issue. But the policy needed to be rewritten based on the issues that surrounded stray animals in the barangay. The barangay captain stressed that he wanted to have a local policy but he said that his members had little knowledge of how to develop such a policy. He argued that if the barangay developed their own policy it needed to be deliberated upon by the Municipal Government. It was also necessary to have a sponsor to present the policy in the session of the Sanguniang Bayan, the legislative body of the Municipal Government. It took time to process the policy so it would be legitimate to implement in the barangay. However, the barangay captain argued that although there were many policies introduced by the government in the barangays, such policies were not effective. Instead they created complex tasks for him in the barangay. For this reason, the barangay captain adhered to and was prepared to use social arrangements between the owner of the animals and the complainant to settle the problem. He tried, wherever possible, not to involve the judiciary due to the costs involved in court hearings.

Limited education was another problem associated with the ineffectiveness of local officials to undertake tasks. In Linayasan, most of the barangay officials had been involved in politics for more than five years. Other officials in the barangay retained their positions for three consecutive terms, each term being three years. Like officials in other barangays, Linayasan officials had limited academic backgrounds with which to prepare plans or to interpret the consequences of some policies the government implemented in their barangay. Interviews indicated that the majority of Linayasan officials studied at high school but the barangay secretary had completed a college degree. Apparently, this was so because most of those locals who were academically trained were employed outside the barangay. Other locals, professionals, migrated to urban areas to seek employment and established families. An account from the barangay secretary illustrated
the importance of an academic background for local officials in administering their barangay:

The majority of our members had a low level of education. Most of them have studied up to high school level only. They were elected because they are very good in public relations with local people, and that’s good because they are close to the people. But there were problems in working with them as the barangay secretary. I did all the paper work and they did not contribute much in this area. What can I do? I’m the only member of the officials that completed a university degree in commerce. I asked for help from other officials there in Municipal offices. They helped to make resolutions and budget reports for the barangay.

Information could not be relayed to our members, the officials, because they were preoccupied with other personal business. We also had a barangay session once a month. This meeting was organised to discuss issues and problems of local people [not specifically farming issues]. While the problems were identified, there was no mechanism to provide a solution to those problems. There was not any structural provision to address problems locally as discussion was disorganised and most problems were eventually, unattended. I think it’s a stupid idea, because I was the youngest amongst them and most barangay officials are in their 50s and have used their patronage to maintain power. The patronage influenced their participation during discussions. The local people criticised them for practicing the patronage system, because it provided advantage for such officials to do so. You know what I mean..., it’s difficult. The local people always want an easy way out. They always approach their closely related officials and ask favours. That’s an example that affects the efficient functioning of our official members in the barangay.

One longstanding problem here was that we don’t have our records about the barangay of a historical or economic nature necessary for the efficient running of the community. This work has been undertaken but the Municipal Government collected it and did not return our copy. That is why we cannot deal with administrative issues that are involved in the running of the community. There is no structure in place to deal with the paperwork. I have not been able to access any documentation on the barangay profile since accepting this position as secretary. I don’t have the records from the previous barangay secretary. All the records I have in my house have started only since I took over the responsibility of barangay secretary.

Another example was an account from Farmer One who ran as a candidate, and was elected, for the municipal council during the national election on May 11, 1998. His illustrated the importance of good public relations with local people as an instrument for winning elections:

What I’m doing here along the road, I talk to the people, share stories with them, and have fun with them. My ‘nick-name’ makes me popular. Wherever I meet people they call me by my nick-name..., they used to call me that, its a bad name but it makes me well-known in the town, wherever I go here in Altavas. Just mention my name, then, the people will tell you who I am. That’s the only capital I had. I only completed my elementary grade. I’m very good with the local people. Kong may genpa-utang may anihan kaman [means if you have planted something, you have something to harvest too]. That’s what I had been doing.
I gave money for their [idlers] snacks. There were cases that I gave them twenty pesos or sometimes fifty pesos depending how much money I had in my pocket. When I passed a group who were drinking, I also bought drinks for them. Then I would have a drink with them, talk to them, and then leave them another drink. That's what I was doing. In the first election I attempted, I spent fifty thousand pesos to go around all the barangays. I sold one home-lot [land] to fund my election campaign. The land was along the road.

I was happy to win a place at the recent election. This was the second time I have stood for municipal counsellor. But one thing that worried me was finding money for the tuition fees for my children in college. I have two college students doing their studies in Kalibo and two in high school this coming June when the classes begin again. My money was all spent during my campaign: that's the effect of elections on my family. Although I won in the election, it takes a considerable time to recover the money invested in canvassing.

About my project, that was failed because the worker I asked to manage the plants he did not manage them properly. I paid the worker but he was incompetent because he spent the time working on other farms. I don't have enough time look after the plants because I was busy with my campaign. During the time of the SOAs, my project was maintained very well by my caretaker. But after the SOAs terminated here in our barangays, several months after the project suffered a long drought. I felt a lack of interest for the project. I was busy and I couldn't do much work. I left to my caretaker the responsibility of maintaining the plants. I supplied the things needed on the farm but ultimately the drought killed our plants.

A barangay official who served nine years as a member of the barangay council shared her experiences. This official was also one of the Roman Catholic religious leaders:

We have sessions every month to discuss problems and our project in barangay. Each of us, barangay council member, has a duty in barangay hall. There are seven of us and everyday one of us is on duty. My own duty is every Tuesday. People who have problems or complaints arrived and I talked to them. I made a record about what they said and I gave some advice to them. If they are not happy with my advice I refer them to the barangay captain. That's what I was doing. I also did cleaning in our office and entertained visitors if there were any. I spent half a day there in the morning: in the afternoon I did some of my personal business selling fish in talawapa, that small fish stall along the road.

For almost nine years being a barangay official the locals knew me very well and there was no doubt about that. But the problems in politics are very complicated. There were issues again that I did not expect, but I did not mind the issues as long as what I had been doing was for the good of the people. About the barangay officials, the majority of our members belonged to one party. I think there were three officials belonged to the party of the opposition. Our problem here was that we had limited knowledge about how we could improve our barangay. I did my elementary grade only, and most of our members did not have a university degree. Only our barangay secretary has completed her study in university. She has done all the paper work and we gave our support to her only in the practical jobs. For example, we co-ordinated with the local people to attend the meetings and to prepare the barangay fiesta. We could facilitate these activities. But to do paper work..., hmmm...it's difficult to for me, I am too old [she is about 68 years old]. If I could not be available to work in the hall cleaning or attend to official business, I asked my son or somebody else to do the work on my behalf and I paid them for their service.
In sum, accounts from the three barangay officials illustrated the issues found in the administration of the barangay. Cultural problems involving kinship and expectations associated with the mutual advantage of both parties were often abused. The principles of reciprocity combined with the lack of any reasonable academic training of the barangay officials were a significant problem that affected the legitimate tasks officials performed. Consequently, there were difficulties encountered by Linayasan officials to overcome issues raised by some locals against them that involved personal and political interests. Personal and political issues were extremely difficult to exclude from the politics of livelihood projects and the barangay officials in Linayasan experienced this. Some officials from government offices in town also provided their accounts of the development project introduced to rural barangays, particularly Linayasan.

17.13 Views from the Representatives of the Municipal Government

Interviews with officials from municipal offices were also conducted to elicit their views regarding the project in Linayasan. Accounts from interviewed officials described the historical background of the linkages between the College and the Municipal Government of Altavas. The linkage was initiated when the College promoted the non-formal education programme by the FYDP in the Municipality of Altavas in the early 1980s. Like other government programmes, the College opened the non-formal education programme in Altavas through a *Memorandum of Agreement* with the Municipal Government.

The *Memorandum of Agreement* provided information on the responsibilities of the two authorities, the College and Municipal Government. For example it described the objectives to be achieved in the barangay, who would the control projects, who worked in the field, where the funding would come from and who would monitor and evaluate output. It also included requirements like who would be the beneficiaries of the projects and where the projects should be located. All of these were briefly described in the *Memorandum of Agreement* and signed by representatives of both parties, the College and the Municipal Government.

Interviews indicated that the main reason these two agencies formed linkages was to integrate their manpower and material resources in order to provide livelihood skills
training with the out-of-school youth and other disadvantaged locals in this municipality. In the 1980s, interviews indicated that the first skills training conducted were in dressmaking, electrical repairs, carpentry and food processing. Training was conducted in the town of Altavas, and also in local barangays. The FYDP also provided a limited amount of loan assistance to those trainees who were interested in establishing projects. The trainees in the town established shops: dressmaking, electrical repairs and welding. The College assisted shop owners through loan assistance from the FYDP. Linayasan was not included as a recipient barangay in the 1980s skills training programme sponsored by the FYDP.

In 1993, after the conversion of the College and the reorganisation of programmes, the Center-directed skills training focused on livelihood projects, particularly food production. In Altavas, Linayasan was one of the barangays identified as the area where hillside farming systems and orchard projects could be introduced. But it was not clear from interviewed officials who were the authorities involved or why Linayasan was selected as the model site to establish hillside farming systems and orchard projects.

The interviews with farmer co-operators also indicated that they were aware of the previous skills training programme conducted by the College. However, the farmer co-operators insisted in the interviews that they were not familiar with the agendas of the Municipal Government or the Center regarding their projects. There was argument from some less affluent farmer co-operators that the role of the Municipal Government was clear in their projects. This issue was discussed in the interview with the representative of the Municipal Government. In the interview, this official described her functions and views regarding the projects in Linayasan:

We were lucky that Aklan State College of Agricultural had established their demonstration projects in Linayasan. That was a big help to the Municipal Government. Our Municipal Mayor, since she was elected, represented the Municipal Government of Altavas. She has been the partner of College in rural development. I worked with the Department of Agriculture and we coordinated linkage with the College. I was the co-ordinator of the Municipal Government in that linkage. One of my tasks was to facilitate information between these two agencies and make a request for technical assistance from the College and they provided what we needed. For example, the livelihood skills training of out-of-school youths, farmers and the College assisted some farmers to establish their income-generating projects. The College helped with the technical assistance to our people here in Altavas.

I was also involved in planning and monitoring of the project in barangay. I had worked with College staff to develop the hillside farming systems in Linayasan. I was
there in the opening project and I had also attended various meetings with farmer co-
operators. But we gave more authority to the Center to implement their project
because I know that their instructors had been experienced and experts in that field. I
attended the meetings of farmer co-operators to get information about the project to
report back to the Municipal Government. My role was to facilitate information
regarding the development of projects between Municipal Government and the
College. Other than that, I monitored also other projects throughout the municipality
and assisted various agencies. Sometimes I attended also seminars and conferences to
talk about the accomplishment of Municipal Government in the rural barangays.

The account by the representative from the Municipal Government clearly emphasised
that her role was municipal project co-ordinator, not only in Linayasan but also
throughout the barangays within the municipality. In the interviews, the farmer co-
operators who were the barangay officials acknowledged the functions of the
representative from the Municipal Government. However, the less affluent farmer co-
operators considered that such functions would be more important for them if the
representative from the Municipal Government could provide additional support for their
projects. The less affluent farmer co-operators argued that the representative from the
Municipal Government's attendance in their meetings was necessary but providing
further financial assistance would be more helpful to continue their projects. It meant that
the less affluent farmer co-operators expected more help from the Municipal
Government, in the same manner as the Center had provided for them. This issue was
discussed with the representative from the Municipal Government:

At present we [The Municipal Government] don't have a new project in Linayasan,
only in Cabogao, the next barangay to Linayasan. Before, we had an animal dispersal
project in Linayasan and that is still going on there. We had quite a number of hogs
dispersed there. The majority of our recipients there were women of subsistence
families. Sometimes I went there to have a meeting with them to monitor their
project. But the meetings were irregular because of this election. I was busy following
up our project in Cabogao. Particularly during this election we were busy completing
the project. Our Mayor wants to complete our project before she turns over to next
administration. She is not qualified to run again in her position because she has been
already in three consecutive terms.

During her terms, we had introduced various types of rural development projects.
Like construction and maintenance of barangay roads and other utilities needed in
rural areas. In agriculture, we focus more on the livelihood of rural people like the
programme of the College. We did similar projects, conducting training for local
farmers and local officials to facilitate development in their barangays. But our
problem was the Municipal Government had limited resources. We could not provide
for all the needs of rural people in fourteen barangays of Altavas. We were lucky that
the College was helping us to assist the disadvantaged locals in our town. Although
the College has been involved helping those people, many of them needed further
assistance.
For example, the demonstration projects assisted by the Center in Linayasan. That’s about hillside farming system, the use of Sloping Agricultural Land Technology. We had a similar kind of project introduced in barangay Catmon. But that was not well implemented because of limited funding support to the farmers. In Linayasan, it seems to me that the farmer co-operators misunderstood the purpose of the Center to establish the demonstration farm on hillside farming system. The Center provided free technical and planting material including the fencing but the farmer co-operators needed more than that assistance. When I talked to the local farmers, they always demand finance for their project, needed cash income for families and asking further assistance from government. But what could I do because I am only an ordinary government employee and even our Mayor could not provide of all what the people demand from the government.

In the case of projects in Linayasan, the plants were not attended properly by the farmer co-operators after the Center left the projects to them. I did not know what the rural people wanted exactly. In my experience of working with rural people they seem to expect support. You give them seedlings to plant like the Center did, then after they were planted they had left the plants without proper maintenance. Locals take wherever they can get easily. Locals have limited ideas and wanted immediate income and were not patient enough to wait three to four years as happened in the Linayasan project. It’s good that you did your fieldwork there. You could observe the real nature of the people. Maybe you could also help us in our rural development projects. I have some documents about Linayasan in my office. Maybe that could help your research or if you want I could bring it home. You could collect it there.

In informal discussions with officials from the Department of Agriculture there were several issues discussed regarding their programmes. One particular issue raised in the discussion was the inadequate funding of projects that consequently achieved limited results. Associated with limited budgets was a lack of technical skill training of the staff of the Department of Agriculture so they could implement their projects successfully in rural barangays. As well, the slow response by the Municipal Development Council to take action when requested created more problems in rural barangays. Related to this issue, Yatar (1997) examined the status of the Municipal Development Council in Aklan province:

The MDCs [Municipal Development Council] did not employ [a] proper procedure of analysis of data to get accurate results. The MDCs did not come up with [a] valid interpretation of [the] data gathered in the Municipality. The MDCs did not formulate the Comprehensive Development Plan, very few formulated the Medium-term Development Plan and all the MDCs in the province of Aklan formulated the Annual Development Plan. [The] majority of the plans formulated were not very realistic. The MDC rendered technical and assistory functions adequately in problem identification but rendered inadequate technical and assistory functions in project implementation, monitoring/evaluation and coordinative efforts. The MDCs were not very effective in the promotion of access of the local people to basic services in the community. The MDCs were not very effective in initiating partnership[s] or [the] collaboration [of] undertaking[s] to strengthen [the] relationship between government and local people in development process. The MDCs were not very effective in ensuring that development programs would answer the real needs of the local people. The MDCs
were not very effective in promoting people empowerment in the community [sic](Yatar, 1997: 104-5).

Yatar (1997) criticised the ineffectiveness of the Municipal Development Council to address the needs of locals, particularly in rural barangays. The previous accounts illustrated deficiencies that existed in the municipalities. In Linayasan, the argument by less affluent farmer co-operators regarding their demand for further financial assistance from the representative from the Municipal Government was an example of the sorts of issues that the Municipal Development Council needed to focus their attention on. Such an issue was one amongst many associated with the development of rural barangays.

Overall, the accounts from the representatives of the Municipal Government and officials from the Department of Agriculture provided their views and opinions on the project in Linayasan. The views presented to the researcher suggested that the interim results of the demonstration projects, assisted by the Center, were functional but the learning process was continuing. It was a transition period for the Center and it was necessary for the staff to face the challenges they encountered in the introduction of projects to barangays. Center staff had the opportunity to gain new insights when dealing with the issues and problems contained in a complex local history, cultural practices, political intervention, and subsistence economy amid the dynamic nature of agricultural production and the extension process. In Linayasan, income-generating projects were for a limited period and were funded through a limited budget with limited results for the farmer co-operators involved. Analysis of the accounts from representatives of the Municipal Government and officials from the Department of Agriculture suggested there was also limited information available that was crucial for the efficient implementation of projects by the Center, Municipal Government and the Barangay Council. Information was necessary in order to work toward addressing the needs of disadvantaged families in Linayasan and other barangays.

17.14 The Change of Management of Projects in Linayasan

In 1995, the management of the projects in Linayasan changed. This occurred when the instructor and SOAs left the management of the projects to the farmer co-operators. Previously, the maintenance of the projects was administered by the instructors in collaboration with farmer co-operators. There was also the involvement of SOAs to
motivate and guide farmers. The instructors adhered to schedules and planned the maintenance of the projects. The projects were maintained through bayanihan, SOAs participated with farmer co-operators clearing, watering plants, cutting hedges and other related work. Those activities were scheduled and revolved in the seven projects assisted by the Center.

The management of the projects changed when the instructor and SOAs left Linayasan. With their departure there was a change of attitude in the two groups of farmers. They became reluctant to work on their projects. Most of them were preoccupied with other work that provided immediate income. They neglected the maintenance of the projects. Interviews revealed that the less affluent farmers lost interest because the projects had not produced any income. The more affluent claimed that they were too busy in other activities.

Although there was frustration for the two groups of farmer co-operators, the interviews revealed that they all continued to manage their projects to some degree. They spent little time working on their projects. When interviewed, the instructor indicated that the Center was notified of this problem. The instructor argued that because of the limited funding, the Center was not able to take immediate action to rectify the situation. The instructor also expressed his disappointment over the interim results of the projects. Other staff members interviewed emphasised their concern regarding the lack of proper maintenance of the projects. This issue was discussed with farmer co-operators. The more/less affluent farmer co-operators had different abilities and amounts of power to manage their projects. But there were similarities in the issues and problems both groups raised about the projects. There were also many aspects to be considered when the comparison of accounts from farmers was undertaken.

An analysis of the interviews revealed that the two groups of farmer co-operators managed their projects differently. In the case of the more affluent farmer co-operators, the projects were managed through caretakers, some of them hired labourers for the maintenance of the plants. The less affluent group relied on the labour rendered by family members. The two groups of farmer co-operators presented similar arguments over the management of projects. The problems involved laborious maintenance, hedges occupied too much space in the area of projects, the long maturation time required by
plants and the limited water supply exacerbated by long droughts. Finally, farmer co-operators complained about the complication of the activities necessary for the projects and the tasks that had to be performed for their families and their other duties in the barangay. How the two groups of farmer co-operators experienced those problems depended on what group they belonged to.

In the more affluent farmer co-operator group, Farmer One mentioned he hired a caretaker to look after his project. The caretaker was paid seventy-five pesos on a daily basis when he worked on the project. The salaries and privileges offered to the caretakers varied between individual members of the more affluent farmer group. Farmer One argued that his caretaker could also work on the farms of other farmers to get income. But Farmer One did not have a clear arrangement regarding the remuneration for the caretaker once the fruit trees began to produce income. He explained that the arrangement he had made with his caretaker was very flexible. The caretaker submitted a weekly report on the number of days that he worked on the project to get his wages. In case the project demanded more people to keep up the work, Farmer One said that he also hired labourers sometimes to help his caretaker. Farmer One no longer trusted his caretaker when he found out that the plants were not cared for properly. Farmer One said:

"Ah.., about my project, that was a failure. The caretaker who managed the plants did not work properly on the plants. I had paid him, but most of the time he worked on other farms. I did not mind if he worked on the others. Just as long as he maintained my project. But the problem was I did not have enough time to supervise his work. I was busy at that time with my campaign. During the time the SOAs were here, my project was well maintained. My caretaker worked with the SOAs. But when the SOAs were withdrawn, my caretaker also changed his attitude to the work on the farm. I had noted that my caretaker spent most of his time working on the other farms. His children maintained the plants, but they were too young to work in the project. I had paid the caretaker, but his son was doing the work. I also provided what they needed for the project. But the long period of drought destroyed our plants."

Related to the problem of Farmer One with his caretaker, was an account by an interviewed woman whose son was hired by Farmer Four to maintain his project. Like the project of Farmer One, this project also required more work to maintain the plants regularly. Farmer Four claimed that he also had to run his sari-sari store and because of this he did not have enough time to maintain his project. He explained that he hired the son of his relative to look after the plants. The arrangement was verbal and the agreement
was on a contract basis in case extra work was required. Several months later, Farmer Four explained that he argued with the caretaker. The interviewed woman whose son worked in this project clarified the issue. The women told of the experience of her son:

My son was hired by one of the farmer co-operators to maintain his demonstration farm. He liked it because he had a job. He maintained the demonstration farm that was near to our house. It was convenient for him to do his work anytime because we lived very near that demonstration farm. They had a verbal agreement that the farmer co-operator was willing to pay three hundred pesos to clear his orchard. When my son had almost finished his jobs, he went to the house of the farmer co-operator to be paid. He wanted an advance payment of his salary. But the farmer co-operator would not agree to pay the equal amount of money that they had agreed on previously. He only paid two hundred pesos to my son. My son was very angry. He took the money but did not continue his work there. He looked for another job and now he works helping in the baker's shop in town.

After the disagreement, the woman further explained that nobody continued to maintain the project. She argued that the owner of the project did not care about the income he could get from his project because he had a sari-sari store. She insisted that what had happened between his son and the farmer was not unusual and that there were worse problems within the barangay. One example was the account from Farmer Five who related the trouble he had encountered with the caretaker of his project:

Many people saw my project and they were interested because the plants were blooming. My caretaker maintained the plants very well. He was a very hard-working man. He used to have a drink every afternoon, but he is not a drunkard. I know that he only drank after he had done his work on my farm. The trouble between us came when he joined the group of men who were given to drinking. Somebody poisoned the mind of my caretaker against me. I do not know how they did it, but the story was spread about his work on my project. Late one afternoon when he was drunk the caretaker came to my house to assault me. I was quite lucky that I was inside the house. I locked the doors and windows, but he hit a window with his bolo. He was shouting bad words at me. I felt nervous on that occasion. That was in the late afternoon. Many people came here to help me. His friends took him and accompanied him to his house. My case against him failed at the office of the barangay captain. He paid for the damage to my house and he moved out from my farm.

This account was confirmed in an interview with the woman who was the neighbour of Farmer Five. The woman intimated that the experience of Farmer Five with his caretaker was shocking and disturbed the neighbours. She explained that the situation that led to the conflict, was not only the project but also a combination of many problems. She considered that what happened to Farmer Five was unusual and seldom happened in
Linayasan. She could not believe what had happened to Farmer Five, as he was a well-respected person in the barangay:

I know that the caretaker was a very hard-working man. He has many children, and the farmer co-operator wanted to help him with their schooling. From what I have heard, the family caretaker was offered a home lot by that farmer co-operator in his orchard. But, I don’t know if they had a written document about it. I’m not sure about it. The conflict between him and his caretaker, I guess, came from the jealousy of relatives. Many relatives of the farmer co-operator were also interested in being the caretaker of his orchard. You know! They saw that they could get money from the fruit trees of the ‘old man’. The caretaker that he had hired was not his relative. He had come from quite a remote barangay but he was a very hard-working person.

The three accounts from the more affluent farmer co-operators were examples of the sorts of social problems that occurred in the barangays. Those problems were unpredictable and the connection to the project in the barangay was vague. Interviews revealed that the problems between farmer co-operators and caretakers were caused through differences in levels of economic need and social status in the barangay social structure. The different economic and social positions of the two groups influenced the interest of farmer co-operators and their caretakers toward projects. There was conflict between the three more affluent farmer co-operators and their caretakers. The other two members of the group experienced only minor problems with the management of their projects but they had not employed regular caretakers.

The interviews revealed that the conflict that arose between the farmer co-operators and their caretakers was due to differences in interest and expectations. Each entity had expectations of what the project could offer them: additional income for the farmer co-operators and the opportunity of employment for the caretakers. An analysis of the interviews suggested that the attainment of long-term economic and social opportunities of the project was directly influenced and disrupted by local cultural practices. Consequently, the change in social relationships between the farmer co-operators and caretakers directly affected the maintenance of the projects.

On the other hand, the less affluent farmer co-operators had also experienced difficulties in the maintenance of their projects. In the interviews, all members of this group argued that immediate income was crucial for the subsistence of their families. Farmer A claimed that when the instructor and student left the project, she and her children maintained the plants in the projects. Like other farmer co-operators, she explained that
she was also becoming reluctant to continue to maintain the project because the plants did not provide an income for her family. She considered that weeding, cultivating, and watering plants was additional work that had to be done over and above her household tasks and her involvement in social activities in the barangay. She mentioned that because of limited land, sometimes her children grazed their buffalo in the project and damaged some plants. Some plants were not able to recover. She claimed that a similar problem was experienced by other members of her group:

I did not have enough time to maintain my demonstration farm. My husband has other work and he did not have not enough time either. He had work there in the provincial capitol. I had five children, but all of them were doing their studies. Three were studying at high school and two were enrolled at university. It costs me a considerable amount of money for their tuition fees. All the salary of my husband almost went on education expenses. And that’s why I needed to find money. But, most of the time I stayed at home. I did housework: washing our clothes, fetching water, cooking, cleaning the house. [Abo gid-ab ang trabaho] I had attended to much work. I also raised pigs, chickens, and looked after three cattle. You know! If I had sold the animals it may have helped us. My husband’s salary was only good to buy food. His salary is very limited.

Similar arguments were described by Farmers B and C who explained that their families were unable to spend more time working on their farms because they needed money constantly. When the students left the barangay, Farmer B mentioned that he did not have time to mange his farm because of his work on the rice field, fishpond or the repair of his relative’s houses. She said that she looked after their farm because her husband suffered from arthritis and could not work on the farms. Farmer B mentioned the difficulties she encountered in maintaining her demonstration farm:

The problem was the lack of water during summer for the plants. It took a thirty-minute walk to get a gallon of water from the artesian well. I applied a mulching of rice hay to cover the plants but the drought was too long. It lasted about seven months. So how could plants survive that period without water? I couldn’t do anything about it, except to wait for the rain and replant them. But I had no money to buy the seedlings. So I left the area for grazing.

While Farmer D was reluctant to comment about his project during the interview, the instructor who supervised the project provided his views on his observations three months after he returned to Linayasan to visit the farmer co-operators. He considered that the plants had been poorly managed. Many plants were missing and animals had damaged others. The instructor said that he talked to the farmer co-operators but found the answers to his questions were evasive. When he returned to Linayasan, the instructor
stated that the condition of the projects was very different from when they assisted the farmer co-operators.

I was very disappointed when I saw the demonstration farms. The grass was growing tall on farms. Many plants were missing and some demonstration farms were being grazed with animals. Even though I had not seen them there, I knew the land was grazed because I saw the footprints of buffalo on the ground and there were signs on the plants of being grazed. The fences we constructed had deteriorated and the Kakawate we planted on the contour lines had not been maintained properly. The farmer co-operators told me about their problems. There was a shortage of water during the summer. Other farmers had mentioned that they had found it hard to maintain the plants because of work commitments outside the farm. They asked me when I would return to work with them again. I replied that I had been laid off because the budget for the project was finished. I was not reinstated. I had no permanent work then. However, the position, for a short time, helped meet my needs.

Interviewed barangay officials not engaged in the projects had similar concerns over the lack of management of the projects. This was after the Center had withdrawn their management of the projects. Many other local people held similar views. One official commented:

I was not one of the farmer co-operators. I was not interested in it because I did not have available land. Maybe if I had vacant land I may also have been one of the farmer co-operators. Many farmers here were interested. It was because of free seedlings and the technical assistance from the Center. I cannot comment about the other demonstration farms, but I had a good idea of what was happening on one demonstration farm near my house. First, the instructor left the farm very early after its establishment. The farmer co-operator did not get an income yet. The plants did not bear fruit. Second, there were projects maintained by the caretaker and not the farmer co-operator. I did not know the exact story but not all farmer co-operators depended on the bayanihan. The instructors and students maintained the farms rather than the farm owners. Of course, when the staff were withdrawn by the Center, the farmer co-operators were paralysed. They had no more free manpower to maintain their demonstration farm. That's why the farms failed here in our barangay. The Center extended assistance here. But the farmer co-operator took for granted that the Center would continue to assist them.

The representative of the Department of Agriculture also presented her comments about management of the projects after the Center left. She explained that the discontinuation of the supervision by instructors in Linayasan was not the end of the extension programme of the Center in this barangay. But it was a new beginning for farmer co-operators to think about their experiences in their projects. It also provided the Center the opportunity to learn, and to identify suitable projects for Linayasan locals.
In Linayasan, for nearly two years from the end of 1993 to mid 1995, the Center introduced the non-formal education programme and assisted graduates to establish income-generating projects in this barangay. This was through the provision of skills training, technical and material assistance. The projects were implemented for a limited number of interested trainees. The hillside farming systems and backyard orchards were the projects introduced. In the project proposal reviewed, the original time scheduled was one year, from July 1993 to July 1994. In 1996, the Center experienced financial constraint. The budget went from 1.819 million pesos in 1995, to 819 thousand pesos in 1996. Consequently, the entire operation of the Center extension programme was affected. The Center's budget for the salaries of instructors and the wages of labourers decreased. Some of the existing assisted projects that were in the barangays were stopped, including Linayasan. Other projects nearer the Center, like Sibalew and Feliciano, were maintained. There were instructors who had been assigned by the Center for the supervision of projects, and who monitored the condition of projects and provided assistance to the farmer co-operators in those barangays.

In Linayasan, interviews revealed complex issues in the establishment of the projects in this barangay. The issues raised by the various actors interviewed were interrelated to the existing cultural, social, economic, political and technical problems in the barangay. The most common issue in the barangay was the limited period of assistance the Center provided. The income-generating projects were left to the farmer co-operators but were not yet producing income. There was the issue of the biased distribution of assistance across the barangay social structure. There were also problems over the requirements of the projects, such as available land. It was necessary for those involved to have other sources of income so they could survive three to four years until the fruit trees produced an income. There was argument that the income-generating projects were not appropriate for disadvantaged families. Most of those families only had a small parcel of land in the barangay.

The majority of disadvantaged families struggled to find money to live on, and they suffered from being unable to access resources from external agencies provided in the barangay. Those families did not have alternative and regular sources of income and
could not wait for three to five years. The lack of water was a major limiting factor. The
detrimental effects of long droughts meant that most of the fruit trees planted in the
projects failed to recover. Finally, there were suggestions from farmer co-operators that
limited funding was a major constraint for the Center to continue providing the assistance
necessary for the sustainability of their income-generating projects.

In 1998, when the fieldwork was undertaken in Linayasan, the condition of income-
generating projects was far from ideal and the locals' hopes and aspirations had not been
realised. The income-generating projects had not become sustainable at that time the
fieldwork was undertaken. Farmer co-operators, interviewed about their projects, were
crucial to any evaluation by the Center of the projects. In particular, it was an opportunity
for the Center to find new ideas that could be helpful in case further assistance was to be
provided for this or any other barangay. Accounts from farmer co-operators were
important for the new direction of the Center's extension programme. Participation by
locals could help to formulate realistic strategies to provide sustainable sources of
income for disadvantaged rural families. For example, locals could provide some
contributions on the type of skills training and technology to be introduced for their
barangay. Locals could also help develop appropriate criteria that allowed disadvantaged
families to participate, particularly to establish projects using local knowledge as means
of researching appropriate sources of income.

However, the previous experience of the researcher of this case study showed that local
knowledge was often ignored in development projects, especially when funding was
limited leaving only a short period of time for implementation. Consequently, after the
termination of funding, the projects were left to the discretion of the farmers but they
were not competent or trained to manage their projects properly. As a result, the
sustainability of the projects after the termination of funding became a major issue. The
lack of sustainability of the projects often caused through limited funding had been a
criticism of the conventional extension programmes in rural barangays. One important
reason for this was because the previous conventional research extension programme
paid little attention to local knowledge and traditional food crops produced by the locals
that were a potential source of income in rural barangays.
Blackburn and Flanerty (1994: 5-6) argued that before and after the independence of many developing countries such as the Philippines, particular types of extension services were sponsored by the colonial government. Blackburn and Flanerty maintained that even after independence, the extension services retained many of the characteristics of the colonial period. Even in the 1980s the focus of extension remained biased toward export crops grown mainly in plantations: sugar, banana, coconut, rubber, ground nuts and others. Amon (cited in Blackburn and Flanerty, 1994: 5-6) reported the problems of extension services in the late 1980s in developing countries. Amon contended that the major problem facing extension programmes in most Third World countries was a lack of appropriate research results. The deficient linkages between research and extension compounded this problem (Amon, 1989: 688). Further, Adams, (cited in Amon, 1989: 684) explained that the extension field workers often found themselves spending most of their time dealing with administrative and regulatory tasks required by the increasing bureaucratisation of government services. Such issues were also existed in the Philippines even in the 1990s.

In Aklan province, the previous experience of the researcher in Sibalew and other barangays showed that many farmers were assisted by the College to improve their locally grown crops and livestock in order to increase their farm income. Skills training in asexual plant propagation and animal dispersal programmes introduced in Sibalew were examples. But in other barangays many of those projects were disappearing because they had not produced a sustainable income after the College left the projects to farmer co-operators. In Linayasan, farmer co-operators during interviews revealed similar problems. The findings from interviews suggested that farmer co-operators were unwilling to make a commitment to run their income-generating projects even if they were fully planted with fruit trees. The farmer co-operators emphasised that the Center should provide continued supervision of their projects, at least until the orchards produced income. Continued supervision was necessary to motivate farmer co-operators to pay attention to their projects.

However, the budget of the Center for salaries, allowances and other related expenses involved in the continuation of supervision of farmers was a major problem in the projects in Linayasan. The Center acknowledged that additional funding was necessary to continue supervision and evaluation to motivate farmer co-operators to manage their
income-generating projects. That was what had happened in Sibalew. A review of the project proposal that was used by the Center as an instrument to access external funds to promote various types of income-generating projects was based on optimistic ideals. There were many problems: poverty, unemployment, underemployment, juvenile delinquency amongst out-school-youth and low productivity and low income. In rural barangays the provision of skills training, technical and material assistance were provided free to interested trainees who would adopt the technology in Linayasan to address those problems.

The one-year funding indicated in the project proposal to train and assist the selected group, the farmer co-operators, was unrealistic. It was difficult to deliver assistance in a manner likely to resolve poverty, unemployment and juvenile delinquency in the barangays. It was even more difficult to improve hillside-farming systems in Linayasan within a one-year period through the extension programme in this barangay. A review of the project proposal provided some understanding of how the Center accessed resources from external agencies or individuals to help finance the implementation of the non-formal education programme in rural barangays. While the project proposal was important, understanding issues and problems associated with poverty, unemployment, juvenile delinquency, low productivity and limited income was crucial for extension programme planners. It was important to understand these problems from the locals' perspective. Planners should have been aware of their existing technology, sources of income and other social, cultural, political and technical aspects. Reducing local poverty, unemployment, juvenile delinquency and low farm productivity was not an easy task. It was one thing to draft a project proposal. It was another matter entirely to make it work. The literature indicated that those problems existed and various attempts were made to rectify them. A well known example was the Green Revolution but it did not resolve poverty: Rather it widened the social inequality between rich and poor.

In a rural society like Linayasan, to improve the hillside farming systems was not an easy task. Interviews revealed that social, economic, political and technical issues were inherent in local cultural practices that required a long period of time to change in the barangay. The Sibalew case study indicated that with the assistance of the College the farmers in this barangay took almost fifteen years to improve their local agricultural industry. Consistent with the changed agricultural production in Sibalew was the
argument by Cornwall et al. (1994: 112-13) who stressed that "change takes place over time, and it takes time." Crop varieties were often intimately entwined with those who cultivated them:

'New' crops can be woven into 'old' systems of practice, or stand alone as products of modernity with only a market value. Cropping patterns, land preparation techniques, ownership and innovation are always located within a complex of historical processes. Without understanding these dynamic processes, agricultural research and extension may obstruct, rather than facilitate, positive change. There is no such thing as a timeless, perfect variety or technique that stands outside wider processes of change. ... the most interesting challenges for research and extension lie in understanding how people bridge different ways of knowing, adapt extension recommendations and tips from contacts from outside the 'local' area and integrate the 'new' into 'traditional' practices (Cornwall et al., 1994: 113).

Cornwall et al. (1994) further suggested that "understanding the dynamic nature of agricultural processes requires an appreciation of local histories." Cross and Barker suggested:

... accounts of history as told by local people are retold and reshaped to reflect current concerns and contingencies. They present personal reactions to and experiences of events, and are therefore necessary to understand local perceptions of innovations and interventions (cited in Cornwall et al., 1994: 113).

Furthermore, Cornwall et al. suggested that the participatory approach could be one of the methods "to draw on oral history to explain the past, to make sense of the present and to plan for the future" Cornwall et al. (1994: 113). Cornwall and her colleagues and other proponents of a participatory approach warned that the users of such approaches needed to move away from a "quick-fix solution, a fallacy which remains largely unchallenged" Cornwall et al. (1994: 113). Cornwall and her colleagues stated:

Whilst dwindling financial resources make ever-increasing demands for short-term solutions to problems, experience has repeatedly shown that these interventions are either ineffective, unsustainable or counterproductive. Cost-cutting does not equal cost-effectiveness, no matter how desirable this might be. Making long-term commitments is crucial, yet depends on the willingness and capacity of those within agricultural institutions to make the appropriate decisions (Cornwall et al., 1994: 113).

Although the income-generating projects were unsustainable in 1998, accounts from farmer co-operators and other actors involved could have been crucial to the Center and the Barangay Council who administered and implemented them. In this case study the issues and problems described by the two groups of farmer co-operators was considered
by the researcher as crucial information for assessing the outcome of two years intensive assistance by the Center in Linayasan. Although the period was too short, at least when compared with Sibalew, historical accounts from farmer co-operators and other actors suggested that there were some complex issues raised in the interviews in Linayasan that were not found in Sibalew.

For example, it was apparent from the interview with farmer co-operators that the ‘top-down’ approach was the dominant method applied by the Center to assist them establish income-generating projects. However, when this argument was brought up in discussions with the higher level management at the Center, it was claimed the ‘top-down’ approach no longer existed. There were arguments that the methods applied to conduct skills training and assist trainees to establish income-generating projects were participatory and based on a ‘bottom-up’ approach. Related to this, Blackburn and Flanerty (1994: 10) suggested that extension should be responsive to forces of change. For example, these forces included financial pressures, changing values, attitudes and priorities and the influences of linkages with other sectors and the evolution of technology and information. Blackburn and Flanerty concluded:

Extension’s changing trends and direction are a response to – and heralding of – wider forces for change within society. These changes are broad, far reaching, sometimes contradictory. Consequently, Extension has evolved with a much broader focus, and a stronger emphasis on reconciling the diverse needs of its clientele and the society in which they live (Blackburn and Flanerty, 1994: 10).

The initiatives by the Center to adopt a new direction for their extension programme was predicted by the argument of Cornwall et al. (1994: 112) who claimed that the major weaknesses of agricultural research and extension practices were that they were based on conventional methods. Cornwall et al. argued that conventional methods of research and extension oriented toward “technical and economic problem-solving... often reduces situations and masks the complexities of rural life” (Cornwall et al., 1994: 112). This criticism needs more analysis by the Center if it intends shifting extension programmes into client-driven, participatory strategies. Changes take time, and the interim results of the projects introduced in Linayasan were examples. The literature suggested that the participatory method includes understanding controversies and interactions within the context of an extension programme (see Scoones and Thompson, 1994; Blackburn and Holland, 1998; Holland and Blackburn 1998; Ife, 1999 and also see Blackburn 1994;
Crouch and Chamala, 1981a and 1981b). The process involves a relatively long period and must accommodate changes in social conditions brought about by outside forces like technological advancement, as had happened in Sibalew.

A review of previous project documents showed that the Center was created after the conversion of the College in 1992. It meant that the Center was in a transition period when their extension programme was opened in Linayasan in 1993. The Center was in the early stages of adjusting the direction of its extension programme to be more responsive to disadvantaged families in rural barangays. In creating new directions for agricultural and extension programme, Cornwall et al. (1994: 112) suggested that the participation involved should be more than just consultation with rural people. Active participation and dialogue with the rural people, allows them to become actors, rather than instruments in the development process. Cornwall et al. emphasised that this required changing the roles of extension workers and researchers, as well as those officials involved. Cornwall et al. argued:

If agriculture is to be treated as the social process it is, then several key aspects of context will need to be considered. Agricultural development needs to be set in time, as a longer-term process rather than a series of defined projects, and needs to consider people's historical experiences. Diversity within rural communities and among external agents needs to be addressed, by recognizing that different actors hold different versions of knowledge. Issues of power, control and conflict will need to be considered. Changing conventional approaches also involves challenging the nature of interaction between rural people, and researchers or extension workers. The importance of training to recognise the political and personal dimensions of agricultural development will also need to be addressed (Cornwall et al., 1994: 112).

Cornwall et al. also suggested “agricultural interventions need to address issues of location within the community, between disciplines and sectors and between organisational levels” (Cornwall et al., 1994: 113). They argued “intervention takes place within the multi-level linkages of institutions and organisations of agricultural development” (Cornwall et al., 1994: 122). In other words, complex interactions within organisations should to be considered to appreciate such influences on agricultural change. For example, the politics and the implications of political processes within the institution at different levels affect the methodology and process of the change. The influences of such interactions in the process of agricultural change, or in the extension programme, need to be viewed in the wider context. Cornwall and her colleagues considered:
The different people who comprise the 'local community,' and who are urged to control their own research and solutions, have relative positions of power. Each position offers differential access to the support of others and to resources. As different interest groups or individuals are consulted, so competing, contested and changing versions of 'community needs' emerge. Their different versions stem from different agendas and means for enacting some solutions or blocking others (Cornwall et al., 1994: 114).

The argument of Cornwall and colleagues was used to examine the accounts of the two groups of farmer co-operators in Linayasan. In general, the more/less affluent farmer co-operators had different attributes and power within the barangay. In interviews, these groups presented different accounts regarding their problems in managing their projects after the Center disengaged in 1995.

In general, the final comment from various actors suggested that the local social, cultural and political practices that existed in the social structure were an integral part of development and were crucial in bringing about the success of projects assisted by the Center in Linayasan. The existing local knowledge and other sources of income within the barangay needed to be considered and were important to the success of projects like the hillside farming system and orchards that required a long period to produce income. Overall, a means to get an income in a short period of time would have been more appropriate for disadvantaged families in Linayasan. Some problems were described in the previous sections of this chapter. The main areas and problems discussed within this chapter are summarised in the next section.

17.16 Summary

The results of the fieldwork of the case study that examined the agroforestry projects assisted by the Center in Linayasan were discussed in this chapter. The discussion focused on the response of locals regarding the technology introduced through the demonstration farms to encourage innovation in the existing agroforestry practices of Linayasan locals. The purpose of examination was not to applaud, or to denounce the results of the projects, but to identify issues and problems and to articulate the complex relationships associated with the establishment of demonstration agroforestry projects in Linayasan.
There were many controversies associated with the establishment of agroforestry projects in Linayasan. Some controversies already existed in Linayasan and others emerged during the establishment and at various stages of the projects. The discussion in this chapter was drawn from the accounts of the various actors involved, annual reports were reviewed and other reports related to the projects were included. The topics discussed in this chapter were outlined in fourteen sections. This chapter started with a discussion on the reorganisation of the extension programmes when the College in 1992 became a member of the State Colleges.

The conversion changed the organisational and social structure of the College. The department of ERDSC was created and this department directly administered the College's extension programme and supervised the ongoing outreach activities and the assisted projects in the barangays. The Center developed new systems and strategies to implement non-formal education as an integral part of the extension programme based on their mission statement. The mission statement focused on assisting disadvantaged families in rural barangays. Sibalew was used as a 'model barangay' for technology transfer so locals from other barangays could improve their traditional farming methods and existing agroforestry practices. This was particularly to reduce poverty, unemployment, underemployment and juvenile delinquency amongst out-school-youth. Furthermore, there was an effort to address the low productivity and poor income-earning capacity in rural barangays. These assumptions were somewhat optimistic it has been suggested. The agricultural development and economic improvement that occurred in Sibalew was expected to be replicated in other barangays, thereby providing similar assistance to the locals.

The findings from the Sibalew case study showed that increased agricultural production and economic improvement had occurred over a long period of time. The acceptance by Sibalew locals of the changes varied, depending on the types of livelihoods introduced, available resources and the extent, consistency and control of the market demand for local produce. The success of the scheme was also very dependent on the locals' acceptance of the introduced agricultural technology. However, the long-term success of the scheme also depended on how much the change impacted on the individual local's life in the rural barangay. Replication of the development that occurred in Sibalew was not a simple task. It is a relatively different activity to initiate a project proposal than to
secure funding, provide skills training and loan assistance, as well as help farmers to establish their own income-generating projects. A broader understanding is required that acknowledges that development activities are inundated with controversy because recipients and providers both have high expectations. Contradictory and/or inconsistent bureaucratic procedures and political interference that leads to changed directives in the new extension programmes are experienced as a matter of course.

In the new system of extension programmes, for example, the leadership styles in the administration of extension programmes changed because the programmes were significantly different from those in the old system. New policies were initiated to assist the locals established income-generating projects. The general concept was to assist locals who belonged to disadvantaged families by introducing demonstration projects in Linayasan and Sibalew as well as in other barangays. The previous extension programme of the College was limited by budget constraints. The funding to finance the outreach activities in a particular barangay depended on the external linkage agencies' ability to provide adequate funding. In recent extension programmes, an increased allotment from national government and funds from other external agencies were provided to the Center to finance the operation of extension programmes. A package of skills training and technical and material assistance was provided free to locals. Limited loan assistance was also provided for interested locals to establish income-generating projects. This package of assistance from the Center was not intended only in Linayasan but also to assist the locals in other barangays.

In Linayasan, the selection criteria for the recipients of income-generating projects were examined from the accounts of locals and actors involved in the projects. Nine Linayasan farmers were identified. They had attempted to establish their income-generating projects on their own land. The farmers belonged to the more and less affluent families. They became farmer co-operators and were assisted by the Center to establish their projects. The majority of the farmer co-operators were, or had been, barangay officials. The majority of the farmer co-operators belonged to more affluent families. Their selection was based on, and a result of social, economic and political variables that undermined the different interests involved in the decision-making process. This chapter discussed the biased distribution of the projects across the local social structure of Linayasan. There
were technical problems in the selection criteria that prevented the majority of disadvantaged families from having access to assistance.

For example, the land area required to establish the projects was greater than most disadvantaged families had access to. Many disadvantaged farmers were unable to attend training or regular meetings because of the necessity to provide immediate income for their families. The maturation time of fruit trees and extra costs incurred by those farmers interested in the projects was a major deterrent. Then there was the necessity for further maintenance of the projects that involved time and, subsequently, a potential loss of money from other forms of income. The requirements were inconsistent in that they excluded the very people they intended to help. In fact, the criteria led to the persistence of economic problems, the continuation of social and economic deprivation. These were the problems the Center wanted to address. The Center was concerned for the needs and aspirations of the disadvantaged Linayasan farming families.

Accounts from the two groups of farmers were discussed regarding problems encountered in the projects. The more and the less affluent farmer co-operators had different powers of access and control, and were also engaged in different livelihood activities. It was interesting that all farmer co-operator comments regarding the assistance provided by the Center and the Outreach Agents raised similar concerns. Accounts from locals acknowledged the crucial role of SOAs in the development of agricultural technology in the barangay. However, there were cultural issues and problems in the standard patterns prescribed in the outreach reports that failed to describe the real experiences of students fielded in the barangay. The outreach reports produced by the SOAs were valued less than the thesis conducted by other College students. With the conversion of the College, the thesis and experimental studies were preferred as they more easily fitted the standardisation of the academic programmes in the College. The outreach reports were not utilised to evaluate the effectiveness of the extension programmes in the barangay. In general, limited periods of assistance, lack of water, damage caused by stray animals and the maturation of fruit trees needed before an income was returned, were the major issues revealed by the farmer co-operators on their projects in the barangays.
Another issue examined was the role of the barangay officials in bringing success to the projects in Linayasan. The local officials played a crucial role in maintaining the harmonious relationships necessary to allow for the development of their barangay. However, traditional cultural practices were often perverted in the execution of social responsibilities and legal tasks performed by barangay officials. Limited educational background and preparation, as well as political alliances were issues associated with inefficient performances by the barangay over emerging problems in Linayasan.

The views of Center staff members, instructors and representatives of the municipal government were also discussed. Accounts from those actors suggested that traditional cultural practices like reciprocity had been misused by the locals, jealousy, limited funding and the adverse affects of droughts, hindered the success of the income-generating projects assisted by the Center in Linayasan. Interviews revealed different versions of what was achieved and what was not achieved in the short period of time the Center assisted the two groups of farmers in Linayasan. The analysis of the interviews implied that in order to serve the less affluent farmers there needed to be more linkage that could help to facilitate continuous assistance. This would bring the projects into a sustainable situation as had happened in Sibalew. In Linayasan, however, the interim results of the introduction of demonstration projects confirmed that even the more affluent farmers had also complained about the labour issue in the maintenance of their projects. This was because there were other, more lucrative sources of income that provided better options than the orchard projects for affluent farmers.

The change of management in income-generating projects, from the Center to the farmer, was also examined with Linayasan locals. Both groups of farmer co-operators were frustrated when they were unable to produce the expected income from their projects. Interviews revealed that they all continued to manage their projects to some degree, although some farmers were spending little time working on their projects. The two groups of farmers managed their income-generating projects differently. The more affluent farmer co-operators managed their projects through caretakers and hired labourers. The less affluent group relied on the labour of family members.

The two groups of farmer co-operators presented similar arguments over the management of their projects. Excessive maintenance, hedges that occupied too much
space in the area of projects, the long maturation time required by plants and limited water, exacerbated by long droughts, were issues described. There were complaints also about the complication of the activities necessary for the projects and the tasks that had to be performed for their families and other duties in the barangay. How the individual farmer co-operators experienced those problems depended on what group they belonged to. There were problems between more affluent farmer co-operators and their caretakers. Many of the problems stemmed from the social inequality that existed in the barangay social structure. Lack of participation by caretakers in decision-making and no assurance of long-term benefits to them from managing the projects were other issues.

The last topic discussed was the insights of Linayasan locals into the income-generating projects. Analysis from interviews revealed complex issues in the establishment of the projects in this barangay. The issues raised by the various actors interviewed were interrelated with existing cultural, social, economic, political and technical problems in the barangay. The most common was the limited period of assistance the Center provided. Limited time meant limited results in Linayasan. The demonstration projects were hindered because of a lack of commitment by family members to provide labour for maintenance. There were complex power relationships, cultural gender issues and intergenerational problems already in existence in the barangay that needed to be taken into account to minimise the biased distribution of assistance across the barangay social structure. The long-term income-producing projects and their requirements, such as available land and regular maintenance of the projects were complex issues for Linayasan locals. Such issues confronted them when attempting to secure economic advantage for their families.
Chapter Eighteen

Summary and Conclusion of Linayasan Case Study

18.1 Introduction

This chapter summarises the main points discussed in this case study. It begins with a condensed discussion of the results of the implementation of the agroforestry projects assisted by the Center over two years in Linayasan. A brief description of other aspects examined in Linayasan that the Center had overlooked, prior to the establishment of agroforestry demonstration projects follows. This covers the barangay profile, features, local livelihoods and other sources of income that had been examined in Linayasan. Finally, the discussion concludes by highlighting the significance of controversial issues and complex problems experienced by the Center and locals in Linayasan in their agroforestry demonstration projects. The implications of the issues and complex problems summarised in this chapter are combined with the results of the Sibalew case study discussed in Part Three.

18.2 Summary

In 1993, Linayasan was one of six recipient barangays of the Center’s assistance. The barangays included Polocate in Banga, barangay Rosario in Malinao, and Odiong and Linayasan were the two barangays located in Altavas. Linayasan was the barangay focused on for this case study. The assistance was part of a general, widespread assistance campaign funded by the Countrywide Development Fund in the province. In support of the campaign, the Center assisted groups of local farmers in those six barangays to establish orchard demonstration projects. Like other barangays, hillside orchards and backyard orchards were the two types of projects initiated by the Center in Linayasan to encourage local farmers to modify their existing agroforestry practices. Through the replication of demonstration projects already established in Sibalew, the Center expected that these projects could provide ‘model orchards’ for other farmers to copy the technology.

In Linayasan, the Center conducted free skills training to locals, provided material and technical assistance, and interested locals established projects. In particular, the Center
wanted to address the low agricultural productivity and poor income-earning capacity of locals. The participation of locals in skills training and their involvement in the establishment of income-generating projects were designed to develop skills and methods for entrepreneurial activities. It was considered that the success of these agroforestry demonstration projects would lead to the further improvement of existing management practices of orchards and the provision of additional income to Linayasan farming families. Through entrepreneurial skills training, material aid and technical aid, the Center expected that those programmes would improve the income-earning capacity of locals and reduce problems related to poverty, unemployment, underemployment and youth juvenile delinquency in the barangays.

In 1998, the fieldwork was conducted in Linayasan. Findings from the interviews of actors revealed that the current situation of agroforestry demonstration projects was not sufficiently appealing for the Linayasan locals to replicate them. The result of the demonstration projects in the barangay was limited. It was not good enough to encourage the local farmers to modify their existing agroforestry practices. There were criticisms from Linayasan locals that the two-year period of assistance to farmer co-operators was too short to assess the success of the new methods of hillside farming and management practices in orchards. Linayasan locals perceived that the agroforestry demonstration projects had limited success in Linayasan. Various controversial issues and complex problems raised by the locals were discussed with the actors involved in the projects. Discussions with those actors revealed that controversies already existed in Linayasan such as unequal access to development assistance, stray animals damage, and droughts, while others issues emerged during the establishment and implementation of the projects.

One of the major difficulties that the researcher of this case study encountered was to analyse the complex problems from accounts by various actors interviewed. Findings from the accounts showed all the various actors produced different versions or explanations regarding the unsustainability or poor results of the demonstration projects the farmer co-operators had established in their land. Opinions differed over the quality and practicability of the achievements during the short period of time the Center assisted the two groups of farmer co-operators. Another issue was the selection criteria for the recipients of demonstration projects. They proved problematic as the majority of farmer co-operators belonged to more affluent families and had current or previous connections
with barangay officialdom. Debatable issues raised by farmer co-operators ranged from work to immediate income and the tasks required to maintain the projects. There were issues in the local social, economic, cultural and political practices where interference was detected in the distribution of assistance across the barangay social structure.

Outside Linayasan, structural and organisational changes in the extension programmes of the College had unforeseen social consequences in the demonstration projects in the barangays. In 1992, for example, the conversion of the College from an ordinary agricultural institution to a higher standard State College for the province created structural change. Administrative personnel were reorganised and College programmes were realigned and modified appropriately for higher level agricultural learning institutions. This intervening change affected the organisational and social structure of extension programmes dramatically. The budget allocation of the College from the national government was increased. The salaries of College staff and faculties increased. The number of people employed by the College also increased. Each department was administered by a director appointed to control the budget and implement their respective programmes.

In 1992, under the new administration system of the College, the ERDSC was one of the new departments created. The management styles and administrative procedures of the extension programmes were changed. Consequently, the changes also modified the procedures and policies of the extension programmes, affecting the activities of the extension staff who assisted the ongoing demonstration projects in the barangay. For example, it was mentioned previously that in 1993 there were four additional demonstration projects initiated, located in three municipalities, barangays Polocate, Rosario, Odiong and Linayasan. Linayasan was one barangay where the Center established demonstration projects. The Center directly administered the College’s extension programmes, supervised the ongoing outreach activities and assisted newly established demonstration projects in Linayasan and projects in other barangays. In Sibalew, where the demonstration projects were initiated in 1983, the College administered the implementation of projects.

In the new system, the Center was given the authority to develop their own initiatives and strategies to implement non-formal education as an integral part of the extension
programme based on their mission statement. The mission statement focused on assisting disadvantaged families in rural barangays. This was particularly to reduce problems related to poverty, unemployment and underemployment and juvenile delinquency among out-of-school-youth. Furthermore, there was an effort to address the low productivity and poor income-earning capacity in rural barangays.

An example was the Countrywide Development Fund designed to help finance the dissemination of non-formal education and the establishment of livelihood projects in the rural barangays. The one-year fund to finance the establishment of orchard demonstration farms in Linayasan from 1993 to 1994 was part of a widespread assistance campaign by the Countrywide Development Fund in the province. In support of the campaign, the Center endorsed the outreach projects established in Sibalew and existing demonstration farms were used as ‘model farms’ for technology transfer. Farmer co-operators from other barangays visited Sibalew and sought information to improve their traditional farming methods and existing agroforestry practices.

The new extension strategies wrought by the conversion of the College provided an opportunity for the Center to reach and assist disadvantaged families in rural barangays. In Linayasan and other assisted barangays, Barangay Demonstration Laboratory Instructors and SOAs established several demonstration projects. In Linayasan, nine farmer co-operators attempted to establish orchard projects using the technology promoted by the Center. Of those farmer co-operators interviewed, a review of the Center’s annual reports showed that seven hillside orchard projects were established in Linayasan. The farmer co-operators agreed that their projects were fully planted with fruit trees and that the projects were located on hillsides where hedges helped to prevent soil erosion. The one-year funding of projects was terminated in 1994. Thereafter, the Center continued to assist the projects although the assistance was not as generous as previously.

In 1996, the national government reduced the budget of the Center. Consequently, many Center employees were laid off, affecting the supervision of all the ongoing demonstration projects. In Linayasan, the management of demonstration projects changed. The change forced the farmer co-operators to manage and maintain their projects independently. However, for many complex reasons, the demonstration projects
were managed inefficiently. Insufficient maintenance of plants led to failure in income generation. The unsatisfactory results of agroforestry demonstration projects created uncertainty for farmer co-operators and other locals. Many controversial and complex problems were discussed with various actors during the interviews and different arguments were presented.

Some locals claimed that farmer co-operators failed to provide for the necessary maintenance of the plants. They maintained that the income produced from projects proved insufficient to support their families. All farmer co-operators reiterated the claim that insufficient income, intensive labour, long droughts, a lack of water and stray animals posed problems for their projects. More affluent farmer co-operators mentioned some conflict with the caretaker of their projects. The less affluent farmer co-operators claimed that immediate income was necessary for the survival of their families and for the continuation of their projects. The barangay officials complained that the period of assistance provided was too short to allow the projects to begin producing an adequate income. The municipal government representative acknowledged that the local values and traditional practices had been problematic in the introduction of the projects in rural barangays. The final comments from the Center’s instructors and staff members emphasised that limited funding hindered the continuation of their ability to monitor, evaluate and provide technical assistance to the farmer co-operators in Linayasan.

The findings of the case study suggested that the interim results of agroforestry projects in Linayasan depicted controversial issues and complex problems that challenged recipients and providers. Both groups expected to achieve much more in the new social structure of the extension programmes. Many issues and problems were unknown to the Center before it initiated the projects in Linayasan due to a lack of any comprehensive evaluation of the existing features of this barangay and its potential for development. The social consequences of the reorganisation of the whole extension system affected the social, economic, cultural and political situation. For example, the new social structure of the extension programmes created higher expectations for both groups of actors. Opinions over what was achieved and what was not achieved in the short period of time the Center assisted the two groups of Linayasan farmers were also contradictory. Accounts from the instructor assigned to Linayasan emphasised this issue.
Another institutional problem was the intervening conversion of the College that led to the standardisation of the academic programmes. Academically, this meant a higher level of expertise was required for the college students to obtain their degree. The outreach report produced by SOAs was valued less than a thesis. The outreach report became obsolete upon the standardisation of the academic programmes. In 1996, the internship of the SOAs was discontinued despite its practical contributions to the Center in the dissemination of technology in the rural barangays. The discontinuation of fielding the SOAs reduced the manpower of the Center. These agents had helped establish the demonstration projects in Linayasan and other barangays throughout the province. These changing bureaucratic procedures and political interference produced contradictions between former and recent extension systems that must be taken into account in newly established demonstration projects like those in Linayasan.

In general, the introduced agroforestry project had limited monitoring and evaluation mechanisms to identify and evaluate emerging problems within and outside the project areas. Overall, the agroforestry projects assisted by the Center in Linayasan were problematic. The introduction of new methods of orchard production was constrained by limited financial support compared with Sibalew. The monitoring and evaluation system of the projects was inadequate. A lack of enlightened or informed participation by the actors involved was one of the debatable, albeit controversial, issues in the establishment of agroforestry demonstration projects. More comprehensive monitoring and evaluation would have been useful to determine the effectiveness of the extension strategies.

The case study exhibited some controversies inherent in the social, cultural and political practices that existed in the social structure. These controversies were an integral part of the development process of the barangay. Many other problems and controversies were beyond the brief of this case study. However, exploring even the controversies covered and articulating the complexity of the associated problems was crucial. They afforded an understanding prerequisite to the success of the agroforestry projects in the barangay. The existing local knowledge and the incidental sources of income of locals within the barangay needed to be considered. This information was important for the introduction of projects like the hillside farming system and orchards.
This case study also discussed other aspects examined in Linayasan that the Center had overlooked prior to the establishment of agroforestry demonstration projects. Linayasan had the potential for economic development, but complex problems needed to be identified and resolved in order to understand local lifestyles in this barangay. For example, issues such as the implications of Linayasan locals’ access to various sources of income and the local market, the power differentials existing in the social structure and the increased population threatened the land area available in Linayasan. The implication of professional and skilled labour migrating to urban areas and abroad and the ensuing depletion of human resources in the barangay hindered the economic development of local families. The result was that most of the local officials had limited educational prowess with which to administer the development of their barangay.

In Linayasan, local traders dominated barangay businesses. They enjoyed easier access to resources and provided local employment. Local traders played an influential role in the barangay economy. They provided direct employment for disadvantaged relatives in the barangay and were sources of help for others. However, any assistance extended demanded reciprocity and adherence to local cultural practices. The importance of religion was also examined in Linayasan. Several religions existed in the barangay, but Roman Catholicism dominated. However, controversial issues surfaced in recent religious and cultural activities. The barangay fiesta exemplified the changed local perception of religious activities. Many locals still adhered to the rituals associated with social and economic activities such as farming and fishing. The intergenerational issue described by the Linayasan widow farmer in her accounts epitomised the adherence to rituals associated with rice farming.

Furthermore, the administrative role of barangay officials was discussed with Linayasan locals. Issues included the implementation of central government policies as well as the planning and assisting of external agencies in introducing livelihood projects. Linayasan officials had different leadership styles and were more politically diverse than in Sibalew. This implied that the barangay leadership style varied between barangays. There were contradictions between the legal tasks and the traditional cultural practices performed by local officials. The effective style of Sibalew officials in exercising their political power was absent in Linayasan due to the complex relationship between the more affluent and less affluent families. The existing reciprocal relationship between the
two groups of local families could render the local officials ineffective in the execution of their tasks in the barangay.

The case study also examined Linayasan's potential for economic development. Agriculture and fishing were the major industries that needed further development to improve the earnings of locals. Disadvantaged families in Linayasan considered fishing a relatively stable source of income. This implied that any projects introduced for the economic improvement of disadvantaged families should be appropriate for the livelihoods already practised by those families. In short, the assistance offered to full time farmers might not have an identical value if the same assistance is offered to fishermen who farmed part time. The fishing activities of locals could impede the development of agricultural production in Linayasan. This dilemma remains a complex problem for the development of agriculture and the fishing industry in this area. In Sibalew, the locals concentrated on agriculture. Development assistance was focused on the diversification of farming methods. Various livelihoods were created and local agricultural production increased.

Another development potential of Linayasan was the existence of various utilities - the national road, electricity supply, the public market, the national high school and the rural health center. Some of those utilities had existed since the 1950s while others were established in the 1970s. In Sibalew, most of these utilities were developed in the mid-1980s. This suggests that Linayasan had a more advanced economic development than Sibalew, except in orchard plantations and the water system. Sibalew had more developed orchards and a good water system. Linayasan had a limited water supply and the facility was poorly developed. Humid conditions and the abundance of water provided more opportunities for Sibalew farmers to boost their agricultural output than Linayasan farmers. The findings of the case study suggest that the geographic location of a particular barangay needs to be taken into consideration when establishing demonstration farms.

Issues related to land tenure practices were also examined in Linayasan. Interviews suggested that many issues arose over the restrictive policies implemented in the land reform programme. The problems included the legal and mutual agreements between landowners and tenants for the sharing of the rice produced. Contradictions existed
between the traditional cultural practices and the development policies imposed by the national government. As in the literature, the arguments from officials interviewed suggested that the loss of power and social control over family land distributions inspired cultural, economic, social and political disharmony in their barangay. These made locals resistant to change. However, issues related to land tenure practices were not a severe problem in Linayasan because not many farmers owned enough land area when compared to farmers in those barangays under the land reform programme. Officials and local farmers interviewed claimed that locals from other barangays questioned the effectiveness of the land reform programme.

The livelihood activities of men and women within and outside the barangay were also examined in Linayasan. Findings based on the accounts of locals suggested that significant variations existed between the more and the less affluent women’s response to economic opportunities. The gender activities or the division of work between spouses varied, depending generally on their respective economic and social status and the existing economic environment. The more affluent women dominated access to the various opportunities available for women. Immersed more in managerial and supervisory tasks in agricultural production and trading activities, they enjoyed better access to income and better control of adequate financial resources for their households. They were also actively involved in the cultural, spiritual and political development of the barangay. In less affluent families, the work of men and women in domestic household activities was not stereotypical. Less affluent women were actively involved in productive activities through manual labour and hard work on the farms. In conclusion, the gender livelihood activities in Linayasan were complementary to the social, economic and moral development of local families. Further, the role of men witnessed some change. They sometimes participated in domestic duties while the women worked outside the home.

Finally, local livelihood and other income sources of locals were examined in Linayasan. Rice farming and fishing were their main economic activities. Besides trading and fish vending, other income was kaingin, coconut plantations, homegardens, raising animals and backyard orchards. Linayasan locals produced income from various types of livelihoods by combining traditional and modern farming methods. Some local farmers still practised reciprocal labour schemes, used local seeds and cultivated land using draft
animals. They also used modern rice varieties, inorganic fertilisers, chemical sprays and mechanised farm implements. But these modern farming methods threatened the traditional farming practices in the barangay.

Other projects were also introduced in Linayasan before the Center launched the agroforestry projects. For example, other agencies introduced new animal breeds to improve livestock production. However, the results of such projects were insufficient to provide for the immediate needs of the less affluent farmers. They remained vulnerable to poverty. Lack of capital, limited access to technology, poor farming implements and inadequate marketing facilities were problems raised. Another issue cited was the persistence of poverty. In general, access to different forms of livelihood and their economic benefits to locals were in doubt.

As in the agroforestry demonstration projects, there were cultural, social, economic, political, and technical controversies in existing livelihoods that created some insecurity amongst locals in improving the economic condition of their families. There were issues that affected the social relationships between the more and less affluent families in Linayasan. The problems concerning rice production were different from the issues debated in local fishing activities. There was an example of the sorts of intergenerational issues that occurred in rice production described by the widow in Linayasan. In fishing, there were cultural beliefs that determined the roles of men and women in fishing activities. A lack of revolving capital, lack of storage and processing facilities and little support for a local market were issues raised by local fishermen.

There was an argument from local farmers that the problem of soil erosion through *kaingin* was acknowledged by the locals in the barangay. But *kaingin* was considered important for the less affluent families so they could utilise available family labour. Linayasan farmers recognised *kaingin* as a simple and inexpensive farming method that had been practised for generations of upland farmers. But the degradation of soil and excessive use of *kaingin* was the main concern about this method of farming.

In coconut plantations, homegardens, raising animals and the development of backyard orchards, the issues raised by the locals regarding these livelihoods were interconnected and often sensitive. The management by locals of the activities involved complex co-
ordination and was complicated by the necessity of having to perform other tasks. In coconut plantations, copra production was threatened by the harvesting of coconut trees for lumber production. Poor soil and long droughts were major problems for intercroppings in coconut plantations.

In homegardens, locals cultivated vegetables for the subsistence of their families. The provision of vegetables also helped establish good social relationships, but also created some dependency by other families. Limited land, lack of water, a glut of vegetables coming from other places affecting the local market price, lack of credit assistance and limited marketing facilities were constraints. The lack of credit assistance and complicated procedures in accessing financial support for the projects were also discussed, as was the ineffectiveness of previous programmes in vegetable production.

Animal raising in Linayasan was also difficult. There were cultural dictates defining the appropriate gender for the ownership of animals. Males were responsible for looking after buffaloes, females were obligated to look after the small animals like hogs and chickens. Swine raising was principally a family activity and treated as the woman’s part-time job that generated extra income for the family. The new breeds of hog were introduced to improve swine production. The programme was more suited to affluent families who could afford commercial feeds and medicinal requirements for the new breeds. In general, animal raising was a potential livelihood but comments from locals suggested that limited land, the smell from piggeries and stray animals were problems.

The backyard orchards that had existed in Linayasan were also examined. Many houses had backyard orchards but they were not properly managed. The poor orchard management was attributed to various problems. The problems included the poor quality of fruit trees planted in the orchards, soil nutrient deficiencies and excessive soil erosion, limited water during summer, lack of good quality planting stock and the low financial status of the growers. In addition, the previous assistance provided by other government agencies was insufficient to improve the technical and managerial skills of Linayasan farmers to manage the orchards to obtain additional income. Linayasan locals raised similar issues in the agroforestry demonstration projects introduced.
Overall, this case study examined various aspects of the change that occurred in Linayasan. There was some potential for development. There were controversial issues and complex problems in the various types of livelihoods that already existed in Linayasan. A deeper analysis of the accounts of locals might have determined more appropriate types of technology and projects for introduction to the locals. The Center had overlooked many pertinent issues in the establishment of agroforestry demonstration projects. A review of previous reports revealed that a survey in Linayasan was recently conducted by the Center in 1998. This implied there were issues that the Center was unable to evaluate before the initiation of projects that lead to complications for the farmer co-operators when maintaining their projects. Such issues might have helped to determine the suitability of the agroforestry technology introduced in the demonstration projects.

Analysis of the previous projects showed that there was limited access to good quality seedlings and inadequate technical support. Insufficient assistance led to linkage mechanisms being ignored when they could have been used to deal with emerging problems in the new projects. The ineffectiveness of previous projects confused Linayasan locals. They were unaware of the assistance provided by the government to them. The issues and problems encountered by locals were crucial for the success of the new projects. In particular, it was necessary to examine the changes and the significance of new technology in the context of the existing traditional cultural practices within the barangay. The changes that were created through the introduction of the agroforestry projects, like those assisted by the Center in Linayasan, could provide new insights for planners and others involved in similar development projects.

18.3 Conclusion

In Linayasan, an evaluation of the prevailing local conditions, the introduction of demonstration projects and the subsequent results were investigated. The purpose of these demonstration projects was similar to the demonstration farms in the Sibalew case study. It was used as a model project to promote new technologies so the local orchard growers in Linayasan could improve beyond the limits of their traditional agroforestry practices. Contour hedges were introduced to prevent soil erosion for those orchards located in sloping areas. New techniques in plant propagation improved the quality of
native plants. Improved orchard management practices to produce a sustainable income were introduced.

In addition, packages of materials and technical assistance, including free labour from the Center, were provided to ten local farmers to establish demonstration projects. It was expected that these projects would become model projects for all local farmers to follow. This concept was similar to the trickle down approach in the diffusion model to promote modern technologies, as described in the literature review (see Rogers, 1983; Rogers and Shoemaker, 1971). The importance of this model in the extension programmes of the College was described in the Sibalew case study. The significance of the diffusion model in extension programmes was also examined in Linayasan.

The findings of the case study revealed that the outcomes of demonstration projects in Linayasan failed to improve on the existing methods used in backyard orchards and produce a better income. The advantages of the demonstration projects were not sufficiently appealing for the locals to want to replicate them. It was not sustainable enough to encourage the local farmers to improve their existing agroforestry practices. The results of the demonstration projects initiated through the ten farmer co-operators were limited. This was during the initial introduction of demonstration projects, and was a primary learning process for farmer co-operators, locals, extension staff and faculty members. The appropriateness of the new technologies and methods introduced in Linayasan conditions was problematic.

Further, the findings of this case study suggest that the ineffective outcome of the demonstration projects in Linayasan was as a result of conflict between human and technical factors (see Mosse et al., 1998; Scoones and Thompson, 1994; Gabriel, 1991). There are diverse social, cultural, economic and political practices engaged in by locals in this barangay. There were different arguments from barangay officials, locals, farmer co-operators, extension staff and faculty over the poor results of the demonstration projects. The arguments were linked directly to inequality and the biased distribution of assistance to locals in Linayasan. This issue was similar to the results found in other development programmes described in the literature (Panopio et al., 1994; Chandler et al., 1987; Anderson, 1982). Inequality was a crucial issue when attempting to reduce the gap between rich and poor (see Gerdes and Pehrson, 1998; Aguilar, 1984). The literature
suggests that this was a serious fault in the diffusion model because unequal distribution of assistance across the local social structure could lead to increased inequality in development (see Gardner and Lewis, 1996; Webster, 1990).

The lessons learned from this case study confirmed various issues about inequality in development. Studies by other authors were summarised in chapter six (see Hutchison, 1999; Angles, 1999; EAAU, 1998; Hertz, 1998; Lewis, 1992; Kerkvliet, 1990). Similarly, it was apparent from the findings of this case study that inequality was a factor that prevented the Center from advancing their extension approach. The participation and empowerment of locals in the decision-making processes needed to be more realistic in Linayasan. This case study suggests that the lessons learned in Linayasan could be used to understand complex problems and controversies related to local social, cultural and political influences in development. Further, the case study findings make clear some account of the imbalance of power across the local social structure is necessary and there is a need to accommodate issues related to gender access and control of resources in extension programmes. Below, there are five major issues in the literature that this thesis focussed on to reduce inequality that could have been used in Linayasan.

The first issue in the literature was that the national policies and political agendas were often unrealistic for solving the local problems (see Hutchison, 1999; Hutchcroft, 1994; Jayasuriya, 1987; Anderson, 1982). This was related to the national policies and political agendas from central government for the College to implement in their extension programmes. An example was the reorganisation of the departments of the College in 1992 when changes in extension programmes designed to promote participatory approach in development were introduced. However, the effects of such radical change did not allow the Center, when implementing their extension programmes, to promote the participation and empowerment of Linayasan locals, as suggested in the ‘putting people first’ approach. The effects of reorganisation increased the expectations of the extension staff and faculty at the College; as well the Linayasan locals had higher expectations of what could be achieved in demonstration projects. Higher expectations for positive results were emphasised, but often more to satisfy national policies, political agendas and funding agencies to maintain institutional alliances in development. It was apparent in this case study that the demands of various tasks and controversial issues were ignored in evaluation and project reports. National policies, political agendas and
funding agency interests took priority over the local interests that were crucial for development (see EAAU, 1998; Haque, 1998; Anderson, 1982). Lack of evaluation, choice of risky technology, loss of anticipated funding and restructuring of the student training programmes all had an impact.

Subsequently, many issues were overlooked which prevented the two groups of farmer co-operators producing model orchard projects for all orchard growers to follow. The inclusion of locals to elicit and articulate complex problems in the evaluation process would have been beneficial for a greater understanding of the emerging issues in the extension programmes in the barangays. Accounts from instructors clarified some of those issues. The duties prescribed for instructors and student agents were different to their actual tasks when working with the farmer co-operators. The documentation and rigid bureaucratic procedures regarding supplies were other issues. Lack of funds and time for projects when assisting farmer co-operators were major constraints for the Center. Results, such as those achieved in Sibalew, were unattainable.

The second issue in the literature was that the social, cultural and political practices of locals have been problematic in development by increasing inequality through the biased distribution of assistance across the local social structure, as happened in Linayasan (see Gerdes and Pehrson, 1998; Haque, 1998; Anderson, 1982). The social, cultural and political aspects of the development were complicated in this barangay more than Sibalew. There were arguments from extension staff that political interference in and outside the extension system often created controversial issues and led to the biased distribution of resources in the barangay. The cultural and political issues described by the barangay captain were classic examples. The administrative tasks of elected officials who managed the development of the barangays were complicated by their cultural obligations, especially their obligation to provide mutual help for those locals who helped them during the recent election (Simpas et al., 1983; Del Rosario, 1981; Simpas, 1979). Such conflicts caused by culture and politics in the development of Linayasan were overlooked during the crucial early stages of the demonstration projects. Such issues, the literature suggested, could lead to nepotism, favouritism, subservience and dependency, creating a biased development (see Hunt et al., 1997; Espiritu et al., 1995; Garcia, 1994; Panopio et al., 1994). Consequently, it could create conflict between those locals included in assistance and those excluded. In this respect, the standard criterion for
the selection of farmer co-operators was often unrealistic in actual practice. Some barangay officials called this *sip-sip* or political patronage in development programmes.

The third issue indicated in the literature was the interaction between the effects of development and the local social structure (see Lewis, 1992; Kerkvliet, 1990; Chua, 1990; Illo, 1985; Ledesma, 1982). The Sibalew case study shows that the development of this barangay was because of technological and economic change. The living conditions of locals were transformed from a backward to a modern lifestyle relative to other Filipinos. But the price of development in Sibalew was at the expense of the traditional cultural practices of locals and some deterioration in the natural environment. In Linayasan, it was clear in the findings of the case study that the demonstration projects had a limited impact on the local economy. The impact of the development programme was temporary (see Blackburn, 1998; Thompson, 1995; Moris and Copestake, 1993). The accounts about conflicts between caretakers and farmer co-operators indicated some of the adverse effects the demonstration farm had on the social structure of Linayasan.

However, existing inequality and the various types of livelihoods described in this case study raised controversial issues and problems for Linayasan locals. There were problems of access to, and management of available resources to produce income, and the gender issue was crucial in development (see Villacorta *et al.*, 1995; Velasco, 1995; De Guzman *et al.*, 1995; Eviota, 1992). There were studies that indicated that the economic and social inequality that existed between men and women as linked to poverty (Tan, 1995; Tisch and Paris, 1994; Tisch, 1992; Paris and Luis, 1991). Local traders dominated the fish and other industries to their own advantage. The disadvantaged locals needed local traders services. But the disadvantaged locals received low incomes for because of the local traders dominated benefits of development (see Gerdes and Pehrson, 1998; Lopez-Gonzaga *et al.*, 1995; Lewis, 1992). The existing inequality created doubt in the minds of locals that they could improve the economic condition of their families through the demonstration projects. Those aspects were not thoroughly evaluated by the Center prior to the establishment of demonstration projects in Linayasan.

The fourth issue indicated in the literature concerned the technological and economic change to traditional cultural practices and the natural environment in rural areas (Balisacan, 1993; Lewis, 1992; Molnar, and Jolly, 1988; Eder, 1982; Anderson, 1982).
This was apparent in Sibalew and it was noted also in Linayasan that the closeness between the locals was affected by the technological and economic change. The locals became preoccupied with various activities to earn money for their families. In both case study barangays the living conditions became more complicated and economic pressures continued to grow. In Linayasan, this problem was not confined solely to the demonstration projects, it was also noted in the other activities of locals. The infrastructure facilities such as the national road, electricity supply, the local public market, the national high school and the rural health center in Linayasan allowed locals to be more involved in various economic and entrepreneurial activities. The various sources of income, market facilities and the access of locals to the coast for fishing made Linayasan more economically advanced than Sibalew, and the effects of previous development programmes on the social and economic spheres had created problems similar to those that had occurred in Sibalew as a result of the College's activities. It had not helped the disadvantaged families and the local traders dominated the local economies (see Hutchison, 1999; EAAU, 1998). Further, the effect of economic change on the farming methods of local farmers had been for them to become dependent on the modern commercial fertilisers, spray chemicals and other technologies in rice, coconut and vegetable production. When new techniques in plant propagation were adopted dependence increased (see Blackburn and Flanerty, 1994). The contour hedges to prevent soil erosion in the orchards had limited value to the Linayasan locals, less than in Sibalew (see Claydon and Dela Cruz, 1998). The soil erosion problem and the harsh climatic conditions were constraints to improve further farming methods and orchards in Linayasan.

Finally, the fifth issue was related to the arguments over why the diffusion model was still dominant, as opposed to the 'putting people first' approach that has been used by the College for over fifteen years in their extension programmes (see Röling et al., 1981). Like the Sibalew case, the findings of the Linayasan case study confirmed that the diffusion model was still dominant as well. The case study shows that the effects of radical change and the reorganisation of programmes and extension policies of the College, did not achieve what was suggested by the 'putting people first' approach described in the literature, specifically an increase in participation by Linayasan locals in all stages of the project cycle and their empowerment in the decision-making processes (see Cernea, 1991; Uphoff, 1991; Chambers et al., 1989). Similarly, the findings of the
case study shows that the radical change of policies and transfer of power from the College to the ERDSC to implement extension programmes was not conducive for staff and faculty, to operate a more realistic participatory approach in demonstration projects in barangays. The extension staff fulfilled national policies, political agendas and the interests of linkage agencies, as well as performing multiple other roles for the development of the College and barangay locals. This issue was presented by various authors in the literature (see Gaventa, 1998; Blackburn, 1998; Morton, 1996; Thompson, 1995).

Gaventa (1998: 161) argued that while national government and donor agencies attempt to promote participation there were dangers of abuse and bad practice where dependency has occurred between the donor and government recipients of foreign aid assistance. According to Blackburn (1998: 168) there was “no magic formula for participation which can be applied universally,” and “perfect participation does not exist.” Blackburn has argued that the “institutionalisation of participation does not depend only on exogenous policy factors.” It also involved “changing the organizational characteristics” of development agencies regardless of their scale and specific tacks. Finally, the suggestions of Thompson (1995: 1552) indicated that “transforming a bureaucracy demands changes to an organization’s working rules in order to allow its staff to experiment, make and learn from mistakes, and respond more creatively to changing conditions and new opportunities.” In concert with these arguments mentioned above, the lesson learned by the extension staff and faculty in Linayasan provided a learning experience for both actors involved. That could be especially useful for the College and linkage agencies to design their extension programmes to spread participation of locals through all stages of projects, as well as increasing their empowerment in the decision-making processes.

In conclusion, the findings of this case study suggest that sensitivity is required to understand the social consequences brought about by development projects, such as the one discussed in the Sibalew case study. The radical change of extension policies and procedures have an impact on extension staff and faculty that influenced the outcomes of the extension programmes in the barangays. Political interference in and outside the extension system often created controversial issues and led to the biased distribution of resources in barangays (see Blackburn and Flaherty, 1994; Lamble and Seaman, 1994;
Problems in bureaucratic procedures when implementing extension programmes and controversies related to the imbalance of power in the social structure, such as political patronage and kinship relations, are crucial human factors in development (Hunt et al., 1997; Panopio et al., 1994; Kerkvliet, 1990; Gabriel, 1991). These issues need to be addressed through critical evaluation of project reports. This could provide an opportunity for extension staff and faculty in collaboration with locals to discover deficiencies in the demonstration projects and improve more extension programmes (see Biggs and Smith, 1998; Michener, 1998; Morton, 1996; Pretty, 1995; Thompson, 1995; Cohen and Uphoff, 1980). This could help to identify a suitable approach that allowed the actors involved to understand the significance of such controversial and delicate issues, especially inequality in development (see Chambers, 1983). Further, there was some reluctance by locals, extension staff and faculty to discuss what was actually happening and failure to accurately describe the condition of the projects in the process of evaluation. And finally, drawing on the ideas and practices of the diffusion model and the 'putting people first' approach, the interaction of these two approaches in Linayasan was complicated, suggesting that a more appropriate procedure is necessary to encourage an upward and downward communication that is more meaningful for local participation in the extension processes.
PART THREE
Chapter Nineteen

Findings of Case Studies Related to Other Development Programmes Introduced in Rural Barangays and Associated Issues

19.1 Introduction

The chapter is in seven sections. Section two evaluates the issues and problems in the implementation of the diffusion model and the 'putting people first' approach in the extension programmes of the College. The third section describes briefly the three examples of previous national development programmes examined in the literature whose impact at a local level is studied in this thesis. The fourth section describes institutional alliances in development projects, which were crucial for the extension programmes of the College. The fifth section discusses the participation of locals and associated issues in the development projects. The sixth section relates the findings of the case studies to the report of the Food and Agricultural Organisation regarding the current issues that challenge agricultural institutions in the Philippines. Finally, section seven is a summary, and ends with an argument that the impact of technologies introduced through demonstration farms and the intensive extension efforts of the College in Sibalew, Feliciano and Linayasan demonstrate to trickle down effects identified by the other diffusion of innovation research.

19.2 Evaluation of the Extension Methods and Associated Issues

This section evaluates the diffusion model and the 'putting people first' approach in the extension programmes of the College. First, the importance of the diffusion model is described and this is followed by a discussion of the 'putting people first' approach in the extension programmes of the College. The findings of the case studies show that the basic extension method of the College was drawn from the diffusion model. Later the 'putting people first' approach was introduced in the mid-1980s to promote a grassroots participatory approach in development. The purpose of the discussion in this section is to illustrate the interactions of complex problems associated with these two approaches in the implementation of extension programmes by the College in Sibalew, Feliciano and Linayasan.
19.2.1 Implementation of the Diffusion Model in the Extension Programmes

Despite changes, the case studies revealed that the ‘top-down’ methods that are practiced in the diffusion model were a dominant procedure in the implementation of the College’s extension programmes. The concepts behind the ‘putting people first’ approach, such as participation and empowerment, were applied just as a slogan to facilitate the implementation of various development programmes. The diffusion model has many attributes which were difficult to alter because it was the foundation of the knowledge taught in extension, especially when introducing modern agricultural technologies. The diffusion model favoured progressive framers adopting introduced technologies (see Rogers, 1983; Röling et al., 1981). Using progressive farmers provided advantages for the College and linkage agencies, as implementation of various programmes focused on these farmers proved effective. The five basic steps described by Rogers (1983: 163) to guide extension staff and faculty as to how individual farmers make their decisions was another important attribute of the diffusion model that the extension policies of the College have been based on.

Another feature of the ‘top-down’ diffusionist procedures practiced by the College came about because its projects were mostly government-sponsored. The implementation of these programmes involved bureaucratic procedures based on an hierarchical structure. The central government had determined and controlled the allocation of funds for the College to implement national development programmes in the barangays. Access from the government resources to increasing funding for extension programmes required the College to produce excellent project reports. In addition to this issue, the College followed rigid bureaucratic procedures before funding for extension programmes could be released from central government.

For over fifteen years from 1983 to 1998 the College had implemented various programmes from national government through the establishment of demonstration farms in the barangays. The concepts behind the demonstration farms were primarily drawn from the diffusion model and classic examples of this were described in the Sibalew and Linayasan case studies. Following the theories in the diffusion model, the College expected that the introduction of demonstration farms in these barangays would improve
economic conditions of locals. In particular, the development of Sibalew was expected to serve as an example of how the College was able to integrate various programmes in this barangay.

From the College point of view, the integration of various programmes in Sibalew was also an example of a grassroots participatory approach. This was because the College had perceived that the Sibalew locals had provided active participation in their extension programmes. Linkage agencies also provided financial and technical support for the development of Sibalew. Through lessons learned by the College in Sibalew, it was rationalised in the project reports examined that the extension method was changing from a 'top-down' to a 'bottom-up' approach which would become a model grassroots participatory approach. However, the changes described in the project reports did not make any difference in the way the extension programmes operated in Sibalew, Feliciano and Linayasan. The 'top-down' procedure was the simplest method for extension staff and faculty to follow instructions, guidelines and policies from the national government in the implementation of the extension programmes.

The findings of the case studies show that the diffusion model was a convenient tool for extension staff and faculty to conceptualise issues associated with the establishment of demonstration farms. As well, the diffusion model was used to deal with local problems through focusing on local farmers who had extra capital which was needed for demonstration farms to be successful. Related to this issue, Lamble and Seaman (1994: 49) argued that, "the more people involved in making an innovative decision, the slower the rate of adoption and the greater the stability of the decision." According to Lamble and Seaman "one strategy for speeding the rate of adoption is to attempt, if possible, to alter the unit of decision so that fewer individuals are involved" (Lamble and Seaman, 1994: 49). Other authors emphasised that the 'top-down' method was convenient for development agencies because of their bureaucratic procedures and existing practices, as well as efficient as regards time and effort (Haque, 1998: Blackburn and Flaherty, 1994: Röling et al., 1981).

Although the diffusion model provided advantages to the College, there were authors who suggested that the shortcomings of this model needed to be addressed in the implementation of development programmes. Vanclay (1992, cited in Guerin and
Guerin, 1994: 551) argued that farmers have not necessarily followed the suggested steps in the diffusion model because of the complexity of adherence to new technologies. For instance, the less affluent farmers want to keep away from risks so these farmers often selected only those steps that were suited to their needs and easier for them to adopt (see Guerin and Guerin, 1994). From an economic point of view, according to Long (1977: 148) working with progressive farmers is a relatively cheap way of “stimulating economic growth since the level of inputs required is comparatively low.” This was related to what the College and linkage agencies aimed to achieve by focusing on Sibalew, Feliciano and Linayasan, instead of spreading various programmes in all barangays. Long (1977), however emphasised that such an approach has two major drawbacks for the local social structure. The first drawback was this “leads to the reinforcement or development of socio-economic inequality in the countryside, sometimes resulting in a widening of the gap between the commercial farmer and the poor peasant or landless categories” (Long, 1977: 148). The second drawback was the “slow-moving process which cannot be expected to produce quick returns” (Long, 1977: 148).

Other authors also emphasised the diffusion model failed to emphasise that both men and women play separate roles in production and they have different access to the decision-making process (see Jiggins, 1993; Tisch, 1992; Adriano and Castillo, 1991; Banzon-Bautista and Dungo, 1987; Illo, 1985). All of these issues remained enduring problems in the extension programmes of the College which made the implementation of various programmes more complicated. For example, the impact of various programmes across the social structure of the three barangays was biased against those locals excluded from having demonstration farms. The trickle down effect of technologies introduced in the demonstration farms was not distributed equally to all locals in the barangays. In Sibalew, for example the integration of various external programmes promoted capital-intensive farming methods and improved the economic conditions of locals. But the subsequent effects of technological and economic development on changes in the local social and economic structures, traditional cultural practices of locals and natural environment were adverse. The economic pressures continue to grow in Sibalew.

The major problem related to these issues described in the literature was that most of the government policies for development were based on technological and economic aspects
despite this being an unrealistic approach for dealing with local problems (see Axinn, 1998; Molnar, 1988; Long, 1977). Many authors have argued that the previous approach to development favoured rich farmers and not poor farmers (see Gerdes and Pehrson, 1998; Otsuka, 1996; Balisacan, 1993). An example of this was the failure of the Green Revolution that prompted criticisms that the ‘top-down’ method practiced through the diffusion model was not suitable for helping the disadvantaged, instead social inequality widened in rural areas (Gardner and Lewis, 1996; Gabriel, 1991; Webster, 1990). Because they were based on similar principles, inequality was also a critical issue in the implementation of various programmes in the case study barangays.

Crouch and Chamala (1981a: 97-225) compiled studies conducted by various authors who examined the shortcomings of the diffusion and adoption of innovations approach in different regions. The major criticism of the diffusion of innovation model was its ‘optimistic assumptions.’ It provided an “oversimplified model of development that lacks two essential ingredients: an adequate historical input and a structural perspective” (Webster, 1990: 62). The model assumed that the technology developed by scientists at experimental stations, would, when transferred to progressive farmers, trickle down to other farmers in rural communities. The diffusion model ignored other problems that were in fact a deterrent to the adoption of new technology. The diffusion model maintained that the degree of adoption of innovation depended on the resourcefulness of the farmers (Rogers, 1983). The adoption of new technology was also focused toward the progressive farmers in any particular area (Rogers, 1983, Röling et al., 1981, see also Crouch and Chamala, 1981a). However, these criteria ignored the needs of disadvantaged farmers who did not have the potential or capital to adopt the innovations. Similar arguments were raised by locals in Sibalew, Feliciano and Linayasan regarding the unequal distribution of benefits from the technology and economic development across the social structure in their barangays; affluent families and mercenary local traders were favoured.

In the literature, Röling et al. (1981, cited in Crouch and Chamala, 1981a: 105) argue that “it is the characteristics and deployment of government development services which are the prime determinants of diffusion efforts: not the characteristics of farmers.” Röling et al. (1981: 227) maintain that “diffusion generalizations adequately draw conclusions about current practice, but this may be very different from offering recommendations for
optimal practice,” claiming that “diffusion generalizations often become normative practice for change agencies” (Röling et al., 1981: 227). They suggest that diffusion researchers should be “well suited to provide the knowledge and understanding of how to manipulate local development activities so as to obtain more rapid and equitable development” (Röling et al., 1981: 236). They should, however, be “testing development strategies,” rather than just affirming the existing farming methods of local farmers (Röling et al., 1981: 236).

19.2.2 The ‘Putting People First’ Approach in the Extension Programmes

This approach was examined also in the extension programmes of the College. The literature shows that the ‘putting people first’ approach has the potential for eliciting and dealing with local problems to counteract the shortcomings in the diffusion model. This approach was introduced in the College in the mid 1980s. This was through a national slogan of the government Bayan Muna Bago Sarili which means ‘people-first’ before your-self. This was introduced to the public institutions to make their employees more effective in implementing national policies and development programmes. The main idea introduced in the extension programmes was to promote a grassroots participatory approach in development.

This included the introduction of development programmes based on concepts drawn from the ‘self-help’ and ‘people-oriented’ development approach. The participation and empowerment of locals were emphasised to the extension staff and faculty involved. These aspects were often described in the previous studies and reports produced by the college staff and the role of barangay officials was also emphasised, as being crucial to promote the ‘putting people first’ approach. Grants and technical assistance from linkage agencies were also provided for the College to promote participation and empowerment of locals in their extension programmes. The College and the linkage agencies assumed that the lessons learned from the Sibalew case would be useful for extension staff and faculty involved in providing better extension methods.

Following the concepts behind the grassroots participatory approach, the demonstration farms of Sibalew were replicated in Feliciano and Linayasan. The replication of
demonstration farms in these barangays was directed towards the implementation of the 'putting people first' approach in the extension programmes of the College. However, there were issues and complex problems that hindered the extension staff and faculty involved in implementing the 'putting people first' approach in their extension programmes in Feliciano and Linayasan. The findings of the case studies revealed that authentic participation and empowerment of locals in decision-making processes were absent from the implementation of the 'putting people first' approach in extension programmes in the barangays. A review of project reports revealed that the participation and empowerment were used superficially to fulfil the national policies and interests of the linkage agencies in integrating their programmes with the College’s extension programmes.

This issue was related to the arguments from various authors questioning the impact of participation of locals in development. In particular, the absence of authentic participation by locals was a critical issue in the decision-making process. Some critics argued that the genuine participation of local people in the development process in actual situations was difficult to achieve (Ife, 1999; Pretty, 1995; Dudley, 1993). Other critics also claimed that there were barriers, which created significant communication gaps between local farmers and scientists in the projects (Bentley, 1994; Eponou, 1993; Merrill-Sands and Collion, 1994; Moris and Copestake, 1993). There was an imbalance of power when competing farmers tried to access development projects, gender inequality in access to and control of resources, as well as recipients having limited participation in the decision-making process (Michener, 1998; White, 1996; Pretty, 1995). A biased distribution of projects to farmers in rural areas was another issue that limited the participation of locals in development projects (Chambers, 1983). There were institutional issues and political barriers that undermined the authentic participation of local people in the development process (Thompson, 1998 and 1995 Chambers, 1997; Pretty, 1995; Cornwall et al., 1994; Uquillas, 1994; Freudenberger, 1994).

These problems, described above by various authors, illustrate complex problems that were also associated with the extension programmes of the College which hindered extension staff and faculty trying to implement the 'putting people first' approach in Feliciano and Linayasan. The case studies in Sibalew and Linayasan show that the constraints in the implementation of the 'putting people first' approach included issues
related to the imbalance of power to access development projects, gender inequality in access to and control over resources and the limited participation of locals in the decision-making process. All these issues exist in the social structure and cultural practices of locals, but were not critically addressed in the extension methods of the College which were to promote demonstration farms in the case study barangays. The concept of the establishment of demonstration farms in Feliciano and Linayasan was similar to Sibalew. The basic procedures were drawn from the western theories of the diffusion innovation model which suggested trickle down would be successful in rural barangays.

In summary, the implementation of the diffusion model and the ‘putting people first’ approach in the extension programmes was problematic. The lessons learned from Sibalew by the College were not fully utilised by extension staff and faculty in replications of demonstration farms in Feliciano and Linayasan. The role of extension staff and faculty involved were directed to the implementation of national policies and development programmes endorsed by the central government. The concepts of participation and empowerment were superficially used to fulfil the interests of the linkage agencies. As a result, the implementation of the diffusion model in Sibalew left unsolved complex problems which hindered the activities of extension staff, faculty and other actors involved in implementing the ‘putting people first’ approach in Feliciano and Linayasan.

Furthermore, the linkage mechanisms between the College and external agencies that funded various programmes implemented in these three barangays were complicated and extensive. In Sibalew for example, there was duplication of effort and redundancy of demonstration farms introduced which complicated locals’ evaluation of the programmes. In Feliciano and Linayasan, the effects of interactions of various actors involved in demonstration farms were crucial issues for the distribution of development programmes. It suggests the concept behind the modelling of demonstration farms could lead to inequality in development, unless all farmers have similar types of farming methods and use the same technologies. This issue is crucial to the evaluation of national development programmes and extension methods of the College.
19.3 National Programmes on Development Related to the Case Studies

This section discusses the three examples of national level development programmes that shaped the extension policies of the College. The impact of these programmes discussed in the literature was demonstrated in the case studies. These development programmes included the Green Revolution, the Integrated Rural Development Scheme and the Agricultural Development Programme for the Countryside. The implementation of these programmes was driven by provision of foreign assistance and national policies.

The discussion in this section is in concert with the national issues described in earlier chapters of this thesis. The major issue is bias of national development programmes which make them unrealistic when addressing local problems in rural barangays. The literature shows that the trickle down effect of the Green Revolution was similar to other development programmes that were unable to address the needs of locals. It also failed the stop the threats to the traditional cultural practices and natural environment in rural areas of the Philippines. The implications of these issues on the outcomes of extension programmes of the College in the three barangays are also discussed in the last section.

19.3.1 The Green Revolution

The Green Revolution was introduced in the Philippines in the 1960s. This included foreign aid, and implementing a package of programmes for alleviating poverty. The Green Revolution focused on the modernisation of agricultural technologies through introducing capital-intensive farming methods to increase national economic growth. This included the promotion of modern varieties of rice and other crops. The local farmers were also encouraged to adopt commercial fertilisers and spray chemicals on their farms. Added to this, improved breeds of animals were also introduced to rural barangays. All of these modern technologies were through with massive foreign assistance supporting the Philippine Government in the implementation of the Green Revolution.

However, a review of the literature shows that the result of the Green Revolution was disappointing for poor farmers in developing countries, including the Philippines. The literature showed that a problem of foreign aid, generally, was that it was “connected
with mismanagement of funds or the local corruption of bureaucrats who administer it in the Third World" (Webster, 1990: 158). Webster argued that the sociology of development had determined that "in principle aid is a good thing, it is merely the way it is delivered and utilised that needs attention" (Webster, 1990: 158). The funds for the Green Revolution were "misdirected" in such a manner that they were unable to help resource-poor farmers to introduce modern technology in the Philippines, as elsewhere. The technology required was appropriate for the economic advantage of those farmers who had the resources and capital to adopt the new, introduced technology (Webster, 1990: 160). The Green Revolution was promoted with inadequate information on complex problems in underdeveloped countries. The traditional farming methods practised in rural areas were ignored in the Green Revolution; they were seen as an obstacle to the adoption of modern technology in economic development (Gardner and Lewis, 1996: 15; Gabriel, 1991: 29). This result remains an important issue in recent development programmes introduced in rural areas in the Philippines (see Gerders and Pehrson, 1998; Panopio et al., 1994, Balisacan, 1993).

An example was the Masagana 99 rice production programme initiated to support the objectives of the Green Revolution in the early 1970s (Panopio et al., 1994). Panopio et al. (1994: 319) noted that the methods of Masagana 99 achieved self-sufficiency in rice production and were later applied to corn, livestock, and other commodities. Previously, local farmers had been self-sufficient but not exclusively through the income from rice. However, Panopio et al. argued that approach was "considered a short-range and expensive response to a crisis such as a commodity shortage," explaining that under the Masagana 99 scheme, those farmers who were educated, skilled and self-reliant had successfully used the technology promoted in this programme (Panopio et al., 1994: 319).

There were serious deficiencies in the way the Masagana 99 scheme was introduced. Related to this issue, Steinberg (1986, cited in Miclat-Teves and Lewis, 1995: 228) claimed that soil erosion and leaching became a serious threat because of the continuous expansion of farms and excessive use of fertilisers and spray chemicals necessary for high production from modern rice varieties. Other authors emphasised that the inconsistencies of the government policies in the distribution of assistance to promote Masagana 99 were critical issues which favoured rich farmers (see Miclat-Teves and
Lewis, 1995: 228-229). This issue was also an enduring issue associated with the extension programmes of the College in Sibalew, Feliciano and Linayasan.

19.3.2 The Integrated Rural Development Scheme

After Masagana 99, the Integrated Rural Development Scheme in the mid 1970s was another example of a 'top-down' approach based on the national economic agenda of the government (Panopio et al., 1994: 319). The introduction of this programme was designed to combine the grants, technological, and material assistance from various agencies in one barangay to develop demonstration farms or model projects to trickle down the technologies and economic development in rural barangays. The concept behind the Integrated Rural Development Scheme was institutionalised in the governmental development agencies and became included as one of the subjects taught in agriculture.

Under the Integrated Rural Development Scheme, modern varieties of rice, corn, cash crops and improved breeds of animals were also introduced. Other management practices were integrated in one geographic area to promote the approach of integrated development. There were techniques for soil testing, pest management, hillside farming technology, improved seed production and marketing systems included in the training of technicians and local farmers (Panopio et al., 1994: 319). All those prescriptions supported the national agenda of the government for the integrated rural development programmes.

However, the literature showed that the Integrated Rural Development approach also had some shortcomings. According to Panopio et al. (1994: 319) the "lack of strong local institutions to carry on the projects," was a critical problem that sabotaged the success of this scheme. This related to the basic ideas in modernisation thinking that the technological and economic were the most crucial elements of development. These problems were similar to the lessons learned by the College in the other barangays before their extension programmes focused on Sibalew on 1983. The integration of the AEOP, FYDP and DAT-BAT programmes in Sibalew was patterned on the Integrated Rural Development Approach.
The College fulfilled the need for a strong local institution identified by Panopio et al. (1994). Despite the achievement of the College, the case study showed that the end results of integration of those three programmes in Sibalew was biased against the other barangays excluded from the extension programmes of the College. It means that inequality was an enduring issue which still needed critical attention when introducing of development programmes in rural barangays. Other related issues could be examined in the next national development programmes described below.

19.3.3 The Agricultural Development Programme for the Countryside

This programme was interrelated with the extension programmes of the College implemented in Sibalew, Feliciano and Linayasan in the mid 1980s. The Agricultural Development Programme for the Countryside was another approach initiated to deal with issues that the Integrated Rural Development scheme failed to address. The Agricultural Development Programme for the Countryside was similar in some respects to the integrated approach. Emphasizing self-help, claiming to be people-oriented, it was more concerned to be a grassroots participatory approach for rural development. The objectives were identical: "to improve the quality of life of the rural poor by putting up socio-economic projects, increasing farm productivity, improving their health and nutritional status, and involving the rural folk in projects" (Davide, 1991 cited in Panopio et al., 1994: 320).

In seeking those objectives, several examples of on-farm trials were initiated, and case studies conducted, using the integrated approach to produce schemes for sustainable agriculture, particularly in upland areas. The Sloping Agricultural Land Technology was an example of the upland farming methods introduced (Duma, 1996; Watson and Laquihon, 1993, 1989 and 1985; Laquihon, 1989; Montemayor, 1986). There were also demonstration farms and projects established throughout the regions, emphasising the concept of the self-help project, using a grassroots participatory approach in development (see Claydon, 1998; Sajese and Briones, 1996; Fujisaka, 1993a and 1993b; Tacio, 1993; Fujisaka and Wollenberg, 1991). However, many of these demonstration projects failed to provide what the locals and development agencies expected. Unequal distribution of land and assistance from various agencies were the critical issues that undermined
achieving successful results from the three development programmes, especially for the disadvantaged farmers.

In the Philippines, as well as the agrarian reform implemented a long time ago, unequal land distribution was one of the major problems that increased the gap between rich and poor farmers in rural barangays (see Angeles, 1999: Hirtz, 1998; Otsuka; 1996; Miclat-Toves and Lewis, 1995). Hertz (1998: 147-148) argued that the “land reform is a redistributive reform instead of a reform of social obligation... that a technocratic conceptualisation of land reform as distributive reform impels one to disregard tenurial complexities beyond an owner-tenant relationship.” Hertz (1998: 148) explained that “the assumption that all reform beneficiaries are equally receptive of, and compliant towards, the intended policy aims allows policy makers to conceptualise agrarian reform as an issue that can be solved basically with the redistribution of assets and no reform of complex underlying social relationships.”

In Mindanao northern of the Philippines, the study by Angeles (1999: 667) highlights some political impediments regarding the implementation of agrarian reform in this area. Angeles identified six elements that maintained oligarchic rule, despite differences in economic and social backgrounds:

(1) Establishment and maintenance of kinship networks, through intermarriages and non-kinship, ritual ties; (2) diversification into non-agricultural economic activities; (3) control of political parties and stage patronage (primary electoral) machinery; (4) cooperation or mobilization of political symbols, issues and movements. (Fifth) use of political power to obstruct progressive legislation, particularly on the land reform taxation; and (6) the strategic management of political violence (Angeles, 1999: 667).

Those problems were also similar to occurrences in the Aklan province. However, in Sibalew, Feliciano and Linayasan the findings of the case studies show that land distribution was not as pressing a problem as in other barangays. As mentioned in the Linayasan case study, the conflicting interest over land ownership between brothers and sisters as well as other relatives was the main tenurial issue affecting long-term investment in the land, and similar problems emerged in Sibalew and Feliciano. While some development projects did improve rural agricultural production, other projects were less effective than perhaps they could have been, as noted in the case studies in Sibalew, Feliciano and Linayasan. Limited funding and inconsistent policies by governments and
new administrations had created bureaucratic impediments for the ongoing programmes (see Angeles, 1999; Hirtz, 1998; Vitug, 1998).

Overall, the national development programmes described above have implications for the extension programmes of the College. The first implication was that the College’s extension policies were interrelated with the national agendas. The second implication was that the College’s extension procedures changed over time, based on the concepts and methods introduced to implement the national development programmes. The third implication was related to the limited resources of government which meant most of the national development programmes were foreign-sponsored. Access by the agricultural colleges to foreign aid was rigid and competitive with those colleges proclaiming their excellence most likely to attract it.

And finally, the last implication was the inconsistent policies of successive governments and constant changes to the administration led the College to be always realigning its extension programmes towards the interests of each new administration. Otherwise, the budget allocated by the national government for the College to run their extension programme would be affected. All of these aspects were crucial to the implementation of the extension programmes. In particular, the College’s access to the resources of government and foreign aid agencies were mediated through institutional alliances and political patronage.

19.4 Institutional Alliances in Development Projects

This section discusses the complex problems associated with institutional alliances, which was one of the critical elements in the extension programmes of the College. The major issue indicated in the literature was that the pitfalls of most government-sponsored programmes were interrelated with the complex problems of adherence to the rigid bureaucracies and political patronage to access external resources (see Angeles, 1999; EAAU, 1998; Hirtz, 1998; Otsuka, 1996; Miclat-Teves and Lewis, 1995). This issue was related to suggestions in the reports of EAAU (1998: 31) that the effectiveness of the bureaucratic system in the Philippines needed to improve. The EAAU (1998: 31) indicated:
Performance of the Philippines bureaucracy is patchy. During the 1970s, government economic technocrats became increasingly marginalised by vested interests and politically connected individuals seeking profit opportunities from the industrial protection system, monopoly and control of industries and expanded public investment. Political considerations, especially national election cycles strongly influenced government spending during the 1960s to the early 1980s (de Dios, 1984). In the late 1980s, broad public participation in government, the urgency of many reforms and numerous personnel changes in the bureaucracy contributed to policy uncertainty and weak program implementation (EAAU, 1998: 31).

This implies the nature of the political system and national policies of the Philippine Government have rigid bureaucracies and an unstable political structure that weaken the services of the development institutions. The role of development institutions has been crucial in the implementation of national policies and fulfilling interests of the linkage agencies. This issue was related to the complex problems experienced by the College in implementation of various national programmes in the case studies barangays. The findings of the case studies in Sibalew, Feliciano and Linayasan showed that the College's alliances with other government and non-government agencies were crucial and influenced the end results of extension programmes in these three barangays.

Further, the findings showed the connections with political leaders that existed within the social structure of the institutional system. The College's alliances with other agencies were crucial to their extension programme and allied functions in rural development. In fact, the College had a "pro-active role" in the development of technology and technology-transfer in Sibalew, Linayasan and other barangays. The pro-active role of the College was influenced by the conflicting elements of complex cultural practices and political patronage that prevailed in the social structure which tended to undermine the College's pro-active role and sometimes resulted in them "passively reacting to circumstances" (FAO, 1997, Part IV: 1).

Because the College tailored its actions to suit external interventions and/or political pressures the officials, staff and faculty of the College performed complicated roles when helping those involved in rural development projects. It was necessary for the College

73 In 1997, an FAO report indicated that the "challenge facing many universities over the next decade will be to move towards the third model, i.e. to take increasingly pro-active roles rather than passively reacting to circumstances" (FAO, 1997, Introduction Overview: 4).
staff to facilitate and accommodate programmes from various external agencies such as local, national, and international aid organisations. In addition to this burden, there was also an expectation of the College that it would implement the directives and policies from central government within their areas in agriculture, education and allied functions, consistent with the national interests of the country. To accomplish those tasks with limited resources and without alliances formed with other institutions would have been impossible. The College achieved success through the integration of various external programmes in Sibalew.

However, the case studies revealed that the success of Sibalew was not the end of the development. It does not mean that the problems were resolved in this barangay. Instead the social transformation that occurred created further levels and different types of problems that were revealed by the locals and these have been discussed in the case studies. There was mixed opinion about the comprehensive assistance received by Sibalew locals from the various linkage agencies of the College.

During fieldwork, for example, the interviews indicated that there were allegations from locals of other barangays, as well as from some dispirited local officials, against the College, to the effect that some staff involved in development projects had sip-sip, or collusion, with Sibalew locals. This was related to the large amount of assistance received by Sibalew locals and the preferences of the College were major issues raised in interviews. These were examples of institutional issues that needed to be taken into account by actors involved in extension programmes. The researcher argued that the allegations from dispirited locals described above, concerned the cultural practices of the College staff and Sibalew locals and alluded to the power relations that existed between both parties. The allegations were also manifestations of jealousy and this was associated with other issues such as power imbalances, gender differences when accessing services, control of resources, or political patronage. All those elements interacted and their interactions pervaded the social networks between College staff and locals in Sibalew, Feliciano, Linayasan and other barangays where demonstration projects were introduced.

This was especially true when the College used Sibalew as an example to promote development projects to other barangays, as well as when the College was attempting to secure funding from linkage agencies. Over fifteen years, the findings of the Sibalew
The case study showed that there were contradictions between what the College had achieved in Sibalew and the conception of development providing a better life for rural locals. The findings of the case study indicated that the social capital that was anchored in the local cultural values created unique power relations between Sibalew locals and the College staff. As a result, Sibalew dominated other barangays because it had acquired more assistance from the College. The established social networks that existed between College staff and Sibalew locals provided a means for the linkage agencies to link their programmes and assistance so that they could be implemented as part of the integrated development that occurred in Sibalew. However, the development that transpired in Sibalew became a contentious issue for locals of other barangays when they were not able to establish similar powerful relations with the College.

These issues mentioned above were linked to the complex problems caused by rapid changes in social and environmental conditions which the College faced. The effect of the reorganisation of departments and restructuring of policies of the College on the locals and other actors involved in their extension programmes was discussed in the Linayasan case study. In the interviews, the college staff and faculty members involved in the extension programmes acknowledged the complexity of implementing the various programmes introduced by the linkage agencies. The social structure of the College was open enough to accommodate issues and problems of locals had they wanted to present them at a higher level of decision-making. The pro-active role of the College was operated in an administrative structure tailored to withstand a certain amount of external pressure and political interference. However, the previous experience of the researcher showed that there were certain conditions and limitations for staff members involved at all levels of the organisational structure. The college staff and faculty members were required to perform their administrative functions and their technical skills within delineated areas of jurisdiction. Like other institutions, the functions and activities of the college staff and faculty members were guided by the mission statement and objectives which were directed toward the fulfilment of national goals for countryside development in the region. A major task performed by the staff and faculty, in their administrative, managerial, technical and academic work, was to adhere to the principles contained within the mission statement of the College.
An example was the introduction of demonstration farms in Sibalew, Feliciano and Linayasan. The College needed cooperation and backing from institutional alliances with other government agencies, as well as the support of local people. Developing and evolving institutions, such as the College, were also confronted with issues of a political nature that needed diplomacy and tact to sensitively resolve. Those sorts of issues tended to complicate the concerns that already existed within the context of the programmes. The diplomatic approach required in dealing with the complex administrative problems and bureaucratic procedures often depended on the principles of conformity, reciprocity and subservience. The impact of social interaction between locals, college staff and faculty and the actors from linkage agencies, which developed mutual engagement in both parties or ‘social capital’ discussed in the Sibalew case study as an example related to this issue.

The institutional complexities described above prevailed amongst college staff and faculty members involved in the extension programmes. The previous experience of the researcher showed that through the economic necessity of earning a living, power inequalities occur when individuals attempt to access or control opportunities from the government. The staff and faculty were familiar with many of the problems. The tasks, relationships and interests of the staff and faculty in the College became increasingly complex and their social, cultural and moral obligations to their families became more difficult. Such issues influenced their concerns when reporting on actual situations that happened in the field. At the same time, staff members at higher administrative levels were required to uphold government policies as well as to execute the institutional alliances of the College with other agencies. They were duty-bound to work toward the fulfilment of the interests of the same central government that determined the budget allocated to the College. At the same time, promotion and salary increases for employees depended on the financial well-being of the College.

On the subject of low-ranked staff, the researcher had learned through previous experience that there were contradictions in the duties of extension staff. Low salaries, limited power and inadequate training led to depressed staff fulfilling tasks and cultural obligations. Consequently, the extension agents experienced difficulties in the effective performance of their functions although they worked to uphold the reputation and interests of the College, and conscientiously performed the work prescribed by the
national policies of the government. The extension staff and faculty members were on differentiated pay scales and there were marked differences in salary between staff members. There existed some insecurity of tenure for their positions. Most staff received a relatively low income and some were in economic difficulty due to the continuous devaluation of the national peso. Their individual difficulties created feelings of stress and disappointment. They felt that although they had worked hard in the field, their efforts were not valued or acknowledged by promotions, which was the only way they could increase their salaries.

Generally, a lack of contentment existed within the social structure because of the inability to acquire advertised or highly regarded consumer possessions. Materialistic values were drastically altering the Filipino way of life in the new and modern society. These two elements, the lack of contentment and the values of materialism undermined cherished cultural values in all social and cultural relationships. These elements added complications to the standard criteria and policies of the government in the promotion of individual staff and faculty members. The criteria were based on academic achievement and performance, including documented attendance at conferences or training at local and national levels. The criteria were even more rigidly applied to those abroad. Because of such issues, some members of the staff felt neglected or frustrated. This had developed because of their dissatisfaction with fluctuating economic conditions. They considered that they had fulfilled their tasks for the government. They had also fulfilled their social, cultural and moral obligations toward their families within the national policies of the government in the wider context of Filipino society. But they still insisted their efforts had not been acknowledged to the degree that they felt they should have been.

In sum, this section shows that the institutional alliances of the College with their linkage agencies were interrelated with the hierarchal structure of institutions and administrative procedures that implied the College had limited autonomy. The College was commissioned to operate a learning institution in the region that complemented the development agenda of the national government. The alliances strengthened bureaucracy and the power relation of the College with other agencies. Subsequently, the ‘top-down’ approach remained the common procedure. This approach involved centralised power and control of resources to maintain institutional alliances. Conversely, this also affected higher-level management’s direct actions to resolve problems at the local level, and even
in the written project reports and previous studies, where this would have been a major concern, these controversial issues were often not acknowledged. The reports were not as useful as they could have been when describing the actual experience of the locals involved in the projects. The variables described in most written project reports and previous studies reviewed were instead produced in such a manner that they were consistent with the programmes and objectives of the government at the local level.

The findings of the case studies described above provided an empirical account related to the argument of Eponou (1993: 17) who suggested that the “weak links between research and technology transfer are often blamed on the structure and organization of the agricultural research system”. If the College had enough money for research, and processes for feeding results into their extension programmes, the schemes would meet people’s needs more effectively. Eponou (1993: 30) suggested the “[l]inkages between researchers, farmers, and the technology transfer are built into the model because all tasks are done collaboratively”. However, Eponou (1993) argued that “their effectiveness depends on the quality of human resources involved”. In concert with this, the participation of locals in the development projects needed evaluation in order to address the issues suggested by Eponou in the context of the extension programmes of the College.

19.5 Participation and the Development Projects

This section discusses the cultural and political factors that influenced participation in extension programmes of the College. The findings of the case studies revealed that the availability of external resources, leadership styles of barangay officials and the cultural practices of locals influenced the degree of participation by the actors involved in the extension programmes. The actors involved in the extension programmes have common cultural values, but how they interacted in certain circumstances was different. The previous national programmes’ failure to address local problems such as biased distribution of assistance was a crucial issue in a participatory development approach. There were contradictions concerning how participation was being used in the extension programmes and its main purpose as described in the literature.
In this section, the discussion is in agreement with the suggestions in the literature that local knowledge should be recognised and institutionalised by the development agencies to achieve sustainable development of projects (see Blackburn and Holland, 1998; Thompson, 1998; Scoones and Thompson, 1994; Cohen and Uphoff, 1980). The discussion relates to the arguments of various authors about the issues of power relations between actors involved in participatory development programmes (see Michener, 1998; Thompson, 1995; Pretty, 1995; Cohen and Uphoff, 1980). It also links findings of the case studies to the arguments of other authors emphasising the ‘putting people first’ approach was an ideal tool for rural development programmes (Cernea, 1991; Chambers et al., 1989; Chambers, 1988 and 1983). This approach provides an opportunity for the locals to participate at all stages of the development projects (Cernea, 1991; Kottak, 1991). Blackburn (1998: 168) argued that the “institutionalization of participation does not depend only on exogenous policy factors.” He emphasised that “it also involves changing the organizational characteristics of development organizations, whatever their size and specific merit” (Blackburn, 1998: 168). The interactions between barangay officials, locals, extension staff, faculty and student agents involved in the establishment of the demonstration farms described in the Sibalew and Feliciano case studies have clarified these issues.

As described in the earlier sections of this chapter, the findings of the case studies revealed that the problems associated with the downward procedures that are practiced in the diffusion model, hindered also upward processes in the ‘putting people first’ approach that the College has been attempting to promote in their extension programmes for almost fifteen years. The findings of the case studies suggest that the authentic participation of locals in development projects has been difficult to achieve in the extension programmes of the College. The actors involved in extension actively participated in the early stage in establishment of demonstration farms, but not in the decision-making processes.

In the Sibalew and Linayasan case studies, for example, accounts by various actors indicated that there were social, cultural, political and technological factors that persisted within the social structure of the barangays and the culture of College, which caused the system to operate in a conservative manner. This resistance to change was observed especially in Sibalew, over a considerable period, throughout development processes in
this barangay. The case studies indicated that the intricate problems described by Sibalew locals who relinquished their authentic participation in various development programmes introduced by the College, were different from those major issues raised by locals in Feliciano and Linayasan regarding their reluctance and lack of commitment to the demonstration projects in their barangay.

In Sibalew, the investment of the massive amount of financial and technical assistance provided by the College over fifteen years was brought about by the leadership style of the barangay officials. The leadership style of Sibalew officials was able to establish considerable ‘social capital’ by uniting barangay locals in support of the various programmes introduced by the College. This ‘social capital’ was the driving force which enabled the acquisition of large amounts of financial assistance from external agencies. Despite the success of the Sibalew locals and the College in securing funding from their linkages, the authentic participation of locals in their development programmes was not achieved. The participation by locals was enhanced by the large amount of financial and technical assistance due to the privileges and benefits of the programmes. Pretty (1995: 1252) considers this form of participation is determined by the “material incentives.”

In the literature, El-Ghannam (1995) and Rossing and Howard (1994) emphasised the critical role of local leaders for the success of development programmes introduced in their barangays. In relation to this issue, it was apparent from the accounts of various actors, and from observations, that Sibalew had inherent features that were markedly different from Linayasan that influenced the degree of participation by locals in the demonstration projects. The findings of the case studies revealed that the styles of leadership of barangay officials in the three case study barangays were different. Rossing and Howard (1994) emphasised that effective leadership in the community was directly related to access to power, but this was a critical issue that needed to be addressed, otherwise this could lead to unequal distribution of assistance across the local social structure. Cornwall et al. (1994: 122) argued that the importance of training to recognise the political and personal dimensions of agricultural development needed to be addressed in extension programmes. In regards to this suggestion the Sibalew case study shows that the strong leadership and commitment of local officials led to coalitions of various interests between barangay locals, the college staff and the faculty members involved in projects. On the other hand, the diverse social structure and the various sources of
income that existed in Linayasan were difficulties that the barangay officials had to overcome in order to consolidate the participation necessary for demonstration projects. This was also similar to the arguments described by barangay officials in Feliciano in the interviews.

This issue was related to the suggestions of Cornwall *et al.* (1994: 112) who suggested that in creating new directions for agricultural research and extension, the “[d]iversity within rural communities and among external agents needs to be addressed, by recognizing that different actors hold different versions of knowledge. Issues of power, control and conflict will need to be considered”. Cornwall *et al.*’s suggestion indicated that Sibalew, Feliciano and Linayasan required an individual approach for the most effective and successful development. It also implied that the passive participation of Linayasan locals in the establishment of the demonstration projects came about because various sources of income existed in the barangay that provided an option for the subsistence of locals. Another reason raised by the farmer co-operators was that the projects failed to provide enough income for their families. The farmer co-operators were reluctant to work on their projects without an income. Many refused to wait for three years to get a return from their fruit trees. The existing sources of income and the time for the maturation of crops in the project hindered the participation of Linayasan locals.

An example of this discussed in the case studies, was that the farmer co-operators or the locals of barangays of Sibalew, Feliciano and Linayasan as a whole did not have enough power when difficulties were encountered in their projects, to effectively voice their concerns. One major reason often revealed in the interviews and group discussion, was that locals wished to avoid unpleasant relationships with the extension staff and faculty members involved in demonstration farms. This was a cultural issue within the participation process directly related to reciprocity between the farmer co-operators, extension staff and college faculty members involved. Both parties often failed to mention critical issues to the higher authorities for consideration in the decision-making process.

The ‘insider’ and ‘outsider’ roles of the author of this thesis provided an in-depth view of these issues, especially examination of the interaction of locals, barangay officials with extension staff and the college faculty members involved when demonstration farms
were established in Sibalew, Feliciano and Linayasan. Similar issues were noted during the fieldwork when group discussions and individual interviews were conducted. Locals avoided raising their difficulties in maintaining social relationships with extension staff to get support from the College for continuous assistance from their linkage agencies. This issue was related to the practices of personalism, particularism, and non-rationalism described by Hunt et al. (1997), Espiritu (1995 and 1989) and Panopio et al. (1994) who said these cultural elements could enhance or hinder development. Traditional cultural values of locals were crucial in extension programmes. They influenced the social actions of locals and social relationships with extension staff and faculty and other actors involved in the extension programmes.

The findings of the Linayasan case study showed that the complications of the work of farmer co-operators in the projects, as well as their livelihood activities outside farming, in trading businesses and such like, also affected their desire to engage in the projects. The social functions and cultural obligations of farmer co-operators, for their extended families within and outside the barangays, made them reluctant to provide their full support to ensure the success of the demonstration farms in this barangay. The major problem in Sibalew, Feliciano and Linayasan was the lack of mechanisms that allowed the locals to participate in the development by evaluating the demonstration projects that had been introduced to them.

Another example was the integration of various programmes in Sibalew. The previous studies and project reports reviewed indicated that the integration of various programmes enhanced active participation of Sibalew locals in the extension programmes of the College (Aguilar, 1995; 1989a and 1989b; Agustin 1990 and 1982; Quintana, 1989; Montemayor, 1986). This was related to the arguments of White (1996: 8) who argued that this form of participation described was an “instrumental participation” that serves the efficiency interests of the “outside funders” rather than the interests of locals. White explained that the labour of locals was taken as ‘local counterpart funds,’ which guarantee the people’s commitment to the project (White, 1996: 8). White claimed that “the funders’ input can be limited to financing raw materials, and the programme can therefore be far more cost-effective.” In these cases, White argued that participation was used instrumentally, “rather than valued in itself,” and functioned “as a means to achieve
cost-effectiveness”, for development agencies and as “a local facility” for the benefit of the implementers (White, 1996: 8).

An example related to issues about power relations in participation described in the literature was the account from barangay officials discussed in the Sibalew case study. The barangay officials claimed that the Sibalew locals were ‘good catchers’ of the programmes and projects introduced by the College to their barangay. This meant that the Sibalew locals were aware of what the College wanted to achieve and the advantages the programmes could provide to their barangay. Further, the power relation could be traced from the interactions between the locals, extension staff and faculty in the DAT-BAT programme that were also discussed in the Sibalew case study. It showed that through this programme, children of Sibalew farmers enrolled in this course. Their classes and laboratory activities were held in Sibalew to allow them to establish their projects on the land of their parents. In this manner, the parents also learned while they were working together with their children. On the other hand, the College assumed that through this approach children, their parents and other family members would participate in the establishment of income-generating projects with students.

As a result of participation in such projects the students expected to become self-employed after graduation. Under the DAT-BAT programme, it was also expected that through such an approach the College would be able to provide education to the locals and establish other projects, which the students could be employed in, thus minimising migration from rural to urban areas. Despite the College’s achievement in introducing the DAT-BAT programme in Sibalew, the findings of the case study revealed that the interim results of this programme contradicted the concept of participation by students and their parents in real situations. Imbalanced power relations and the different expectations of the students and their parents, extension staff and faculty influenced results of the income-generating projects of the students. These issues were related to the complexity in participation that the various authors suggested needed to be addressed in the development processes (see Chambers, 1997; Blackburn and Holland, 1998; Eponou, 1993; Dudley, 1993; Wignaraja et al., 1991).

The Sibalew case study revealed that the ideology that prevailed and the strategies applied in lectures, in the DAT-BAT programme in Sibalew, caused a reversion to
conventional methods in practice. This indicated that there was an interaction between the actors involved, the effect of which was a communication breakdown between instructors and students and also in the parent’s relationship to the programmes. During their classes, the instructors were considered the major sources of information, while the students and their parents were the learners. This implied that unequal power relations existed between instructors, students and the parents.

This illustrates how the system operates in real situations and suggests how the participation of locals in all stages of development might fail to be achieved. While the College achieved a ‘model barangay’ in technology-transfer, the replication of the integration of various external programmes and resources in Sibalew could not be achieved in other barangays, unless large amounts of funding and similar periods of time were also provided. Providing a package of programmes with a large amount of funding could be a useful means for the College to facilitate the participation of locals in the introduction of projects. However, the finding of the case study revealed that the application of ‘model farms’ such as the demonstration farms established in Sibalew, still needed to be examined, to develop new programmes that were appropriate for the geographical and climatic conditions. The new scheme should be consistent with the diverse social structure of the barangay, which would provide the chance for all locals to participate in development processes. In other words, funding was necessary to implement the programmes, but the programmes needed to be readjusted to suit the cultural practices and sociopolitical conditions of other barangays as well (see Michener, 1998, Thompson, 1998, White, 1996; Cohen and Uphoff, 1980).

The finding of the case studies revealed that the farmer co-operators actively provided free labour to establish the demonstration projects, but they had limited participation in the monitoring and evaluating their projects. The actors involved in the extension programmes have different levels of knowledge and diverse interests. There are issues of power and control over access to the benefits of projects. In particular, the limited opportunities for farmer co-operators to raise problems encountered in managing their projects the cultural and political practices of locals. This issue was related to the intergenerational problems that hindered the participation of locals, especially in monitoring and evaluating of development projects. The intergenerational issues referred to, were interrelated with issues raised by various authors in the literature regarding
gender equality, unequal power to access and control resources amongst the locals, and the unequal distribution of the benefits of projects across the social structure of barangay. It means that cultural practices of locals intertwined with their participation in the extension programmes of the College.

These issues were also interrelated with other issues that caused the failure of the three national programmes discussed earlier to close the gap between rich and poor in rural areas. The unequal distribution of national development programmes has had an enduring effect on the sociocultural and political practices of locals. As well, it influenced the College's extension policies and strategies. The literature shows that the culture of Filipinos influenced the long-term acceptance of locals of the development programmes (Espiritu et al., 1995). This could be observed from differences in values, behaviours, norms, beliefs, attitudes and interests of actors involved in the extension programmes of this College. Further, the literature suggests that some of these cultural traits of Filipinos enhance development, but others such as extreme forms of reciprocity can hinder development. This issue was also emphasised in the works by Hunt et al. (1997), Panopio et al. (1994) and Garcia (1994).

In reality, the findings of this thesis revealed that the practice of those cultural elements mentioned above was increasingly complicated by the urban lifestyle in Sibalew and Linayasan, where values, behaviours, attitudes, interests and economic activities of locals and actors involved in the extension programmes were directly related to modern social practices. The researcher observed the differences in cultural values and behaviour that were exhibited by the locals, particularly the elders and the young, when they interacted and shared their opinions and ideas during group discussions, meetings, interviews and other social activities they attended in Sibalew, Feliciano and Linayasan.

Gender inequality such as difficulties of access and control of resources, and the different livelihood activities of men and women discussed in the Sibalew and Linayasan case studies, were all issues across generations and showed that the entrenched Filipino patriarchy has not changed much at all. Over three decades this issue became a problem between elders who wanted to preserve the traditional way of life and those young people who wanted to adopt modern values or technologies. Related to this, the case studies revealed that in Sibalew the College conducted a general survey in 1983, but the
issue of gender inequality was not included in the survey. In particular, the issues related to gender power relations, such as who controlled the household resources, and the advantages and disadvantages experienced by men compared to women when accessing services from the government and other agencies, were not presented. This was because in 1983 the main focus of the College was the introduction of new farming methods to increase farm productivity. Gender was not a major issue when the demonstration projects were initiated in Sibalew. It was the same in Linayasan when the staff of the Extension and Rural Development Services Centre conducted a general survey in 1998. This survey also did not cover social inequality and problems between men and women in agricultural production, especially gender issues in farming, fishing and trading businesses in Linayasan. Past failure of the national programmes makes people less keen to participate in the extension programmes of the College. An example of this was the problem described by barangay officials of Linayasan in the 1970s regarding the rehabilitation of coconut plantations. The Sibalew case has countered this issue.

The researcher observed similar problems to those mentioned above when his Participatory Rural Appraisal was conducted in Sibalew, Feliciano and Linayasan. Imbalance in the powers of participants such as differences in ages, levels of education and economic background were noted that determined the degree of participation of individuals during the group discussions. These problems hindered participants from discussing their ideas and opinions, despite the findings that Participatory Rural Appraisal was a powerful method that allowed locals to discuss the difficulties, issues and problems they encountered in their projects (see Chambers 1992a; Cernea, 1991). The researcher felt that particular cultural and ethical issues interfered with the expected outcomes of interviews, group discussions and other activities with the locals and other actors involved. As the fieldwork proceeded, the researcher noted that there was an attitude of inferiority amongst participants, perhaps because of their lack of education, the unequal power relations that existed between interviewer and interviewee, and their guilty consciences over their neglect of particular cultural practices. Political alliances and utang na loob or reciprocity were also examples of problems experienced by all generations, often mentioned in the interviews and group discussions with locals and other actors involved.
Similar issues were uncovered when the researcher conducted observations in the barangay council meetings and at the formal and informal social gatherings attended in Sibalew, Feliciano and Linayasan. Power relations and politics were major issues that prevented the powerless officials from voicing their ideas and opinions in the group discussions. The findings of the case studies indicated that the persistence of utang na loob became a form of social control. The principle of utang na loob was very closely connected to other sociocultural practices that were outlined above by Espiritu (1995: 66).74 Hunt et al. (1997: 90) argued that when utang na loob was abused, it became a burden and hindrance to the freedom of decisions. In the case studies, one issue raised by different groups of locals that contradicted what the College has expected from development was the way the benefits of development were distributed across the social structure. The locals felt to raise such an issue may have embarrassed other staff and faculty involved in extension programmes.

Overall, the findings of the case studies suggest that the local cultural values and participation was intertwined in the extension programmes. The past failure of national programmes led to uncertainties and conditions were not conducive for authentic participation. This circumstance involved serious ethical issues that need to be taken into the consideration by higher authorities in central government as they have an adverse affect on social relationships between the locals, extension staff and faculty members involved in extension programmes. Related to this issue, it could also prove interesting to relate findings of the case studies to a previous report of the FAO (1997) “Issues and opportunities for agricultural education and training in the 1990s and beyond” which will be discussed in the next section.

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74 Espiritu (1989: 66) outlined eight Filipino cultural values that needed to be acknowledged to ensure success for the development of rural areas. These included paggalang, respect for elders; paginamay-ari, property ownership; pakikisama, a concept of good public relations; bahala na, I don’t care; pagwawalang bahala, a lack of responsibility; hiya, shame; machismo, masculinity or male supremacy; and finally the pakikipagkapwa-tao or concern for others (Espiritu, 1989: 66).
19.6 Findings of Case Studies Related to the Food and Agricultural Organisation’s Views about the Agricultural Institutions in the Philippines

This section relates to the lessons learned from the case studies about the issues and complex problems associated with the College’s extension programmes to the suggestions in the reports of FAO (1997). In developing countries, including the Philippines, this report indicated that the “agricultural education and training failed to adapt and respond to the realities of rural societies” which included rapid changes in social and natural environmental conditions (FAO, 1997, Introduction Overview: 1).

In the case of the Philippines, the FAO report showed that the agricultural education system in this country “generally lacks quality and relevance due to the rapid proliferation in the number of institutions and expansion of enrolment.” It claimed that this was a result of unplanned growth, coupled with financial constraints and a shortage of qualified teachers, which meant the institutions tended to be standard, overcrowded and under-equipped (FAO, 1997, Introduction Overview: 4). Consequently, the report further indicated that the graduates produced were usually poorly trained and had difficulty qualifying for employment in their respective fields. The one exception was the College of Agriculture of Los Baños where most graduates were employed in their field of study.

The FAO makes the point that “the extension methodology portion of the curricula and programmes of study of many agricultural education institutions is inadequate and in need of review and revision to make it more relevant to current needs” (FAO, 1997, Introduction: 4). The FAO report suggested:

To effectively address agricultural and rural development problems, curriculum content needs to be applied rather than theoretical. Learning needs to emphasize inductive reasoning so that the students can interpret problems and devise solutions. Furthermore, curricular revisions need to take into account a number of factors – the decline in public sector employment, the deterioration of the natural environment and the changes in the roles and responsibilities of women (FAO, 1997, Introduction Overview: 4).
The FAO report stressed that agricultural education institutions need to incorporate sustainable development issues in their curricula, suggesting that a holistic approach should be applied when incorporating the concept of environmental and sustainable development, "not only to technological concerns, but also to economic, social, cultural, ecological, and public policy matters" (FAO, 1997, Part 1: 3).

In the literature, a holistic approach was used in many studies as a powerful tool to identify local needs and articulate complex problems in a wider context. This was because development had been viewed as a "multidimensional process" that involved major changes in social structure that affected values and attitudes, modification of policies, improvement of economic growth, the reduction of inequality and the reduction of the persistence of absolute poverty (Sierra, 1989: 13). It is implied that the holistic approach has been often used to define programmes and strategies to address existing issues and systemic problems of the country as a whole, instead of addressing the needs of locals directly.

In this thesis, the findings of the case studies proved that the application of this particular version of the holistic approach was problematic in actual situations. This was because the Sibalew, Feliciano and Linayasan barangays were administered by local officials with different leadership styles. These three barangays have different potentials for development and were at different stages of transformation and their economic growth was also different. This suggested that the existing problems of locals in these three barangays could not be generalised. However, the findings of the case studies revealed that the cultural practices, political uncertainties and the institutional alliances of the College with linkage agencies are unsolved problems left from old programmes that need to be considered in the extension programmes of the College before the optimistic suggestions in FAO report could be fulfilled. These old national development

75 Through a holistic approach, the FAO report expected that: "it will necessitate a change in attitudes, practices, goals and resource allocations. In particular, an open-mindedness and willingness to innovate should be fostered with attention paid to bringing in all participant groups (students, men and women farmers, agri-businessmen, researchers, youth and others) at all relevant levels (local, regional, national and international). There is a growing belief that one of the more effective means of protecting the environment and agricultural resources is to empower local people and others directly involved in the management of natural resources to make their own analysis and decisions of what should be done" (FAO, 1997, Overview: 3).
programmes, discussed in previous sections, have residual effects in the rural barangays and also have influenced the extension methods of the College. This issue was often ignored in the development process.

Related to this was the National Agricultural Education System described by FAO in their report. The National Agricultural Education System was a macroplan that was expected to address the ineffectiveness of the agricultural education system, by providing programmes specially designed to increase agricultural production in the rural areas throughout the Philippines. This macroplan was to work through “stratification and differentiation of the rules of agricultural institutions as centres of excellence as well as collaboration among them” (FAO, 1997, Part I: 4).

In this thesis, the previous experience of the researcher showed that the result of this macroplan was to tighten the system and the bureaucratic procedures to be followed by the different agricultural institutions. This was expected to produce excellent results from the various programmes in their respective regions based on the interest of central government. However, many problems were brought about by this macroplan at the institutional level, for instance the impacts on employees were often ignored. There were complex problems existing in particular institutions like the extension programmes of Aklan State College of Agriculture that need specific attention, such as limitations of funding, administrative issues such as access, and control of external and internal resources.

The National Agricultural Education System macroplan has good features, but it has also some problems in actual situations. An example of this was the Aklan State College of Agriculture was converted into a State College as part of the implementation of the macroplan. This College was converted into a State College in 1992, and was recognised as the best academic learning institution in Aklan province, especially in the field of agriculture and allied disciplines. The conversion resulted in the restructuring of all programmes and administrative systems. Existing policies were changed to expand the coverage of the services. The change to the new system created higher expectations by staff, faculties and locals in barangays, and especially those who were disadvantaged. They were expecting technical as well as financial assistance from the extension programmes of the College. The change of management in the extension programmes
provided new directions and strategies to follow the concepts of the grassroots approach, using a non-formal education programme as a strategy for addressing the needs of disadvantaged families. However, as detailed previously in the Linayasan case study, there were problems in implementing this new approach.

Colleges and Universities throughout the country have had administrators with different leadership styles controlling their programmes and implementing governmental policies. Each institution had particular problems, which constrained their administrative outcomes. For this reason, creating a new system such as the macroplan without relating it to the local historical situation including the culture of the institution, added complexity for the management and increased pressure on the staff. As this thesis has shown, many old problems that were revealed by previous experience, and which were expected to be resolved when the new system was introduced, were neglected.

Further, the stratification and differentiation of agricultural education institutions into different categories, from national, to regional, and to provincial level as part of the macroplan, also created isolation. The impact of the conversion of the College on staff and faculty described in previous sections was an example. There were many differences in these three levels of categorisation of agricultural education institutions. There were considerable variations in budget allocations from central government, to national, regional and provincial levels. The colleges were different, the salaries of employees varied greatly, and the coverage of their development programmes was also different. Isolation reduced the potential of those institutions which did not qualify for higher status categories. It also demoralised those involved in instruction, research and extension programmes who did not have access to the opportunities provided under new systems. The previous experience of the author of this thesis showed that this was particularly true of those personnel in agricultural education institutions which belonged in the lower category. This was the case for the staff of provincial agricultural institutions that have limited resources.

For example, the University of the Philippines in Los Baños received higher recognition in the field of agriculture from the national government and most of the foreign aid for research and development projects was focused on this institution. This implied that stratification amongst institutions presented the opportunity to increase the institutional
hierarchy further so that funding and foreign grants were likely to be channelled to those institutions proclaiming excellence. At the local level, this was similar to the integration of grants and assistance in Sibalew from various development agencies discussed in the case study of this thesis. The integration of various programmes provided advantages for the economic growth of Sibalew and the development of the College. However, many barangays failed to access the grants and assistance from the College and their linkage agencies. This contradicts the intrinsic meaning of the terms ‘holistic’ and ‘development’ as indicated in the reports of the FAO (1997, Introduction Overview: 3).

The FAO report outlined seven areas related to, and applicable to the Aklan State College of Agriculture to integrate their research, teaching and extension functions. These seven areas included addressing changes of focus (1) from production to productivity (2) from immediate needs to long-term sustainability (3) from disciplinary to interdisciplinary teaching and research (4) from a commodities to a system focus (5) from reactive to a pro-active organisation (6) from hierarchical organisations to participatory ones, and (7) from agricultural universities to universities for rural development (FAO, 1997, Part IV: 1).

These seven areas were similar to what the College had expected to achieve through its extension effort, particularly in Sibalew where it established a model barangay to trickle down the agricultural technologies and to promote economic development in the other barangays. After fifteen years of College assistance in Sibalew the agricultural production of locals was improved. Values, behaviours and attitudes of Sibalew locals changed. Sibalew locals have a better understanding about their immediate needs and knowledge regarding the long-term sustainability of their farming, especially in orchard plantations. Awareness of Sibalew locals about new technologies and consequences of economic development for their traditional cultural practices and natural environment also improved. At the College the social network of faculty and staff with locals was established. The institutional alliance of the College with their linkage agencies was strengthened. The College also adopted an interdisciplinary team-approach in teaching and their extension activities to promote grassroots participatory development through their extension programmes. All these were interrelated with the institutional role of the College.
The thesis shows that the institutional role of the College with its linkages, the cultural practices, and political patronage that existed in the social structure contributed to the outcome of the extension programmes in the barangay. An example of this was the way the institutional alliances of the College with their linkages provided an opportunity for Sibalew officials and staff to secure and facilitate additional improvements for their barangay. The Japanese International Cooperation Agency, for example, which funded the improved water system in Sibalew, was a case in point. A Japanese volunteer and a College staff member initiated a plan to increase the capacity of the existing water system, in consultation with locals. Through the Japanese volunteer, the College endorsed and processed the project plan to the Japanese International Cooperation Agency, which provided a grant for the construction. Another example was the Rice Mill Project that eventuated through a proposal by an American Peace Corp Volunteer. The Sibalew locals were consulted to provide necessary information to justify the assistance for their barangay.

However, how this system operated between Sibalew and the College would be different from other agricultural institutions. The Sibalew and Linayasan case studies showed that the complex cultural and political practices that existed in the social structure within and outside the barangays, and the political environment, interfered with the strategies, procedures and policies of the central government. The interference could enhance or subvert the main purpose of the College and their extension programmes, depending on the situations and the administrative procedures, as well as the leadership style of barangay officials and alliances of locals with other actors involved in the extension programmes.

Finally, the findings of the case studies of this thesis illustrated examples of social, economic, cultural and political issues associated with the extension programmes of the College and their critical role in rural development. The FAO recommends the Colleges make their extension methods and curricula more relevant to the current needs of locals, especially in addressing complex problems that this College is facing in the rapid changes in social and environmental conditions in the Philippines.
19.7 Summary

The findings of the case studies and comparison with the other development programmes examined in the literature that were introduced during the past decades in rural barangays were discussed in this chapter. In particular, the importance of the diffusion model and the 'putting people first' approach in the extension programmes of the College was evaluated. The evaluation shows that the diffusion model remained dominant over the 'putting people first' approach that the College had been promoting through their extension programmes for over fifteen years from 1983 to 1998. The basic concepts and methods used in the extension programmes of the College were drawn from the diffusion model. Through the national slogan in the mid 1980s the 'putting people first' approach was introduced to promote grassroots participatory approach using participation and empowerment of locals as a key elements for development programmes to be successful.

However, the terms of participation and empowerment were superficially applied fulfilling national policies. As indicated in the literature this issue was related to the rules and interests of foreign aid institutions which were sponsoring a grassroots participatory approach in development. The literature indicated that this led to the dependency that had been a critical problem of the unrealistic national policies. Conversely, associated issues in the 'top-down' procedures practiced using the diffusion model also hindered the 'bottom-up' processes in the 'putting people first' approach and both approaches were problematic in actual situations. This means that the participation of locals and voicing of their problems in all stages of development projects has been difficult to achieve, as revealed in the findings of the case studies. The participation of locals in the extension programmes of the College was connected to the funding processes of demonstration farms introduced in Sibalew, Feliciano and Linayasan.

The national provision of packages of development assistance and establishment of demonstration farms were drawn from the western theories in the diffusion model. The basic concepts in the technology and economy-driven extension methods and policies of the College were drawn from the diffusion model. This model ignored the importance of the traditional cultural and political practices of locals that were crucial to the development processes. The assumptions were that the introduction of new farming technologies and provision of loans and technical assistance would enhance local
livelihood projects. As well, it assumed that provision of packages of assistance would improve the earning-capacity of locals and the benefits from the technological and economic development would trickle down to disadvantaged locals in Sibalew, Feliciano and Linayasan.

However, the unequal distribution of benefits from demonstration farms was the critical issue, which was surrounded with cultural, political and technological factors, as well as intergenerational issues that influenced the selection of demonstration farm beneficiaries by the College. There were intergenerational issues related to power relations between old and young people in changing traditional to modern farming methods. There were issues concerning cultural and political practices between those barangay officials who have had power and the powerless, who had limited access to the services and assistance of development agencies. There were arguments over the achievement of the College in Sibalew. The College had developed Sibalew from a backward to a 'model' barangay through technology-transfer for over fifteen years. However, the replication of the integration of various external programmes and resources in Sibalew could not be achieved in other barangays, unless large amounts of funding and similar periods of time were also provided.

Overall, the extension programmes of the College in these three barangays were interrelated with the national policies promoting the Green Revolution, Integrated Rural Development Scheme and the Countryside Agricultural Development Projects in other barangays. The benefits of development brought about by those development programmes were biased. The unequal allocation of assistance or resources was a critical issue among agricultural institutions implementing the national programmes for rural development. As well, biased distribution of assistance across the local social and economic structures was problematic in the extension programmes of the College.

Unequal land distribution, imbalance in access and control of local resources and cultural practices such as jealousy were related to unequal distribution of assistance in the three barangays. As well, political patronage within development projects was a complex problem associated with the implementation of the extension programmes of the College. There were problems noted in other national development programmes examined in the literature such as gender inequality, different livelihood activities of men and women and
the lack of strong local institutions to carry on the projects. These were all problems that were revealed in the case studies, affecting the degree of participation of locals in the extension programmes of the College.

The literature suggested that local knowledge and participation of locals should be institutionalised by the development agencies to achieve sustainable development of projects. The coalitions and alliances between locals and the college staff and faculty members involved in the extension programmes helped the College secure funding assistance from their linkage agencies over a long period for Sibalew while other barangays had limited opportunity to access development assistance. The study of social relationships between the College and Sibalew revealed that the authentic participation of Sibalew locals was undermined by the benefits from grants, materials and technical assistance provided by the linkage agencies. Institutional alliances and issues of accountability were critical factors in the success of the College’s integration of their external programmes and development assistance in Sibalew. The leadership style of barangay officials and strong commitment of the locals to the extension programmes were linked to the institutional alliances of the College to the other development agencies.

The case studies revealed that there was a contradiction in the implementation of various programmes in fulfilling national policies which claimed to adopt a grassroots participatory approach. The literature suggested that the locals should be involved in all stages in the development of projects. The findings of the case studies emphasised that issues of power and control of external resources were crucial and needed to be addressed by allowing locals to voice their concerns in the decision-making processes.

In the Sibalew case, for example, despite the long period of extension services of the College, Sibalew locals did not have full freedom in voicing their realities in actual situations as shown in the case studies. Similar circumstances happened in Feliciano and Linayasan. The Linayasan locals have limited participation in monitoring and evaluation of the demonstration farms. Power relations and the mutual agreements established between the actors involved in the extension programmes and the influence of the outside economy and political interventions prevented locals raising their critical feedback about the projects. This was similar situation faced the college staff and faculty members
involved in the extension programmes. They were cultural practices and political pressures. Staff had to uphold the interests of a central government that determined the funding of the College. Promotion and salary increases for employees depended on the financial well being of the College. These issues prevented the extension staff and college faculty from providing better extension services, especially to the disadvantaged, in the case study barangays.

The Food and Agricultural Organisation report indicated that the extension methodology portion of the curricula and programmes of study of many agricultural education institutions was inadequate, suggesting that this needed to be reviewed to make it more relevant to the current needs of agricultural institutions. They had to address complex problems related to the rapid changes in the social and environmental condition of the country. The report outlined seven areas relevant to the current needs of agricultural institutions, which should change from production to productivity; from immediate needs to long-term sustainability; from disciplinary to interdisciplinary teaching and research; from commodities to a system focus; from reactive to pro-active organisation; from hierarchical organisations to participatory ones; and from agricultural universities to universities for rural development. These seven areas described above were interrelated with the general mission of the College, but were difficult to achieve in their extension programmes as examined in the three barangays. The series of external programmes introduced in Sibalew and the involvement of college staff, faculty members and other actors from linkage agencies involved in the extension programmes discussed in the case studies were examples of this.

Overall, the results of the examination of the transformation and adoption of agroforestry innovation in Sibalew, Feliciano and Linayasan revealed that kinship ties, cultural and political practices that the locals adhered to, and the alliances between barangays with the College and development institutions, especially between barangay locals, college staff, faculty members and actors from linkage agencies were important to the outcomes of extension programmes in the three barangays. These barangays have different potentials for development and are at different stages of economic transformation. The technological and economic development that apparently occurred in Sibalew failed to stop the threats to the traditional cultural practices of locals and the natural environment. Sociocultural, political and technological factors and intergenerational problems were
ignored in the project documents reviewed. All of these were associated with the
technology and economy-driven extension strategies that the College needs to address
critically, so that biased distribution of extension services across the social structure can
be minimised and the gaps between rich and poor could be reduced in rural barangays.
Chapter Twenty
Conclusion of the Thesis

20.1 Conclusion

The basic concepts to be used to examine rural transformation and the adoption of agroforestry innovation in the Philippines were outlined in the first chapter of this thesis. The concepts associated development with its subsequent effects on social and economic structures, traditional cultural practices of locals and the natural environment of barangays. This thesis has focused on the barangays of Sibalew, Feliciano and Linayasan where the Aklan State College of Agriculture had implemented their extension programmes. Seven months fieldwork was conducted in these barangays to examine how new agricultural technologies introduced through demonstration farms changed the social structure and rural living conditions of locals. The results of the fieldwork were described in the Sibalew and Linayasan case studies. The discussions were focused on the increase in inequality through development which has not closed the gap between rich and poor in rural areas. This thesis has shown that the diffusion model and the ‘putting people first’ approach were important tools the College used to implement their extension programmes. The findings of the case studies suggested that in reality these two approaches cannot be separated until the Filipino context changes and there needs to be more focus on inequality rather than concentrating only on the technological and material aspects of development.

This thesis has shown that complex interactions of human and technical factors are involved in the transformation of the lifestyle of Filipinos from traditional subsistence to a more complex modern way of living in rural areas. Over fifteen years, the effects of technological and economic change on the local social structure did not directly allow the disadvantaged to improve their economic condition or reduce inequality. This finding did not support the assumptions of the diffusion model which assumed that the trickle down of technological and economic transformation would provide a better life for disadvantaged locals. Authentic participation and empowerment of locals in the decision-making processes, emphasised in the ‘putting people first’ approach, were not fully implemented. Instead, participation and empowerment were used in a superficial way to implement various programmes in the barangays.
The findings of the case studies have shown that the technological and economic change that occurred in the three barangays favoured affluent families. Many of the less affluent families lacked access to development assistance from the various agencies. There were many issues and problems left unsolved. These issues included imbalance of power of actors involved in extension programmes, gender inequality in access to development programmes, biased distribution of assistance, absence of authentic participation of locals and the issue of national policies which were often not a realistic way of solving the local problems. The inequality of power was crucial in the social structure of extension programmes which biased distribution of assistance. Unequal access to and control over local resources were major issues. This issue was related to the power relations between barangay, the College, and the College's securing of funding from linkage agencies.

These issues were overlooked in the studies by Agustin (1990 and 1982) and Quintana (1989) and reports by Aguilar (1991 and 1990) and Montemayor (1985). These authors have explicitly described how packages of assistance from foreign aid institutions and national government helped finance the College to implement their extension programmes. The purpose of integration of various programmes was to promote the participation of various agencies in extension programmes in Sibalew. This approach was the end result of the diffusion model and the 'putting people first approach' and used in the transformation of Sibalew. Over fifteen years, the integration of various agricultural education programmes in Sibalew improved farming methods and enhanced infrastructure development. It also facilitated diversification of farming methods, created new economic activities, built social networks, established institutional alliances and introduced urban lifestyles in Sibalew.

In Linayasan, the findings of the case study show that the extension effort of the College was not as effective as in Sibalew. The demonstration projects in Linayasan were part of a general widespread, assistance campaign funded by the Countrywide Development Fund in the province and limited linkage agencies were involved. The effects of demonstration projects were limited, not enough yet to convince the Linayasan locals to put more attention into improving their backyard orchards. Even the ten farmer cooperators who the extension staff and the student agents assisted directly to establish their own projects experienced limited changes. The ineffective result of the
demonstration farms in Linayasan was an example of complex interactions between human and technical factors in diverse social, political and economic conditions. It informed us also about an adverse affect of the restructuring of the College programmes. The radical change of social structure when the College became a state college affected the policies of the extension programmes and all the demonstration farms in the barangays. There were different comments from locals, farmer co-operators, barangay officials, extension staff and faculty about what they had learned from the demonstration projects. Lack of funding for the project, the limited period of extension assistance, lack of maintenance of the plants, inadequate water supply during summer and damage of plants by stray animals from neighbours were the major issues related to the unsuccessful demonstration farms in Linayasan. Further, the down side of development in the case study barangays: changes to social structure, cultural practices of locals and natural environment, was explicitly noted. The complexities of rural life for locals and their economic pressures continue to grow. The gap between the more affluent and less affluent families became more distinguishable. Comments from extension staff, faculty and other actors involved showed that this issue was related to problems with the unequal distribution of development. Implementation of national policies often contradicted the local practices and was a critical issue associated with the extension programmes.

The adverse effects of development on social and economic structures which threatened the traditional cultural practices of locals were illustrated explicitly in the Sibalew and Linayasan case studies which showed some traditional cultural values were no longer practised, or were altered by urbanised way of lifestyles. Modernisation increased inequality, and the values and attitudes of locals changed and become more diverse. Materialism and attainment of possessions became more important in the way of life of locals. An example of this was the traditional cultural values described in the literature. According to Garcia (1994: 205) young Filipinos were initially taught to kiss the hands of the elders and to answer them with po, meaning 'yes' and opo, meaning 'yes it is,' as a sign of their respect. Now this is seldom practiced in the case study barangays. He explains that the cultural practice of kissing the hand, showing respect to elders has declined; instead young Filipinos prefer to kiss the cheeks of their parents and other older members of their extended family.
Similarly, cultural values such as *paggalang* which means ‘respect for elders’ and *pakikipagkapwa-tao* which means ‘concern for others’ deteriorated. Awareness of locals about ‘loyalty to family,’ ‘reciprocity’ and ‘good public relations’ which led to strong social relationships among locals had declined. As well, the authoritative power of elders was changed. This issue was related to the arguments of Espiritu *et al.* (1995: 69-76) who emphasised that local values and behaviours were crucial to the long-term acceptance of development projects. Espiritu *et al.* suggest that in every livelihood project or development programme the plan should be implemented in accordance with local cultural values and practices. They warned that if abused, the local cultural values such as reciprocity, or political patronage can lead to nepotism and favouritism or can be manoeuvred to produce shortfalls in development programmes (see also Hunt *et al.*, 1997; Panopio *et al.*, 1994). This could lead to conflicts of interest, disobedience, subservience, dependency or subordination which prevented locals from voicing their concerns in the decision-making processes. These cultural elements cannot be separated in implementation of development programmes. In order to address such issues, Kerkvliet (1990: 273) has suggested that the human rights such as equality, justice, freedom and treating others equally should be practiced to reduce inequality in the development programmes. Kerkvliet emphasised that injustice, lack of freedom and unequal access to resources prevented the vulnerable from moving away from poverty.

Similarly, the findings of the case studies that show the benefits from development brought about through demonstration farms mostly favoured more affluent farmers. The local traders dominated markets and prices of products produced by farmers. The effect of development on social and economic structures in Sibalew was partial. The case study shows that the Sibalew farmers still continue searching for better farming methods. The farming methods introduced in demonstration farms had become obsolete for farmers wishing to further improve their farming methods.

An example was the Sloping Agricultural Land Technology described in the case studies. This technology was introduced because it was considered suitable to prevent soil erosion. In the 1970s, the literature showed that the Sloping Agricultural Land Technology was effective for the local farmers in Mindanao region (Duma, 1996; Watson and Laquihon, 1993). In the early 1980s, this technology was promoted throughout the country through the AEOP programme. It was funded by the USAID and
implemented by Agricultural Colleges through their extension programmes (Montemayor, 1986). In 1983, Sloping Agricultural Land Technology was introduced in Sibalew, then replicated in Feliciano in 1989 and was introduced in Linayasan in 1993. In Mindanao region, Watson and Laquihon (1993: 240) proved in their studies that the Sloping Agricultural Land Technology was simple, applicable, low-tech and suitable for the needs of local farmers having orchard plantations in upland areas.

However, in Aklan province, the findings of the case studies in Sibalew, Feliciano and Linayasan were not consistent with the findings of Watson and Laquihon. The amount of manual labour needed to maintain the contour hedges, the unproductive land occupied by contour lines and the length of time involved to produce a better income were issues which prevented less affluent farmers from adopting the Sloping Agricultural Land Technology. These issues were similar to the problems described in the reports by Claydon (1998), Fujisaka (1993a and 1993b) and studies by Fujisaka and Cenas (1993) regarding the reluctance of local farmers to adopt contour hedges. The findings of the case studies suggest that the Sloping Agricultural Land Technology needed further modifications to make it more suitable to the actual needs of locals and existing farming practices when introducing it in other barangays.

Another issue revealed in this thesis was the introduction of demonstration farms and interaction of other factors of development made the outcomes of these farms difficult for locals to comprehend. This was an important lesson learned by the farmer co-operators on the unsuccessful results of demonstration farms in Linayasan. However, the understanding about orchards gained by farmer co-operators was less important to them than the economic gain obtained from sari-sari stores, local trading businesses and fishing. As well, the lessons gained by farmer co-operators were not fully utilised in the decision-making processes because the participation by locals was absent from the evaluation and monitoring of projects. The inclusion of locals in designing demonstration farms would be useful for improving the backyard orchard industry in Linayasan. As well, another approach would be developed. The complex problems encountered by the extension staff, faculty and farmer co-operators over setting-up the demonstration farms were crucial aspects of development. The findings of the case studies suggest that extension methods should be flexible and suitable to the actual needs of locals, adjusted to the social, economic, political and physical conditions of each barangay.
Biased distribution of assistance across the social structure was another issue that prevented closing the gaps between rich and poor. As shown in the case studies the benefits from massive extension efforts of the College were concentrated in selected barangays. The demonstration farms were confined to a limited number of local farmers or farmer co-operators. The majority of them were affluent farmers with positions in the barangay administration. These findings confirmed the assumptions in the diffusion model, which suggested that the adoption rates to promote new technologies could be increased, if trial farms were to be introduced directly through progressive farmers who have social and economic power in the local social structure. Related to this issue, Röling et al. (1981: 229) outlined the major lessons learned from different regions in Third World countries as to why the diffusion models directly deal with the progressive farmers. It shows that the resourcefulness of these farmers was a crucial element in the introduction of new technologies so that they were chosen over the actual needs of the disadvantaged farmers. The progressive farmers have capital that can be utilised to finance extra expenses for payment of labour and procurement of fertilisers and other supplies for farms. In this manner, progressive farmers provide a convenient way for extension staff, faculty and student agents to deal with complex problems.

There are other institutional issues to consider such as the role of the College and their accountability for projects and alliances with linkage agencies. These elements overlapped with the function extension staff and faculty have to implement national policies and programmes from central government to the barangays. This issue was related to arguments about the institutional issues on participation in the literature (Haque, 1998; White, 1996; Hutchcroft, 1994). It was indicated that development institutions are often commissioned to integrate a participatory approach without fundamentally changing their cumbersome bureaucratic systems and 'top-down' decision-making processes (Michener, 1998; Pretty, 1885; Thompson, 1995; Cohen and Uphoff, 1980). According to Thompson (1995: 1522), changing to a new approach created problems that led to conflicting policies, procedures and norms within institutions. The management structure, professional norms and the inherent social practices within institutions influenced a 'set of working rules' that individual employees used to establish their relationships. Thompson further explained that such a 'set of working rules' determines who will be eligible to make decisions, what actions will be allowed or prohibited, what procedures must be followed and what penalties or rewards
will be assigned to individuals or groups as a result of the actions. This is crucial for extension programmes in which the College has attempted to combine the diffusion model and the 'putting people first' approach in order to change their extension strategies from 'top-down' to 'bottom-up' approaches.

In addition to the institutional problems, there were issues over leadership styles of barangay officials that needed to be addressed in the extension programmes in order to spread participation of locals through all stages of the development process. It was emphasised in the literature that the leadership of local officials is crucial to ensuring development programmes are successful (El-Ghannam, 1995; Rossing and Howard, 1994; Antlov and Cederroth, 1994). The success story of the leadership style of Jose Ingalla described in the Sibalew case study clarified this issue. The kinship relation-based projects and the alliances of locals with the College provided power to Ingalla for the development of Sibalew. However, the development of Sibalew is not complete yet, because of increasing problems with overpopulation, unemployment, limited entrepreneurial industries, lack of marketing networks and inadequate infrastructure facilities. As well, decreasing land area for cultivation was also a serious problem. All of these factors threaten the natural environment of Sibalew. Similar issues emerged in Feliciano and Linayasan because the rural lifestyles of locals are continuously reshaping and the social and economic gaps between rich and poor remain a controversial issue.

In concert with the questions outlined in Chapter One, the findings of the Sibalew and Linayasan case studies illustrated the multiple functions of demonstration farms for development of each of the three barangays and the College. The demonstration farms provided a space for practical skills training of local farmers. It was a venue to test the effectiveness of new farming methods, especially Sloping Agricultural Land Technology. Generation of information is useful for locals, extension staff and faculty involved in the diversification of farming methods and livelihood projects.

Barangay officials, farmer co-operators, student outreach agents, extension staff and faculty were the main actors in the demonstration farms. They have different sets of roles, interests and powers. They have expectations as to what will be achieved in the demonstration farms. The demonstration farms provided various benefits such as technical, material and financial assistance, but these were confined directly to the farmer
co-operators. The provision of demonstration farms strengthened the powers of barangay officials who played a critical role in the selection process of the farmer co-operators. Moreover, the demonstration farms provided an opportunity for student outreach agents to gain practical experience, especially the application of theories learned inside classrooms from the actual extension services.

Despite the advantages, demonstration farms had shortcomings. Biased distribution of assistance was a critical issue in the three barangays. The trickle down effects of technological and economic change that occurred in the three barangays were based on the Green Revolution and other national development programmes which failed to close the gaps between the rich and the poor in rural areas. Development made the social structure and the cultural values of locals become more fragmented and inequality increased. This was obvious in Sibalew where the College had achieved its most successful extension programmes rather than Feliciano and Linayasan.

The length of time and amount of funding involved, diverse social structures, various sources of income and differences in geographical conditions among the barangays were crucial elements influencing the effectiveness of extension programmes in these three barangays. Over a long period of time the alliance of locals in Sibalew with extension staff and college faculty was strongly established, as compared with the locals in Feliciano and Linayasan. The strong alliance of Sibalew locals with extension staff and college faculty was connected to securing funding of demonstration farms. As well, the impact of social interactions of locals with the extension staff, faculty and actors from linkage agencies had strengthened their social network. Over time, people came to have similar ideologies. The overall findings of the case studies revealed that the development programmes introduced in the three case study barangays were interrelated with each other. Evaluation of the effectiveness of an individual programme was problematic. There were redundant extension efforts and duplication of demonstration farms in Sibalew and the other barangays.

There were negative reactions from locals of other barangays excluded from having demonstration farms that had threatened the social relationship of Sibalew and the College. What the College was expected to achieve through the demonstration farms were different from what the locals thought about the new farming methods, adding
another level of social problems. The College had different levels of achievement in the three case study barangays. From the College point of view, Sibalew was the most successful and this was followed by Feliciano, with Linayasan being less successful. In Feliciano, like Linayasan, political patronage was the most critical issue. In addition to this was the negative practice of reciprocity existing in the social structure. This included domination by mercenary traders over the local industry which was an enduring problem preventing closure of the gaps between rich and poor. The response of locals to the limited results of demonstration farms aggravated conflict between the cultural values and political practices of locals and intergenerational problems associated with the extension programmes.

The findings of the case studies suggest the role of Filipino cultural values was crucial to the pro-active role of the College in implementation of the 'putting people first' approach in their extension programmes. Authentic participation and empowerment by locals were not achieved. The implementation of extension programmes was tailored to suit the College's cultural practices, rigid bureaucratic procedures and politics. Conflicting cultural issues were also related to the imbalance of power relations and political uncertainties that surrounded the extension programmes. The literature suggested that the consequence of not solving complex problems traps many development agencies, which go back to 'top-down' procedures, instead of maintaining a grassroots participatory approach which had been newly adopted (Michener, 1998; Thompson, 1995; Pretty and Chambers, 1994). Pretty and Chambers (1994: 190) have explained that inflexible management, centralised criteria, biased reward systems, lack of financial resources, and limited transport and travel allowances hinder agricultural colleges from spreading the participation of locals in development processes.

The diffusion model and the 'putting people first' approach were crucial tools in extension programmes. However, the procedure of these two approaches in the implementation of extension programmes of the College was contradictory. Of those approaches, the 'top-down' method practiced in the diffusion model was dominant over the 'bottom-up' procedure of the 'putting people first' approach. A 'top-down' method of promoting new technologies favoured the Colleges in maintaining strong relations with their linkage agencies. Overall, the diffusion model provided a basic theory that helped to explain the power of the College to achieve what was expected out of grants, materials
and technical assistance from their linkage agencies that were distributed to locals in the case study barangays.

In conclusion, the findings of this thesis have significance for the five major issues in the literature outlined in Chapter Six. The first issue was about the biased national development programmes not directly solving the local problems (see Michener, 1998; Thompson, 1998; Cornwall et al., 1994; Uphoff, 1991 and Cohen and Uphoff, 1980). The second issue concerns the social, cultural and political practices of Filipinos that influenced the unequal access to benefits from the development programmes (see Hunt et al., 1997; Espiritu et al., 1995; Panopio et al., 1994; Garcia, 1994). This thesis conformed the transformation of Sibalew included problematic processes. There were cultural and political concerns that led to compromises in the choice of extension methods. It was clear in the case studies that the ‘top-down’ processes such as rigid bureaucratic procedures and political patronage within development programmes, were directly related to imbalance in power relations and access to external resources (see EAAU, 1998; Stiles, 1991; Kerkvliet, 1990; Simpas et al., 1983; Anderson, 1982; Simpas, 1979). As well, national development programmes which were unrealistic in dealing with local problems affected the social relationships of the actors involved and hindered participation of locals.

The third issue pertains to the adverse effects development has on social structure, increasing inequality in development (see Kerkvliet, 1990; Chua, 1990; Illo, 1985; Aguilar, 1984; Eder, 1982; Ledesma, 1982). The findings of the thesis revealed that the fragmentation of social structure and the standard of living of locals is complex and economic pressure continues to grow. The fourth issue concerns the consequences of economic and technological change which threaten the traditional cultural practices of locals and destroyed the natural environment (see Eder, 1994; Lewis, 1992). These issues were critical in the development that occurred in the case study barangays wither as a result of the College’s activity as in Sibalew or other influences as in Linayasan. Finally, in concert with the argument of this thesis, the fifth issue pertained to the dominance of the diffusion model against the 'putting people first' approach in the extension programmes. In practice, the findings of the thesis showed the use of these two approaches proved both difficult and enlightening at a theoretical and methodological level. The two approaches helped analysis of the relationship between national issues and
local problems in the extension programmes which was needed to deal with inequality in development, but a final resolution of the difficulties of institutions such as the College face when they try to combine these two approaches does not seem possible.

20.2 Limitations of the Study

Looking from the outside and taking a wider picture of the findings of the case studies, the researcher has identified three major limitations of this thesis when addressing inequality in rural barangays in the Philippines. The first was that the thesis involved a qualitative inquiry that required an intense effort to amass a large volume of information. It provides qualitative information that includes the interactions, cultural practices and complications of the everyday activities of locals in rural areas. This was a huge task: it required a long period to complete and a large amount of funding was necessary to complete the research. Although the qualitative information could broaden ideas about the inter-relationships between theory and practice in development, the everyday activities of locals were “unsystematic and often officially unrecognized” and so difficult to study (Moris and Copestake, 1993: 87).

The second limitation was related to the associated problems in Participatory Rural Appraisal which was the method of fieldwork the case studies were based on. In the case studies, the main concern of the researcher was to present the ideas and opinions of locals, especially of their experiences in various development programmes introduced to them. However, there were general attributes related to the Filipino cultural practices and institutional context, such as the imbalance of power relations between participants, that were perceived as crucial issues that needed to be addressed in doing Participatory Rural Appraisal. The issues and complex problems that emerged from the results of the fieldwork were the essence of the discussion of this thesis, not only to reconfirm issues in the literature, but also to assemble qualitative information provided by locals from the case study barangays. The researcher has proven the Participatory Rural Appraisal provides a flexible and spontaneous method to undertake various activities and examine complex problems experienced by the locals in the case study barangays. However, the design of the Participatory Rural Appraisal needed to be suitable for a particular local condition. Therefore, more effort is necessary to design Participatory Rural Appraisal that is suitable before being used to evaluate a particular development programme.
Finally, the last limitation was that this thesis contained some critical ideas and opinions based on historical and cross-cultural research and the actual experience of the researcher which could be subject to different interpretations. In doing this thesis, ethical issues were ever-present in the research processes. There were cultural and political concerns to take into account during fieldwork. The role of the researcher, being at the same time an 'outsider' and 'insider' in relation to the College and the extension programmes evaluated, might be seen to have been influenced in this aspect. The researcher asserts that whilst his 'outsider' role could be seen to have greater objectivity in terms of being free of shared interests, the 'insider' has all the advantages provided by participant observation.

As an 'insider,' the researcher was able to establish a rapport with locals in the three barangays where the case studies were conducted. He discussed with colleagues complex problems and their difficulties in the extension processes. These included an evaluation of the results of the Participatory Rural Appraisal. As a result, there were many questions by college staff and faculty, especially concerning the standards and procedures of this method. Criticisms included the claim that the model did not provide scientific information, compared with the quantitative methods that most of the staff and faculty engaged in. Therefore, combining qualitative and quantitative methods could provide a better understanding and identify many issues that would otherwise be missed or ignored. In other words, rigid adherence to a specific framework could adversely influence the choice of data collection and analysis because it could restrict exploration of issues crucial to the research.

20.3 Implications for Future Research

This thesis has used descriptive qualitative methods to describe the themes that emerged from the actual lived experience of locals, extension staff, college faculty and other actors involved in extension programmes. This provides basic information for other researchers who are interested in examining the subsequent effects of development on social and economic structures, traditional cultural practices of locals and the natural environment. The thesis explores the area related to the social, cultural and political practices that prevented closing the gaps between the rich and the poor in rural areas in the Philippines. As well, there are institutional problems and intergenerational issues in
technology-transfer related to the imbalance of power in the social structure and inequality problems associated with the implementation of extension programmes discussed in this thesis, that need to be explored further.

This thesis has identified four significant implications for the introduction of developmental assistance, especially for those concerned with the issues and complex problems that produce inequality in development. First, the results of the Sibalew and Linayasan case studies have provided useful information to the College, which can gain new insights and understandings of the effectiveness of previous and current extension programmes. This includes the College staff and faculty members, as well as students initiating new concepts and strategies. The implications of the findings of this thesis are also valuable for the College's reassessment of future national policies in extension programmes. This is related to the suggestion in the report by FAO (1997) that the cultural gaps that exist in extension work needed to be evaluated so that agricultural education training and extension methods produce a more suitable approach when bridging the gap between the implementers and the locals in rural areas.

The second significant feature of this thesis, was the opportunity the researcher was given to bring the issues raised by various groups of actors, particularly disadvantaged locals, to the attention of senior academics, policy makers, planners, researchers and others engaged in the planning and implementation of development programmes. The findings of this thesis also provide basic information to non-Filipinos engaged in the implementation of development projects in the Philippines.

The third area of significance of this thesis is the hope to contribute to the debate about some of the issues and problems raised by various authors in development studies. For example, issues concerning the ‘top-down’ and ‘bottom-up’ approaches in technology-transfer; gender inequality when accessing assistance, problems encountered when obtaining control of resources; problems associated with the biased distribution of economic change; and social and cultural practices that contradict the aims and objectives of many development programmes. The case studies discussed examples that relate to the problems of political interference and the institutional problems of bureaucracies, as well as intergenerational issues when introducing rural development projects. Finally, the fourth significant aspect of this thesis, is the attempt to link the
relationships of complex problems between the theory and practice in the diffusion model and the 'putting people first' approach to the existing literature on the sociology of development, a discipline that the researcher enjoys.

20.4 Recommendations

The literature suggests that the Philippines has a need to develop strong instruction, research and extension programmes in order to increase agricultural productivity and support the diversification of local livelihoods in rural barangays. Drawing from the various issues and complex problems elicited from many sources during the Sibalew, Feliciano and Linayasan case studies, the researcher of this thesis recommends three major areas that are essential for the successful development of the College's extension programmes.

First, while it is acknowledged that the technologies, facilities and equipment of the College need upgrading, the College's instruction, research and extension programmes need to be strengthened further. This could be achieved by using a multi-disciplined approach that allows staff and faculty in different fields to work together, so they share their expertise and jointly critically evaluate the extension programmes. In this way, the issues and complex problems associated with changes in the local social and economic structures, and the consequences of development to the traditional cultural and political practices of locals, could be addressed while introducing and first evaluating the development programmes.

Second, creating better extension programmes requires appropriate funding and a strong commitment not only to promote economic and technical aspects of the programme, but to invest also in the social, cultural and political aspects of development that are so essential to close the gaps between rich and poor. The researcher suggests that issues concerning the 'top-down' and 'bottom-up' approaches in technology-transfer, such as gender inequality when accessing assistance and the problems encountered by locals when obtaining control of resources, need to be addressed more competently in extension programmes. Attention should be given to the problems associated with the establishment of demonstration farms to minimise the biased distribution of economic change. The identification of the inherent social and cultural practices of Filipinos that
both enhance and undermine the national and College agendas and local procedures when implementing national development programmes are crucial for the extension programmes to be successful. All these issues need to be integrated in lectures, seminars and when training extension staff, college faculty, students and other actors, for example from linkage agencies. Farmer co-operators also need to understand these practices to increase their awareness of the negative consequences of development to the traditional cultural practices of locals and the adverse effects on the natural environment.

Finally, the researcher would like to emphasise the value and significance of the inclusion of locals. They should be encouraged to articulate their views of the problems they perceive during the development processes. For example, local knowledge would have been beneficial to planners and developers who would gained a greater understanding of the emerging issues in the extension programmes in the three barangays studied. Participatory Rural Appraisal offered various techniques and some cost-effectiveness when assessing local needs prior to launching development projects. Integration of Participatory Rural Appraisal as one of the subject areas in research and extension programmes would be useful. That way, the College could develop a more appropriate procedure to encourage a form of ‘upward’ and ‘downward’ communication that is more meaningful for local participation in the extension processes. Local community participation in the evaluation of development programmes helps to ensure extension priorities are relevant to locals’ needs.
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**Electronic Sources**


Glossary

Local Dialects

Alima, paiwi: traditional animal raising and sharing system
Almo: boss
Amor propio: self-esteem
Bahala na: I don't care
Balikbayan: kin live in other country having holiday in the Philippines
Barangay, barrio: community, village
Bayanihan: a spirit of nationalism or traditional labour system
Bura'an: liars
Bwisit: jinxed
Calamansi, ladu, czincom: oranges widely grown in the Aklan
Compadre: godfather or friendship based on social and political ties
Delicadesa: a sense of propriety
Encomienda: package or parcel post
Fiesta: community religious festival
Haligi ng tahanan: head of the family
Ilay ng tahanan: domestic and caregiver of the family
Ipil-ipil, kakawate: slash and Burn
Kaingin: bad luck
Kamalasan: cold weather out at sea
Machismo: masculinity or male supremacy
Mahogany, Gemelina: introduced tree species for timber and paper production
Malas: bad luck
Opo: yes it is
Paggalang: respect for elders
Pagnamay-ari: property ownership
Paghayag sa panilya: close family kinship system
Pagtitis, pasensiya: misfortune that befalls an individual
Pagwawalang bahala: lack of responsibility
Pakikipagkapwa-tao: concern for others
Pakikisama: a concept of good public relations
Palabra de honor: word of honour
Palahambal: talkative
Po: yes
Rambutan: a fruit tree wildly grown in Aklan.
Sangguniang barangay: barangay council
Sanguniang bayan: municipal councillor
Sari-sari stores: local general store.
Sip-Sip: connivance, conspiracy; a denigratory term
Sutio: loyalty in business transactions
Suki: success
Suwerte: sharp stick
Tagat: particularism
Tayo-tayo: patience and confidence
Tyaga-Iakas-Ioob: reciprocity
Utang na loob: showing no shame
Walang hiya: a small area use for wood production
Woodlot:
Appendix

Appendix 1: Outline of the Fieldwork of Case Studies in the Philippines

1.0 Introduction

The main purpose of the case studies is to examine the approaches in the introduction of the Barangay Demonstration Laboratory Farms/Projects and the changes brought about by such projects in Sibalew, Feliciano and Linayasan. This will be done in order to examine the pattern of changes brought about by the demonstration projects in those barangays. The results of the investigations will be used in the discussion of the thesis. This case study will use the PRA, not just to find out about local people's current needs, but this method will also be used to evaluate the responses of different groups of rural people on past policies and events. This will be done through conducting meetings, interviewing, and informal group discussions with locals in Sibalew, Feliciano and Linayasan. Interviews with the ASCA staff and faculty members involved in the project will be conducted. The representatives from other agencies who are participating in the development projects of the College will also interviewed. The information shared by the different groups of locals during the interviews in Sibalew, Feliciano and Linayasan, as well as information from other actors, will be used to evaluate the policy when the demonstration projects were implemented in the three barangays.

2.0 Strategies to be used in the Case Studies

In order to understand rural barangay transformation and the adoption of agroforestry innovation, it is important to understand how social and other changes have affected groups of local people and rural family activities. It is necessary to also understand the sources of change or interventions that have previously taken place in the barangays. To reach this understanding the following PRA strategies will be used initially:

1. Meetings with locals in Sibalew, Feliciano and Linayasan. Significant areas of change brought about by the introduction of new technology by the demonstration farms/projects will be identified.

2. Eliciting information, using a semi-structured interview schedule, from three groups of people who are actors in this case study. The barangay actors include groups of men, women, youth, local leaders, landowners, tenants and the middlemen buyers. The College actors are the staff/faculty members and students involved in demonstration farms. The Linkage actors are those selected agency-representatives or technicians involved in the College extension programmes.

3. Conducting informal group discussions and mapping exercises with barangay actors to trace the patterns of changes perceived by men, women, youth, local leaders, landowners, tenants and local middlemen buyers.

4. Collecting and reviewing documents related to case study barangays such as development plans, annual reports, student outreach reports and studies from the College.

5. Evaluating changes of policy relating to the “top-down and bottom-up approach” of the College in promoting demonstration farms, using the results of interviews, informal group discussions, meetings and other information from participant observations.

6. Keeping confidential written records of results of individual interviews and group discussions relating to their concerns or comments on changes that the demonstration farms have brought about in their barangays.

However, if any of these strategies do not prove to be effective in eliciting the desired information, other strategies will be designed and implemented.
3.0 Subject Areas to be Explored in the Fieldwork

Initially, the subjects that will be explored with various actors involved in demonstration projects are:

1. **Demographic conditions.** This refers to the population, migration, health and education of people in the case study barangays.

2. **Local customs.** This will be a description of how local cultural practices like rules, elders and young people, their values and kinship have been affected by the changes brought about by the demonstration projects.

3. **Leadership.** This will be done by characterising the power relations between individuals, groups and local leaders. It will also say how they manage local resources, as well as make use of the introduced projects.

4. **Local people's participation.** This examines the division of labour and involvement in decision-making by gender, within groups of local people in terms of their access to resources, credit and support services.

5. **Distribution of project benefits.** This will be done by evaluating how benefits and products such as seeds, fertilisers, loans and other resources are distributed in the barangay.

6. **Changes to farming practices.** This will describe the pattern of land tenure, land use, types of crops and the use of technology by rural farmers.

7. **Products and income.** This consists of identifying kinds of produce, prices received and market demands, as well as patterns of family spending.

8. **Infrastructure and marketing facilities.** This will be a list of physical resources, such as access roads, water systems, training centers and electric power. It will outline how those are acquired and managed by the local people.

9. **Changes to policy when introducing Barangay Demonstration Laboratory Farms/Projects.** This will be done by evaluating the objectives, strategies, and funding from linkage agencies, as well as looking at how agreements have differed over time.

Information elicited from the three groups of actors will provide comprehensive perspectives about the early development of demonstration projects introduced to Sibalew, Feliciano and Linayasan. The information gathered will be used to evaluate the policy and approaches of the demonstration projects introduced by the College in the case study barangays. This is in order to examine the changes of policy and approaches used by the College from the 1980s to the present.

4.0 Fieldwork Activities

The case studies will require approximately six months to conduct the fieldwork. The fieldwork activities will be organised into three phases. First, conducting the PRA exercises in Sibalew, Feliciano and Linayasan. Second, interviewing College staff and students involved in the demonstration projects. This includes collecting and reviewing documents related to the case studies. Finally, time will be scheduled for interviewing representatives from other government and non-government agencies participating in the College extension programmes. The questions that will be addressed during the interviews are outlined separately.

4.1 Phase One

The first phase of the fieldwork is to conduct the PRA in the three barangays. To start the fieldwork in the barangays, the researcher will liaise with and co-ordinate activities to suit the College and local leaders of the case study barangays for protocol purposes. The researcher will live in each of the three barangays for a period of about six weeks to conduct the PRA activities. The activities include conducting meetings, participatory mapping exercises, group discussions and individual interviews with local people and/or the barangay actors. Secondary and historical documents about demographic conditions, such as population, health, education and migration will also be collected.
The meetings with individuals or groups will be formal and/or informal, with at least five members whose socio-economic backgrounds are similar. This is important because the interviewees must feel comfortable when voicing their concerns. This will be conducted with groups of men, women, and local youth, as well as landowners and tenants who belong to poor, middle and rich families. This is to provide an opportunity for individuals or groups with somewhat similar backgrounds to share their ideas and knowledge during the meetings. The participants in the meetings are those people who are not participants in PRA exercises. These will be held either in the barangay hall or in the houses of participants. However, they could be held in any place that is convenient to the participants to avoid interrupting their daily activities.

The researcher will also conduct mapping and discussion exercises with different groups of men, women, youth, local leaders, and local middlemen buyers. This will be done in the barangay hall, on Saturdays or Sundays to allow everyone to participate in the PRA activities. These activities will be announced to the barangay in conjunction with the address of local leaders and other local people. A notice will also be put on the bulletin board of the barangay hall to notify others. The PRA approach will be used in the mapping and discussion exercises. The exercises are open to all local people. The participants will form groups of at least five members and they will select their leaders. There will be no formal selection of group members. Rather, it will depend on whether individuals choose to join a group.

Using manila paper, the group members will be asked to illustrate their perceptions on the patterns of changes influenced by the demonstration projects in their barangay. The purpose of the drawing exercise is to let the participants identify and discuss amongst themselves the changes that the demonstration projects brought about in their barangay. Then the group, together with the researcher, will analyse the drawing. The pattern of changes indicated on the paper will be discussed. Following the principles of the PRA, each participant will be allowed to explore their knowledge regarding what has been drawn in the map. The researcher will act as the convenor and facilitator during the mapping exercises. The questions What, When, Where, How and Why will be used as the keys to generate ideas from the participants during the discussions. Information from these exercises will be used later during the interviews. Issues concerning customary behaviour; leadership in the community; gender, or different groups will be discussed with locals. Access to resources; participation in demonstration projects, distribution of project benefits, changes of farming practices as well as issues of power relations that are associated with living conditions and the development of their barangay will be discussed.

The researcher will give particular attention to the participants’ interaction during the mapping and group discussion exercises. This is to gain an idea about those who participate actively and those who do not. Those who are not active in the exercises will be followed up with an informal interview. The researcher will conduct the interviews with other local people informally using snowball-sampling techniques. Five representatives will be selected from different groups of men, women, youth, local leaders, and local middlemen buyers that vary in family income, nature of jobs, age and education. The interviewees will be those local people who are present during the mapping and discussion exercises. Interviews will be tape-recorded and if the interviewee is willing, they will be recorded and the transcribing will be done by the researcher on the day of the interviews and kept confidential.

The researcher will keep records of daily activities in the barangay. This includes problems encountered by the researcher, discoveries made, changes of weather conditions, the major activities of the local people, major events encountered and a summary of daily activities. Information and data taken from the PRA exercises will be kept and filed for further analysis.

4.2 Phase Two

The second phase of fieldwork consists of conducting interviews with the staff and students of the College involved in demonstration projects. The interviews will be done individually. Interviewees will be selected randomly from a list of names. At least five staff and five students will be targeted for interviews. The President of the College and the Director of Research and Extension Services will be interviewed separately. About an hour is the time allotted for conducting an interview, either
formally or informally, using unstructured questions. The interviews that will be conducted in the College will be recorded and kept confidential.

Questions will be asked concerning the College's implementation of demonstration projects in Sibalew, Feliciano and Linayan. They will be the focus of the interviews and discussions. These issues concern local customary behaviours relating to policy. Methodological approaches will also be part of the discussion. This will include leadership, gender access, participation of locals and distribution, assistance and projects benefits within the barangays. Changes of farming practices and the consequences brought about by such changes will be discussed. Other questions that will be asked will center on the policy and approaches that have been used by the College in implementing their extension programmes. These refer to objectives, strategies, funding, future plans and the involvement of linkage agencies in Sibalew, Feliciano and Linayan. Information gathered from these actors will be compared with information from other groups of actors. The purpose of this is to develop a theme that can explain the sociopolitical relationships that revolve around the groups of actors. The information from the College actors will be supplemented by evaluating all other documents related to the results of the fieldwork of the case studies. Another activity to be carried out at the College is collecting secondary data. This includes gathering documents such as the development plan, annual reports, student outreach reports, theses and articles. Important information from these documents will be photocopied and filed for evaluation and used when writing the thesis.

4.3 Phase Three

The third phase is the interviewing of representatives from government offices and non-governmental institutions who participated during the development of the demonstration projects in Sibalew, Feliciano and Linayan. Similarly, representatives from these offices will be interviewed formally and informally on tape, transcribed and kept confidential. The government offices referred to here, are those at the municipal and provincial levels. The most important of the government offices are the Department of Agriculture, Department of Health and Social Welfare, Department of Local Government Units and Department of Natural and Environmental Resources. The researcher will cooperate with these offices to schedule interviews at times suitable for them. The non-governmental agencies referred to include the Land Bank, Rural Bank, Local Transport Operators, Farmers' Federation and Organisation, Religious Organisations, and Local Middlemen Buyers and Suppliers.

Similar questions will be asked of linkage agency actors. These questions will arise from discussions about experiences of participating in College extension programmes. Once again, these concern local customary behaviour, community leadership, gender access to resources, local peoples' participation, distribution of project benefits, changes in farming practices, as well as issues about power relations that affect participation. Some of the institutional issues will also be discussed.

5.0 Guide Questions in the Participatory Rural Appraisal Exercises

Discussion during the PRA exercises and interviews will center on changes in Sibalew, Feliciano and Linayan that the demonstration projects have brought about in the living conditions of rural people. It will also focus on approaches and policies that have been used by the College in introducing demonstration projects in other barangays in Aklan. The following are guide questions that will be paraphrased during the interviews with barangay actors. Some of these questions will be used to interview the other actors involved:

- What do people do in the barangay?
- What are people's occupations or roles?
- What's going on in the barangay? (Present and past occurrences in the barangay).
- When and how was the demonstration project introduced?
- Who were the first beneficiaries of the demonstration projects?
• Who selected them, and how was it done?
• Why was the demonstration project introduced in the barangay?
• How have the demonstration projects affected the daily activities of the rural people?
• What other changes have the demonstration projects brought about in the barangay?
• Where did the main changes happen?
• When do the changes occur?
• How did the changes take place?
• Who benefited/benefits from the changes?
• Why did they happen?
• What mechanism allowed/allow the rural people to cope with change?
• How did or does each group respond to the changes in their barangay?
• What pattern of participation does each group in the demonstration projects follow?
• What are the factors that contribute to the success/failure of the demonstration projects?
• How are the goals of the demonstration projects achieved in each group?
• What benefits are distributed throughout the barangay as a whole?
• Why do some demonstration projects succeed and others fail?

Other questions for the College actors:

• What is your role in the demonstration projects?
• How did you become involved in demonstration projects?
• At what levels do you participate?
• How do you participate at these levels?
• What problems do you encounter in participation?
• How do you overcome the problems?
• What do you think about the previous and present demonstration projects?
• How have the demonstration projects been implemented?
• What changes do you think the demonstration projects have brought about in the locals?
• Why do some demonstration projects succeed and others fail?

Some questions to be asked from the linkage actors are:

• What is your role in this agency?
• What do you know about the demonstration projects?
• What is the involvement of your agency in this project?
• What benefits does your agency bring to the demonstration projects?
• What agreement was made between your agency, the barangay and the College?
• What problems have your agency experienced in its participation?
• What do you think about the barangay with/without demonstration projects?
• What do you think the demonstration projects have contributed to the rural people?
• How do the demonstration projects differ from other demonstration projects?
• Why do you think some demonstration projects succeed and others fail?

5.5 Analyses and Writing of Reports

The analysis of information is the essence of research. In these case studies, the researcher will evaluate the information gathered from different activities. Significant issues that have not been covered will be addressed in the subsequent activities. The evaluation of information will be continued throughout the process of fieldwork. The researcher will write a weekly report on his fieldwork activities. The report will cover the researcher's observations about the participants, problems, significant issues that arise, changes of plan, comments and outlining the subsequent topics to cover in the next activities. A written monthly progress report will be prepared for the supervisors. This is to provide information regarding progress made in the fieldwork activities.
The thesis will be written after completion of fieldwork activities. This will be done when the researcher returns to the University of Canterbury, New Zealand. This includes coding, sorting of ideas and grouping information to develop themes in order to present the results. The themes will be related to major changes in the barangays, social activities of local people, relationships between different local groups, issues and problems relating to the transfer of technology in rural barangays. The findings will be examined to identify the implications of technology-transfer on the lifestyle of local people. The information will be logically organised and analysed using various references. The books of Lofland and Lofland (1984), Mariam (1988) and Yin (1993, 1994) will be used as guides for organising the data for analysis. Other than these references, the researcher will find other, appropriate references to guide the writing activities.

5.6 Ethical Issues in the Case Studies

The researcher recognises his multiple roles and responsibilities as an employee of the College and as a PhD student at the University of Canterbury. Therefore, he will act in an ethical manner consistent with the Code of Conduct of the ASCA and the Sociology Department of the University of Canterbury. The researcher is subject to following the regulations of the University of Canterbury and he is directly supervised by two staff members of the Sociology Department.

The case studies will be undertaken so as to comply with the PhD thesis regulations of the University of Canterbury. Information collected from individuals or groups will only be used for the purposes of research. Issues of confidentiality will be discussed with participants before they are interviewed. Efforts will be made to protect the name of participants, especially in interviewing and when writing the thesis. No individual participants will be named in the interviews or in any written work. The terms ‘barangay actors’, ‘College actors’ and ‘linkage agency actors’ will be used. The barangay actors will include ‘the groups of men, women, youth, local leaders, local middlemen buyers, tenants and landowners’. College actors are ‘staff, faculty members, extension officers and SOAs’ and the term ‘linkage agency actors’ will be used in the discussion of the results of the fieldwork.

Tape recordings of interviews will be taken with the interviewees’ permission. Tape-recorded interviews will be transcribed and carefully stored to ensure confidentiality and to protect participants. Access to the case studies data and publication rights rest exclusively with the researcher. The researcher is responsible for any conclusions made in the case studies and they will not necessarily reflect the views of either the ASCA or the University of Canterbury. The researcher will submit the thesis to the Sociology Department for examination. A copy of the thesis will be provided to the University of Canterbury.
Appendix 2: Correspondence

University of Canterbury
Private Bag 4800
Christchurch, New Zealand
Telephone: 03-3667001
Fax: 03-3642999

Ref: 47071

20 October 1997

Mr Roberto Saladar
C/- Sociology Department
UNIVERSITY OF CANTERBURY

Dear Mr Saladar

I am pleased to advise that the Dean of Postgraduate Studies acting for the Academic Administration Committee has approved the registration of your Ph.D. research proposal.

Your topic for research is "Rural Barangay Transformation and the Adoption of Agroforestry Innovation in the Philippines" and your supervisor is Dr Alison Loveridge. You associate supervisor is Mr Colin Goodrich.

Yours sincerely
A.W. Hayward
Registrar

per: [Signature]

Michael Sykes
Manager: Student Records & Systems
Monday, 14 November 1997

Dr Helmar E. Aguilar
President
Aklan State College of Agriculture
Banga, Aklan
Philippines

Dear Dr Aguilar,

This is to confirm that Roberto Saladar is a postgraduate student in the Doctoral programme of the Sociology Department of the University of Canterbury, Christchurch, New Zealand. He is currently in the Philippines conducting fieldwork for his doctoral thesis ("Rural Barangay Transformation and the Adoption of Agroforestry Innovation in the Philippines"). The fieldwork is expected to be completed by the end of June, 1998 at which time Roberto will return to New Zealand to continue writing up his thesis. His supervisors hope that he will have completed his doctoral studies by October 2000. We hope this meets with your approval. If any matters still require further clarification, please don't hesitate to contact me.

Yours sincerely,

Bob Hall, PhD
Head of Sociology Department
Monday, 24 November 1997

To Whom It May Concern

This is to confirm that Roberto Saladar is a postgraduate student in the Doctoral programme of the Sociology Department of the University of Canterbury, Christchurch, New Zealand. He is currently in the Philippines conducting fieldwork for his doctoral thesis ("Rural Barangay Transformation and the Adoption of Agroforestry Innovation in the Philippines"). Whatever help you might be able to offer to ensure that his fieldwork is completed successfully would be greatly appreciated.

Yours sincerely,

Bob Hall, PhD
Head of Sociology Department
28 December 1997

Dr Helmar E. Aguilar
President
Aklan State College of Agriculture
Banga, Aklan
Philippines

Sir:

I would like to ask permission to conduct research in the College's Barangay Laboratory Demonstration Projects (BDLPs), in which the thesis will be based to complete my degree in Ph D at the University of Canterbury, New Zealand.

The research is about “Rural Barangay Transformation and the Adoption of Agroforestry Innovation in the Philippines”. This is through a case study, which focuses on social and other changes brought about by the Barangay Laboratory Demonstration Projects (BDLPs) of the Aklan State College of Agriculture in the rural barangays of Aklan. The fieldwork of this case study will be conducted at (1) Barangay Sibalew, Banga (2) Barangay Feliciano, Balete and (3) Barangay Linayasan, Altavas starting from January to July 1998.

The qualitative research method using Participatory Rural Appraisal (PRA) will be used to gather information from different groups of the local people. It also involves interviews of the College’s personnel who have been involved in the BDLPs, as well as interviews of representatives from other government sectors and non-government organisations participating in the College’s BDLP programme.

This research to be conducted will be done under the regulations of the Code of Conduct of the two institutions, the Aklan State College of Agriculture, Philippines and the University of Canterbury, New Zealand. The researcher acknowledge that issues on ethics as a part of the entire research process, which respect the rights of the research’s participants. Any information gathered from the participants will be kept confidentially. Information collected from individuals or groups will only be used for the purposes of research. Issues of confidentiality will be discussed with participants before they are interviewed. Tape recording of interviews will be done with the interviewee’s permission. Access to the data and publication rights rest exclusively with the researcher.

Attached herewith is the xerox copy of letter from the head of Sociology Department at the University of Canterbury for your reference.

Hoping for your favourable action on this matter.

Yours sincerely,

[Signature]

ROBERTO L. SALADAR
Republic of the Philippines
AKLAN STATE COLLEGE OF AGRICULTURE
Extension and Rural Development Services
Banga, Aklan

January 5, 1996

Dr. Helmar R. Aguilar
President
Aklan State College of Agriculture
Banga, Aklan

Sir:

This has reference to the attached request of Mr. Roberto Saladar to conduct his Ph. D. thesis in our pilot barangays.

In this connection, we have the honor to recommend the approval of his request. Whatever the result of this study, could likewise help strengthen our future rural development activities.

Once again, thank you so much.

Respectfully yours,

PORFIRIO G. BULLO, Ph. D.
Director for ERDSC

APPROVED:

HELMAR E. AGUILAR, Ed. D.
President
Hon. Stevens Fuentes  
Municipal Mayor  
Banga, Aklan  
Philippines  

Dear Hon. Fuentes,  

This has reference to my letter dated 28 December 1997 that your town, the Municipality of Banga has been selected as one among the three municipalities in the province of Aklan where I could conduct my research, and that your office was verbally granted the permission. I would like to inform you that the schedule of my fieldwork in the Barangay Sibalew will be completed this coming February 20, 1998.

The last part of the fieldwork activities will be scheduled to observe the session of Sangguniang Bayan and to conduct interviews with the representatives from your office and other representatives of the different government and non-government agencies in your municipality. Also I would like to collect the socio-economic profiles of Banga and other related documents which will be needed in my research.

In this connection, I would like to ask permission and the approval to conduct the above mentioned fieldwork activities which will be schedule on this coming February 16 to 21, 1998.

Furthermore, as I mentioned in my previous letter the issues on ethics is a part in the entire research process. That I respect the rights of the interviewees. Any information gathered from them will be kept confidentially. The information collected will only be used for the purposes of research. Issues of confidentiality will be discussed with interviewees before they are interviewed. Tape recording of interviews will be done with the interviewee's permission. No individual interviewee will be named in the interviews on any written work. Access to the data and publication rights rest exclusively with the researcher.

Hoping your approval and support on this research.

Yours sincerely,

ROBERTO L. SALADAR  
Researcher/Ph. D Student  
University of Canterbury  
New Zealand

Approved:  

STEVENS FUENTES  
Municipal Mayor  
Banga, Aklan, Philippines
09 February 1997

Mayor Ponteciano G. Rodriguez  
Municipal Mayor  
Balete, Aklan  
Philippines

Dear Mayor Rodriguez:

I am pleased to inform you that your town, the Municipality of Balete has selected as one among the three municipalities in the province of Aklan where I could conduct my research. This research is a thesis to complete my degree in Ph.D., in Sociology at the University of Canterbury, New Zealand.

The research is about “Rural Barangay Transformation and the Adoption of Agroforestry Innovation in the Philippines”. This is through a case study, which focuses on social and other changes brought about by the Barangay Laboratory Demonstration Projects (BDLPs) of the Aklan State College of Agriculture in the rural barangays of Aklan. The fieldwork of this case study will be conducted at (1) Barangay Sibalew, Banga (2) Barangay Feliciano, Balete and (3) Barangay Linayasan, Altavas starting from January to July 1998.

The qualitative research method using Participatory Rural Appraisal (PRA) will be used to gather information from different groups of local people. The fieldwork involves interview of representatives from your office and other government and non-government agencies in your municipality who have been involved in the College BDLP’s programme. Further, it also involves collection of socio-economic profiles of Balete which are important in analysing the findings of the study.

In this connection, I would like to ask permission and the approval from your office to conduct the above mentioned fieldwork activities. This will be conducted at Barangay Feliciano for seven weeks, starting February 22 to April 12, 1998.

Furthermore, in this case study, I acknowledge that issues on ethics as a part in the entire research process, that I respect the rights of the interviewees. Any information gathered from them will be kept confidentially. Information collected from individuals or groups will only be used for the purposes of research. Issues of confidentiality will be discussed with interviewees before they are interviewed. Tape recording of interviews will be done with the interviewee’s permission. No individual interviewees will be named in the interviews on any written work. Access to the data and publication rights rest exclusively with the researcher.

Attached herewith is the xerox copy of letter from the head of Sociology Department at the University of Canterbury for your reference.

Hoping your favourable support on this research.

Yours sincerely,

ROBERTO I. SALADAR  
Researcher/Ph. D. Student  
Sociology Department  
University of Canterbury  
New, Zealand

Approved:

PONTENCIANO G. RODRIGUEZ  
Municipal Mayor  
Balete, Aklan, Philippines
Subject: Asking permission to conduct group discussions, mapping exercises and interviews with different groups of local people, and collection of socio-economic profiles and related documents about Barangay Feliciano.

I am pleased to inform you that your barangay, the Barangay Feliciano selected as one among the three barangays in the province of Aklan where I could conduct my research. This research is a thesis to complete my degree in Ph. D at the University of Canterbury, New Zealand.

The research is about “Rural Barangay Transformation and the Adoption of Agroforestry Innovation in the Philippines”. This is through a case study, which focuses on social and other changes brought about by the Barangay Laboratory Demonstration Projects (BDLPs) of the Aklan State College of Agriculture in the rural barangays of Aklan. The fieldwork of this case study will be conducted at (1) Barangay Sibalew, Banga (2) Barangay Feliciano, Balete and (3) Barangay Linayasan, Altavas starting from January to July 1998.

The qualitative research method using Participatory Rural Appraisal (PRA) will be used to gather information from different groups of the local people. The fieldwork involves interviews of representatives from the groups of men, women, youth, landowners, tenants, local middlemen buyers, local organisation leaders and the officials of the barangay. Further, it also involves collection of socio-economic profiles of Barangay Feliciano which are important for analysing the findings of the study.

In this connection, I would like to ask permission and the approval to conduct the above mentioned fieldwork activities which will be scheduled for seven weeks in your barangay, starting February 22 to April 12, 1998.

In this case study, I acknowledge that issues on ethics as a part in the entire research process, which respect the rights of the research’s participants. Any information gathered from the participants will be kept confidentially. Information collected from individuals or groups will only be used for the purposes of research. Issues of confidentiality will be discussed with participants before they are interviewed. Tape recording of interviews will be done with the interviewee’s permission. No individual participants will be named in the interviews on any written work. Access to the data and publication rights rest exclusively with the researcher.

Attached herewith is the xerox copy of letter from the head of Sociology Department at the University of Canterbury for your reference.

Hoping your approval and support on this research.

Yours sincerely,

ROBERTO L. SALADAR
Researcher/Ph. D. Student
Sociology Department
University of Canterbury
New Zealand

Approved:

PETER RECIDRO
Barangay Captain
Barangay Feliciano
Balete, Aklan, Philippines
12 February 1998

Mayor Potenciano Rodriguez
Municipal Mayor
Balete, Aklan

Dear Mayor Rodriguez:

Greetings from ASCAI

The bearer of this letter is Mr. Roberto L. Saladar, one of ASCAI's faculty, who is conducting a research on "Rural Barangay Transformation and the Adoption of Agroforestry Innovation in the Philippines" for his doctoral degree.

Mr. Saladar has selected Barangay Feliciano, Balete as one of the venues for his study. Thus, our request for your permission.

Any assistance you can extend him is highly appreciated.

Very truly yours,

| HELMAR E. AGUILAR, Ed. D. |
| President |
HON. DORITO A. TULIO
Barangay Captain
Barangay Linayasan, Altavas, Aklan
Philippines

Dear Hon. Tulio:

I am pleased to inform you that your barangay, the Barangay Linayasan was selected as one among the three barangays in the province of Aklan where I could conduct my research. This research is a thesis to complete my degree in Ph D at the University of Canterbury, New Zealand.

The research is about "Rural Barangay Transformation and the Adoption of Agroforestry Innovation in the Philippines". This is through a case study, which focuses on social and other changes brought about by the Barangay Laboratory Demonstration Projects (BDLPs) of the Aklan State College of Agriculture in the rural barangays of Aklan. The Barangay Linayasan is one of the recipient of the above mentioned project.

The qualitative research method using Participatory Rural Appraisal (PRA) will be used to gather information from different groups of the local people. The fieldwork involves interviews of farmer co-operators, non-farmer co-operators and barangay officials. Further, it also involves collection of the socio-economic profiles of Barangay Linayasan which are important for analyzing the findings of the study.

In this connection, I would like to ask permission and the approval to conduct the above mentioned fieldwork activities which will be scheduled starting May 4 to 31, 1998.

In this case study, I acknowledge that issues on ethics as a part in the entire research process, which respect the rights of the research’s participants. Any information gathered from the participants will be kept confidentially. Information collected from individuals or groups will only be used for the purposes of research. Issues of confidentiality will be discussed with participants before they are interviewed. Tape recording of interviews will be done with the interviewee’s permission. No individual participants will be named in the interviews on any written work. Access to the data and publication rights rest exclusively with the researcher.

Attached herewith is the xerox copy of letter from the head of Sociology Department at the University of Canterbury for your reference.

Hoping your approval and support on this research.

Yours sincerely,

ROBERTO I. SALADAR
Researcher/Ph. D. Student
Sociology Department
University of Canterbury
New Zealand

Approved:

DORITO A. TULIO
Barangay Captain
Barangay Linayasan
Altavas, Aklan, Philippines
Hon. Ma. May P. Refol
Municipal Mayor
Altavas, Aklan
Philippines

Dear Hon. Refol:

I am pleased to inform you that your town, the Municipality of Altavas was selected as one among the three municipalities in the province of Aklan where I could conduct my research. This research is a thesis to complete my degree in Ph.D., in Sociology at the University of Canterbury, New Zealand.

The research is about "Rural Barangay Transformation and the Adoption of Agroforestry Innovation in the Philippines". This is through a case study, which focuses on social and other changes brought about by the Barangay Laboratory Demonstration Projects (BDLPs) of the Aklan State College of Agriculture in the rural barangays of Aklan. The Barangay Linaysan was identified as one of the venues of my study. The importance of this study will contribute in giving a new direction to the management of the ASCA so that they can improve their BDLP programme.

The qualitative research method using Participatory Rural Appraisal (PRA) will be used to gather information from different groups of local people. The fieldwork involves interview of representatives from your office and other government and non-government agencies in your municipality who have been involved in the College BDLP's programme. Further, it also involves collection of socio-economic profiles of Altavas which are important in analysing the findings of the study.

In this connection, I would like to ask permission and the approval from your office to conduct the above mentioned fieldwork activities, starting May 4 to 31, 1998.

Furthermore, in this case study, I acknowledge that issues on ethics as a part in the entire research process, that I respect the rights of the interviewees. Any information gathered from them will be kept confidentially. Information collected from individuals or groups will only be used for the purposes of research. Issues of confidentiality will be discussed with interviewees before they are interviewed. Tape recording of interviews will be done with the interviewee's permission. No individual interviewees will be named in the interviews on any written work. Access to the data and publication rights rest exclusively with the researcher.

Attached herewith are the xerox copy of letter from the head of Sociology Department at the University of Canterbury and the approved request from the Aklan State College of Agriculture for your reference.

Hoping your favourable support on this research.

Yours sincerely,

ROBERTO L. SALADAR
Researcher/Ph. D. Student
Sociology Department
University of Canterbury
New, Zealand

Approved:

MA. MAY P. REFOL
Municipal Mayor
Altavas, Aklan, Philippines
Dear Hon. Miraflores:

I would like to inform you that the Aklan province was selected as the venue where I could conduct my research. This research is a thesis to complete my degree in Ph.D., in Sociology at the University of Canterbury, New Zealand. It is about “Rural Barangay Transformation and the Adoption of Agroforestry Innovation in the Philippines”. This is through a case study, which focuses on social and other changes brought about by the Barangay Laboratory Demonstration Projects (BDLPS) of the Aklan State College of Agriculture in the three rural barangays in Aklan. These are the Barangay Sibalew in Banga, Barangay Feliciano in Balete and Barangay Linayasan in Aklasan. The importance of this study will contribute in giving a new direction to the management of the ASCA so that they can improve their BDLP programme.

The field work of this research involves interviews of local people, college staff, representatives from your office and other government and non-government agencies in the province who have been involved in the ASCA BDLP’s programme. Further, it also involves collection of socio-economic profiles and other related documents about Aklan which are important in analysing the findings of the study.

In this connection, I would like to ask permission to conduct interviews of the representative from your office and the representatives of other government and non-government agencies who have been involved in the above-mentioned programme. This will be scheduled starting July 6 to 11, 1998.

Furthermore, in this case study, I acknowledge that issues on ethics as a part in the entire research process, that I respect the rights of the interviewees. Any information gathered from them will be kept confidential. Information collected from individuals or groups will only be used for the purposes of research. Issues of confidentiality will be discussed with interviewees before they are interviewed. Tape recording of interviews will be done with the interviewee’s permission. No individual interviewees will be named in the interviews on any written work. Access to the data and publication rights rest exclusively with the researcher.

Attached herewith are the xerox copy of letter from the head of Sociology Department at the University of Canterbury and the approved request from the Aklan State College of Agriculture for your reference. Also, the lists of government agencies where the interviews will be conducted.

Hoping your favourable support on this research.

Yours sincerely,

ROBERTO L. SALADAR
Researcher/Ph. D. Student
Republic of the Philippines
PROVINCE OF AKLAN
Kalibo, Aklan
OFFICE OF THE PROVINCIAL GOVERNOR

FLORENCIO T. MIRAFLORES
Provincial Governor

July 2, 1998

TO WHOM IT MAY CONCERN:

Greetings!

This is to introduce to you MR. ROBERTO L. SALADAR, who has sought the assistance of this Office in the conduct of his research on "Rural Barangay Transformation and the Adoption of Agroforestry Innovation in the Philippines".

Considering that his research shall be beneficial to the implementation of our province's and our country's development thrusts kindly extend assistance to Mr. Saladar in the conduct of interviews with concerned personnel of your agency/department.

Sincerest thanks and best regards.

FLORENCIO T. MIRAFLORES
Provincial Governor
28 July 1999

The President
Aklan State College of Agriculture
Banga, Aklan

Sir:

I would like to ask permission to conduct a seminar on Social Research Methods to the interested faculty, undergraduate and graduate students of the Aklan State College of Agriculture which will be scheduled on July 2-3, 1999 at the Cafeteria Training Center.

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<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friday, July 2</td>
<td>9:00-12:00</td>
<td>Undergraduate student and faculty</td>
</tr>
<tr>
<td>Saturday, July 3</td>
<td>9:00-12:00</td>
<td>Graduate student and faculty</td>
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This seminar will focus on qualitative research approach, particularly to discuss the importance of Participatory Rural Appraisal (PRA) in technology-transfer in the rural community. Also, it covers some problems and issues on how to conduct qualitative research using the PRA.

The presentation of seminar consists of two parts. The first part will discuss the importance of the PRA in technology-transfer. The second part will present the general concept of my research on "Rural Barangay Transformation and the Adoption of Agroforestry Innovation in the Philippines". This will be followed by the presentation of the results of case study "Why the Sloping Agricultural Technology (SALT) Demonstration Farms Failed in Barangay Linayasan?"

I would like therefore to invite the interested faculty, undergraduate and graduate students to attend the above-mentioned seminar.

Hoping for your favourable action on this matter.

Very truly yours,

ROBERTO E. SALADAR
PhD Candidate
University of Canterbury, New Zealand

Noted:

BANJO H. ABAEYON, Ph. D.
Director, HES/Chairman, MAS

EDITO G. AGUSTIN, Ph. D.
Director, ERDS/Chairman, Ph. D.

THEODORE R. ROWAN
Director, Auxiliary Services/Chairman, MAMS

Approved:

HELMAR E. AGUTAR, Ed. D.
President