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THE UNIVERSITY OF ALBERTA

Communal, Corporate and Cooperative: The Property Relations of the Ibaloi of Northern

Luzon, Philippines

by

Melanie G. Wiber

(C)

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE

OF Doctor of Philosophy

Department of Anthropology

EDMONTON, ALBERTA

Fall 1986

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled COMMUNAL, CORPORATE AND COOPERATIVE: THE PROPERTY RELATIONS OF THE IBALOI OF NORTHERN LUZON, PHILIPPINES submitted by MELANIE WIBER in partial fulfilment of the requirements for the degree of DOCTOR OF PHILOSOPHY.

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ABSTRACT

A study of the social groups concerned with the productive technology of the Ibaloi¹ of northern Luzon was undertaken in a small community in northeastern Benguet Province, Philippines. This research had two broad goals. The first goal was a practical concern for understanding the social context of traditional communal irrigation. The second goal was to gain insight into the corporate control of productive resources in a cognatic society. In relation to these goals, the Cordillera Central region of northern Luzon was chosen as a research area for several reasons. First, the Ibaloi and other Cordillera ethnic groups utilize communal irrigation in their traditional wet-rice subsistence economy. Second, the Ibaloi are a cognatic society and it was believed that they had only been marginally affected by the kinship, jural and bureaucratic systems of the Spanish and American colonial regimes. Third, the rapid spread of vegetable production into upland rice-producing communities has required that Cordillera peoples reassess their productive resources and realign their allocation of such resources to a new technological requirement. This state of ongoing change was considered interesting for evaluating some of the above issues.

The research design required, first, a descriptive investigation of the productive resources of the Ibaloi, and their ownership and use patterns. This was followed by an assessment of the corporate models of George Appell (1974, 1976) as applied to the ownership of these resources, where applicable. The difficulties experienced in applying Appell's model led to further data gathering in problem areas identified in the model. These problems focus on what Brown (1984) has called the "plurality of jural units" sometimes found in certain societies and with certain other gaps in the model, including a lack of diachronic perspective. These gaps are most clearly seen when the model is applied to the organization of communal irrigation in an Ibaloi community. Nevertheless, the model, and its gaps, proved extremely instructive in identifying and focusing on those socio-jural areas where conflict could and did occur.

The thesis will address some of these gaps and will point out the utility of improving our models of group ownership in regards to development issues such as

¹I follow Otto Scheerer (1905) in his spelling of the name for this ethnic group. Other spellings are common such as "Ibaloy" used frequently in Spanish references.

irrigation, land tenure, resource utilization and jural disparity. It will also identify the utility of such concepts for the analysis of the ownership of resources in cognatic societies and will suggest further directions for research.

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LIST OF TABLES

TABLE	PAGE
TABLE 1: Percentages of Households in Various Income Sources.....	184
TABLE 2: Labour Sources and Crop Types	185
TABLE 3: Landholdings by Income Categories	186

LIST OF FIGURES

FIGURE

PAGE

Figure 1:

Appell's Model of Property Relations and Group Ownership 187

LIST OF MAPS

MAP	PAGE
Map 1: Benguet Province, The Philippines	188
Map 2: Kabayan Municipality, Circulation.....	189
Map 3: Kabayan, Municipality, Water Resources.....	190
Map 4: Kabayan Municipality, Slope Map	191
Map 5: Kabayan Poblacion	192
Map 6: Kabayan Poblacion Central	193
Map 7: CotCot-Salat Irrigation System	194
Map 8: CotCot-Salat Paddy Layout.....	195

Table of Contents

Chapter	Page
I. INTRODUCTION	1
A. Background To The Study	1
B. The Research Design	5
C. Historical Background to the Study Area	8
Philippines Geography and History	8
The Ibaloi of Benguet Province	10
Kabayan Poblacion	21
II. ISSUES IN THE THEORY OF PROPERTY SYSTEMS	24
A. The Appell Models for Property Systems	28
III. ETHNOGRAPHIC DESCRIPTION OF IBALOI SOCIETY	31
A. Social Organization	31
Kinship and Social Class	32
Kinship Terminology	36
Marriage and Residence Patterns	37
Inheritance	38
The Household	40
B. Economic Organization	52
Agricultural Production	52
Vegetable Production And Sources of Capital	58
Livestock Production	67
Labor Sources in Agricultural Production	70
Property Ownership - Land Tenure	74
C. Jural and Political Organization	85
D. Religious Belief System	90
IV. IRRIGATION	100
A. The Watershed	100

B. The Infrastructure	102
C. Social Organization	108
Membership	108
Leadership	108
Water Distribution	110
Sanctions and Conflict Resolution	113
Water Rights	114
Irrigation and Commercial Production	123
V. AN ANALYSIS OF THE PROPERTY RELATIONS IN KABAYAN	127
A. Communal Resources	128
Communal Forest	128
B. Kola-kol: The Irrigation System	131
Water as a Community Resource	131
The Major Canal (Kola-kol) Level	133
C. Baley-tok: Gold Resources	139
D. Payaw, Uma: Landholdings in Kabayan	143
VI. CONCLUSIONS: ISSUES IN THE ANALYSIS OF PROPERTY RELATIONS	147
A. Multiple Jural Levels	149
B. Sources of Jural Authority in Kabayan	151
C. The Ibaloi Property System - A Diachronic Perspective	157
Historical Evidence: the Role of Resource Base in Community Development and Social Stratification in Property Relations	157
Cross-Cultural Evidence: Upland Property-Systems and Jural Concepts - The Ibaloi Difference	165
The Communal Issue	171
Post-War Developments in Ibaloi Property Systems	174
D. The Role of Corporate Theory in Cognatic Societies	179
BIBLIOGRAPHY	196

C

APPENDIX ONE: THE ORGANIZATION AND OPERATION OF THE LUPONG TAGAPAYAPA	209
APPENDIX TWO: LUPONG TAGAPAYAPA CASE ONE: THEFT	212
APPENDIX THREE: LUPONG TAGAPAYAPA CASE TWO: ASSAULT	213
APPENDIX FOUR: WATER DISTRIBUTION AGREEMENT	214
APPENDIX FIVE: STATE WATER PERMIT REQUIREMENTS	215

I. INTRODUCTION

A. Background To The Study

Over the past several decades, improving and expanding irrigation has been a persistent theme in the development of agriculture in underdeveloped regions (Siy 1982:9). In many areas of the world, massive new hydrological projects have received a large bulk of development aid monies, as well as subsequent social, medical and environmental scrutiny. A surprising number of these mega-projects as well as numerous more modest irrigation projects, have been criticized for failing to bring about the expected social and economic benefits (Harriss 1984:318; Johnson III 1982:173; Siy 1982:5). During the United Nations Water Conference at Mar del Plata, Argentina in March 1977, the years from 1981 to 1990 were designated the "International Hydrological Decade" in order to draw attention to the imminent possibility of a world-wide hydrological crises (Utton and Teclaff 1978:267-268). Irrigation accounts for about eighty percent of the world water consumption (Ibid:224); therefore, serious consequences may result from continued mismanagement of this resource.

Part of the problem is technological (Harriss 1984:320; Clarke 1967:49). Design flaws have resulted in environmental damage, deleterious effects on human health, and inefficient water distribution with corresponding loss of crops, and sometimes lives. More often, however, when development schemes have failed to create the expected economic benefits, the beneficiaries have been blamed - either directly, as for showing a lack of "cooperative spirit", or indirectly, as for having a lack of management skills. Increasingly, the focus has been shifting from "a transfer of technology alone" to an emphasis on the "social factors" of irrigation development (see Utton and Teclaff 1978:223). As a result, in recent years researchers have been scrambling to produce the organizational and management information which was formerly lacking in irrigation-related literature².

²See for example, Angeles et.al. 1983, Bacdayan 1980, Bagadion 1976, Bagadion and Kortan 1980, Chambers 1980, Coward 1980, Coward and Siy 1985, Cruz 1982, de los Reyes 1980, de los Reyes et. al. 1980, Djojoadinato 1979, Duncan 1980, Fleuret 1985, Hafid and Hayami 1979, Hutapea et.al. 1979, Kelly 1980, Lando 1979, Lewis 1971, Pasandaran 1979, Siy 1982, Young and Huang 1975.

Unlike the macro-studies of Wittfogel (1955) and Stewart (1955), where large-scale irrigation is studied for its effect on state or social organization, many of these micro-studies seek to understand the effects that the social organization will have on irrigation practises. They attempt to elucidate what Chamber (1980:24) called, the: ...human side of the organization and operation of irrigation systems - the management of those who manage the water, the procedures for irrigation control, the process of allocation of water to groups or individuals, the distribution of water within groups.

There are two broad approaches discernable in much of this research. The first might be termed the "rational management" approach, where it is assumed that the new technology of large-scale irrigation projects requires new, more rational organizational principles. These principles are to be taught to both the water users and the bureaucratic water managers so that these two groups will cooperate in maintaining and managing the system³. The second approach tends to reify the indigenous small-scale irrigation system which is supposedly based on mutually cooperative, egalitarian principles⁴. This second approach is common in many rural development studies and in rural development planning, and is often based on what has been called the 'myth' of the communal indigenous agricultural community⁵. The problem as Harriss (1984:329-331) has pointed out, is that such "socially cohesive" indigenous communities as an ideal type do not exist, and further:

...a large scale irrigation system links together a 'community' of people (of a kind) far exceeding in scale the communities linked by multiplex relationships, which have informed their models.

The⁶ disturbing fact which is emerging from follow-up studies of development projects and related "Green Revolution" technological applications, is that these programs actually seem to be exacerbating the gap between the poor and the wealthy in developing nations⁶. This perhaps results from two conflicting themes in rural development theory; the creation of security for the small-scale, peasant agrarian operator (see Harriss 1984: 324 and Smith 1984:34-35), and the rapid capitalization of the agrarian sphere in developing countries (see Durrenberger 1984:1-25). What is obvious, however, irrespective of social or political philosophy, is that too much

³See for example, Bagadion et.al. 1980.

⁴See Hafid and Hayami 1979, for example.

⁵See Dove 1982, Harriss 1984, Johnson III 1982, Smith 1984 for some discussion of this problem.

⁶See Dahlberg 1979, Gartrell 1981, 1983, Greenwood 1976, Harriss 1984, MacAndrews and Sien 1982, Smith 1984.

development planning lacks a basis in a firm understanding of the social context of rural production. This is especially the case in irrigation development. It is rarely recognized that water is property; it is difficult to control as it is a scarce good which flows, and it is intimately connected with principles of land tenure and the social organization of production.

And yet, it has been recognized that the success of a new or renovated irrigation project depends largely on the active participation and cooperation of individual farmers (Asian Development Bank, Regional Workshop on Irrigation Water Management, Manila 1973:50). This is essential since farmers will not or cannot utilize agricultural input systems which are not in accordance with their own perceptions of ownership, resource sharing and allocation principles, authority structures and socio-economic applicability (see the IRRI Workshop Report 1982 and Goodell 1984). Research on indigenous irrigation systems is needed to test many of our basic assumptions regarding resource ownership, development and exploitation in the rural areas of developing nations. Also, a diachronic perspective is required to avoid the tendency to reify the situation as observed at one moment of synchronic analysis. For this reason, the analysis of the Ibaloi irrigation system contained within this thesis, has been placed in a wider historical perspective and cultural setting. Such an approach has shown the changes in water tenure and irrigation organization which have occurred within one community over the last century.

Further, irrigation is just one example of the group development and control of scarce resources in Ibaloi society. Thus, while on one level, the research was designed to contribute to the increasing understanding of the social organization of indigenous irrigation groups, it was also designed to investigate group ownership in general. The second, wider application of the research, relates to universal principles of corporate organization and resource exploitation. Where some scarce good is jointly owned and managed by a group of people, various organizational forms may be utilized to protect individual interests against the group, as well as the group's interests against certain individuals. Further, the group as a whole must protect its joint interests against external groups or against natural threats to their scarce good. The various organizational forms these social groups may take have been lumped together under such terms as

'corporate', 'cooperative', and 'communal'. An example includes the so-called 'corporate' village where the community controls surrounding lands and allocates them to residents for their use (Brush 1977, Behar 1984, Rambo 1977, Wolfe 1957). It also has been applied to rangeland management (Behar 1984), hunting territories, forest reserves and to agricultural resources such as water and even labor.

While widely employed in a descriptive sense, such terms are rarely well-defined, especially in their application to bilateral or cognatic social systems where principles of incorporation, membership, and devolution of rights are not thought to be necessarily guided by kinship and descent rules. The development of cognatic theory and the problems encountered in understanding productive resource ownership in such societies complicates the issue of joint or group ownership. And yet, land reforms, changes in tenurial patterns or development projects which are imposed from external bureaucratic or jural sources may often have disastrous consequences if they ignore these indigenous social patterns of group ownership. Obviously, what is needed in such situations is a cross-culturally applicable, field-tested method for uncovering organizational principles and the locus of ownership as applied to such resources. This research was designed to test the underlying assumptions and applicability of models, which were developed by George Appell (1974, 1976), (as contrasted with those of Brown 1974, 1976, for example) and more specifically, to test their application in a cognatic society which was involved in the use of indigenous irrigation systems.

The findings indicate certain shortfalls in the models, especially when they are applied to societies which have been colonized, or where minority groups are subjected to the authority of a centralized, political bureaucracy of a majority group different from their own - that is, in peasant societies. Both of these situations apply to the Ibaloi. This thesis demonstrates that those areas where tenurial practises and superimposed jural concepts come into conflict, can create problems within the social organization of groups concerned with corporate holdings. In his recent article on the "reglementation" perspective on conflict management, Arno (1985:47) argued that a conceptual framework for discussing relationships among corporate units is important for understanding social change since conflict is an important indicator of "actual or potential flux in social relationships". This issue is crucial to rural development planning,

since development might be termed 'planned change'. Development planners must deal with the actual situation as it exists in such communities - instead of relying on inaccurate and/or obsolete information. This research provides some indication of the complexity of such issues in one community in the Cordillera Central of northern Luzon, the Philippines.

B. The Research Design

The data for this thesis were gathered from October 1983 to August 1984 during field research in Benguet Province in the Philippines (see Map 1). Three months of this time was spent in Baguio City, studying Ibaloi, doing archival research, interviewing government bureaucrats and local officials, visiting numerous Ibaloi and Kankanay communities, and attending various development-related conferences and symposium at the University of the Philippines Baguio. In December 1983, Kabayan Poblacion was selected as the research site for the following reasons: first, it met all the research design requirements since it has large irrigation systems, some market production of vegetables and a subsistence-based agricultural economy. Second, community officials were receptive to the idea of having research done in Kabayan. Third, the community was accessible by road and was large enough to have space for rent. Finally, some aspects of the Ibaloi culture of this area had been documented by Claude Moss who taught school nearby at the turn of the century (see Moss 1919). With my research assistants, I spent close to nine months living and working in Kabayan Poblacion, from December 1983 to August 1984. Further, my research assistants continued to gather census data for me in the community until October 1984.

Kabayan Poblacion is the municipal capital (poblacion) of Kabayan Municipality - one of thirteen administrative districts comprising Benguet Province (see Map 1 and 2). At almost one hundred and ninety-five square kilometers in area, Kabayan municipality is the fifth largest in the province (Cosalan 1982:17). Kabayan Poblacion (see Map 5) covers one thousand and fifty square hectares of this area and is comprised of steep mountainous terrain (see Map 4), through which the Agno River passes (see Map 3). Within Poblacion boundaries are found twelve main nucleated settlements (sitios) with a combined population of slightly over nine hundred and fifty persons residing in over one

6

hundred and eighty-two households (see Map 6). The majority of people are Ibaloi while on the steep upper slopes of the mountains are found tiny sitios (three or four households) comprised of "Kalanguyans" - a closely related ethnic group with a distinct dialect (see Conklin 1980:3).

Access to Kabayan Poblacion is via the National Road which terminates at a turn-around point a kilometer past the town (see Map 2). This road is a single lane dirt track which is often closed by slides, especially during the rainy season from May-June until November-December. Nevertheless, when possible, there is a daily bus from Baguio City, eighty-five kilometers to the southwest. This trip takes approximately six hours. Numerous jeepsies also ply this road carrying passengers and cargo at a slightly lower fare than the bus, but with a slightly higher rate of discomfort and danger. As the administrative and business center for the municipality, Kabayan contains the municipal offices, elementary and high schools, a market, several "sari sari" or general goods stores, a museum and youth hostel for tourists (which are still under construction) and several businesses. There is also a farmer's credit union and farm supply store (see Map 6).

During the first quarter of the research period, a pre-designed census form was completed for every household in the community. This established a base-line body of information on the individual members, economic resources and socio-economic inter-connections of these households. At the same time, maps of the physical layout of the community were developed, including residences, major field sections and the irrigation canals. Various community officials were interviewed with a formal set of questions regarding local government, rural development issues and the organization of community irrigation resources. Information from the first census was used to select individuals from all socio-economic levels for informal interviews. Many of these early interviews were conducted during guided tours of various sections of the irrigation system. Various informants of the same age and sex were also selected for cohort interviews (see Rosaldo 1980) to establish a historical time frame for the community.

The second quarter of the research period was a time of constant interviewing in various specific topic areas - history, property relations, kinship, agricultural practises, irrigation organization, commercial production, religion and external influences. Several

Key informants emerged during this period and these people provided genealogical information as well as quiding us to participant observation events such as weddings, *tong tong*⁷ or customary courts, anniversary parties, field trips to the gold mines, mummy caves and fishing expeditions. During this period, the commercial vegetable producers, jeepnie drivers, vegetable dealers and small business people of the community were also interviewed.

When the irrigation system was better understood, a self-contained irrigation system in the CotCot-Salat area was selected for a more in-depth analysis (see Map 6). Property records for the land within this system were traced both through community tax records, and through sitio counsellors for the neighborhood. The heads of the landholding households connected to this irrigation system were interviewed with a set of prepared questions on household income, expenditures, resources and assets, labor recruitment and allocation and detailed irrigation information. This economic survey provided more detailed information than the base-line census but on a smaller sample. It led to specific interviews with gold miners and officials of the local credit cooperative.

In the final quarter of the research period, a final census questionnaire was developed which was only slightly modified from the original base-line census⁸. During the final stages, several trips were taken to the International Rice Research Institute and to the Philippine Program on Environmental Science and Management Institute, both in Los Banos, to gather information on and seed of new rice strains, as well as data on pest management and the studies of commercial vegetable farming in other communities of the Cordillera. Throughout the research period, other researchers were consulted - especially those affiliated with the Cordillera Studies Center at U.P. Baguio - for information on how Kabayan differed from or resembled other areas of the Cordillera.

Upon return to Canada, the quantifiable data in the two community census, as well as from the CotCot-Salat survey, were coded and tabulated using the Statistical

⁷ See Sheerer (1905) for a discussion of the Nabaloi dialect and its translation^o into written form. Where terms used by the Ibaloi are thought to have originated elsewhere, they are not italized. Many Ibaloi terms are borrowed from Spanish, Ilocano and American sources. In situations where the source of the word is not known, or is thought to be Ibaloi, it is italized. Spelling of these words reflects the pronunciation heard in Kabayan.

⁸ Unfortunately, with the onset of the monsoon season in August 1984, some households on the upper slopes of Mount Al-AI were not reached (ie. Calimban and Balinit Area), for this final census.

Package for the Social Sciences (SPSSx). Only basic frequency measurements were taken from the data - in order to provide some quantification of assessments gathered through participant observation and interviews - and in order to provide some assessment of the characteristics of this community. It must be pointed out that the data on which this thesis is based refers only to Kabayan Poblacion - except where specifically contrasted against other communities. Other Ibaloi communities vary widely in their socio-economic characteristics (see, for example, Russell 1983).

C. Historical Background to the Study Area

Philippines Geography and History

The Republic of the Philippines is a nation of islands which lies off the southeastern rim of the Asian continent; approximately 116,000 square miles in area, this country has a population well in excess of 55 million people, most of whom reside on the eight main islands (see Map 1). In general, these islands are mountainous and the majority of the population is clustered in the coastal plains. In contrast, the mountain regions have, until recently, been sparsely populated with various minority ethnic groups. Luzon, the largest Philippine island, contains some of the most rugged mountain regions of the country, including the Sierra Madre and the Cordillera Central of northern Luzon. The development of mineral resources and of hydro-electrical facilities on major waterways in these ranges, has increasingly brought the national government of the lowland majority into sharp conflict with the minority ethnic groups of the uplands. The contrast between the lowland populations of the coastal plains, and the minority upland groups has a long history.

The Philippine lowlands have been subjected to a large number of external cultural influences. For example, from the eighth century to the fourteen century, a strong Indian influence was exerted from the Hindu-Buddhist empire of Sri-Vishaya - mostly through colonialization from Borneo to Sulu and the Visayas in the south.⁹ Chinese trade relations with portions of the Philippine islands, including northern Luzon,

⁹For information on this early period in Philippine history see Blair and Robertson 1973 and Zaide 1957.

date back to about 800 A.D. (Zaide 1949:38). The tarsilas (Moro Chronicles) date the first Arab missionaries to reach the Philippines in 1380 A.D. and these established the Muslim societies of the southern Philippines. In 1521, Magellan found a Siamese trader in Cebu when he landed there and trade connections were also documented with the Moluccas, the Malay Peninsula, Borneo, Java and Sumatra - as well as China and Japan (Ibid:43).

Magellan's circumnavigation of the globe brought the Philippines to the attention of the western nations and Spain sent Legazpi in 1564 to establish a colony in the archipelago. Legazpi's attention was soon drawn to Luzon when he discovered two trading junks from that island containing cargos of gold, wax and slaves (see Blair and Robertson 1973:197). By 1571, Spanish expeditions were seeking the fabled "Igorot mines" and attempting to subdue their native owners in the mountains of the Cordillera Central in northern Luzon (Zaide 1949:153; Scott 1974:9).

A popular Igorot¹⁰ saying holds that: "Before - the lowlanders had the cross and the Igorot had all the gold. Now - the Igorot have the cross, and the lowlanders have all of the gold." However, the Spanish cannot be solely credited with this transformation. Unlike neighboring lowland areas, where the twin rule of the "Cross and the Crown" created a corrupt and cruel social system which many Filipinos tried to escape by fleeing into the mountains, the Igorots were never entirely subdued by the Spanish¹¹. On the other hand, at the turn of the century, the new American presence in the Philippines began a different pattern of colonialization - one which mountain regions were powerless to resist. The Kabayan Ibaloi characterized the difference between the Spanish and American regimes in the following way:

The Spanish are very selfish - they do not give us anything - only deprive us, even of our food. For four hundred years we are stagnant. The Americans brought us schools, even paying for the books and the paper. They gave us our present form of government. Little by little we became civilized.

However, some informants were quick to add: "At least, this is what they taught us in our American schools." Between the period of the first punitive Spanish raids and the first American schools, however - a great deal of changes were introduced into Ibaloi

¹⁰Scott 1974 uses this term to describe Filipinos born in the Cordillera Central. The Spanish learned the term "Ygolotes" from adjacent lowland areas where the mountaineers traded, and they gradually respelled it "Igorrotes".

¹¹ See Scott 1974, for an excellent analysis of this period of history in the Cordillera Central.

society. Most of these changes were not intentionally introduced by the Spanish, but as Scott (1974) has shown, resulted from Igorot responses to the new situation in the adjacent lowland areas.

The Ibaloi of Benguet Province

The Benguet province area, in the southern Cordillera Central (see Map 1), was one of the earliest and most successfully penetrated areas of the mountain range. The Juan de Salcedo expedition of 1571 was quickly followed by many more attempts to find and control the elusive Igorot gold mines (see Scott 1974:10-62). Some of these expeditions, as well as a few short-lived Catholic missions were able to document minimal details about the several major ethnic groups of the Benguet area, including the Ibaloi and the Kankanay. Many "relacions" from such sources have been translated and published in the voluminous Blair and Robertson collections and have also been interpreted in the books of Scott (1974, 1975a, 1975b) and to a lesser extent, Keesing and Keesing (1934) and Keesing (1962). The best ethno-historical relacions for this region can be briefly catalogued and are important for gaining some perspective on changing property "relations" among the Ibaloi of this period. These sources include: for the sixteenth century (c. 1591), "Expeditions to the Province of Tuy" (Blair and Robertson 1973:Vol.14:281-326); for the seventeenth century (c. 1624), "Expeditions to the Mines of the Igorotes" by Quirante (Ibid:Vol.20:263-301); from the eighteenth century (c.1755), the reports of Father Vivar on the Igorot missions (Scott 1974:116-128) and of Fray Francisco Antolin (c. 1788) from the upper Magat River area (Ibid:146-156); from the nineteenth century (c. 1830), the field records and diary of Galvey (Ibid:213-223) and the reports of the European scientists who travelled through the region a generation later (Scott 1975b). From these records, a sort of chronology of property relations from the sixteenth century to the mid-nineteenth century can be constructed.

Reports from expeditions in Tuy Province in the late 1500's described the gold producing "Ygolots" in the following way. They lived in villages of three to four hundred people who followed the lead of the richest men who displayed the many skulls of animals killed in ritual feasts outside of their homes. According to the reports, the

common people cultivated the lands of these rich men (Blair and Robertson 1975:Vol.14:303). They were monogamous, believed in a pantheon of gods, worshipped their ancestors with the help of priests called "maibunung" and dried the corpses of their dead over fires before burying them in caves. They worked copper and gold mines and some were so successful at this that they did not bother to grow root crops, but bought all they needed through trade to the lowlands (Ibid:304). From such reports, the Spanish were convinced of the existence of fantastically productive gold mines and many expeditions were sent into the Ibaloi region over the next century to find these mines. The result of this harassment was said to be a drop in gold production (Scott 1974:13), followed by a corresponding rise in raids upon lowland communities for slaves and cattle (Ibid:14).

The next detailed report of these Igorot of Benguet area was produced by Quirante in 1624 when he pushed into the "Galan" mining district and there assayed ore from several abandoned works (Blair and Robertson 1973:Vol.20:266). He determined to his own and to his government's satisfaction, that the fabled "Igorot mines" were very poor and he speculated that they may never have actually been very productive since he reported that the gold miners were often in debt to the people in the lowland towns where they traded (Ibid:279). He was the first to impress upon the colonial government that in entering the Cordillera Central one was not dealing with a single range of mountains, but miles of extremely broken terrain - where the peaks were "cleared and despoiled of trees" and settlements were a few houses clustered on the mountain tops for defensive purposes (Ibid:268-9). He had a very poor opinion of the Igorot political and economic system. For example, he complained that they only produced a few yams and camote in shifting fields and bred dogs as their sole form of livestock. Cattle, obtained from lowland trade were quickly butchered and eaten in the prestige feasts of the chiefs, who were very numerous - one for every ten to twelve households, as the head of their kinfolk (Ibid:270). The "sages or philosophers" were the eldest men and women, who were respected and obeyed "in an extraordinary manner" (Ibid:274). The result of Quirante's pessimistic report and ore samples was a generation of respite from Spanish gold expeditions into the beleaguered Benguet region.

Ibaloi folklore, on the other hand, points to this period as the start of the great gold-and-cattle trading aristocratic "clans" (see Scott 1974:117) in Benguet. These clans were established when their founding members discovered gold placers along the Agno River valley, subsequently involving that region in the profitable gold and cattle trade cycle with the lowland regions in neighboring Ituy and on the Ilocos coast. This, in turn, brought cattle-raiding Igorots from the upper Agno valley into the gold-producing region which disrupted the gold trade (see *Ibid*:118). One enterprising Ibaloi named Amkidit (who Scott (*Ibid*:117) says must have been a contemporary of Quirante (ca. 1624), was born near Baguio and married a woman from Kabayan. He solved the twin problems connected to the gold trade - the amount of gold flowing into the lowlands and inciting Spanish interest in the area, and the northern Igorot cattle raiders - by making a peace pact with Chief Mashay of Kabayan (*Ibid*:118). This pact forbade any residents of the Agno Valley from coming up onto the western ridge without reporting their presence to Amkidit's people; subsequently the valley people became dependent on his clan for all trade relations with the western coast. By 1755, Chief Baban and his son Kidit, direct descendants of Amkidit:

...belonged to a family that was steadily extending a sort of dynastic control over the western ridge of the Agno Valley from Kabayan to Acupan (*Ibid*:117).

They traded with other Igorots for unrefined ore, which they in turn refined and traded with lowland towns in the Ilocos region (*Ibid*:115).

It was this dynastic clan, and others like it, which were most threatened by the increasing belligerence of Spanish authorities in 1754. Several gold traders were jailed, their gold confiscated and a new punitive expedition planned by Governor Arza of Pangasinan Province in an attempt to control relations between the Igorots and the unstable Christian population of the lowlands (Keesing 1962:32). In response, descendants of Amkidit sent Igorot-ambassadors directly to the Governor General in Manila to plead their case (*Ibid*:32; Scott 1974:114). This action shows the level of sophistication achieved by the gold-traders in their relations with Spanish bureaucrats - by going over the head of the local provincial authorities, they gained the patronage of important government officials in Manila, and were able to have the planned punitive expedition called off and their gold and traders returned (Scott 1975a:178-182). In return, the headmen in the gold-producing region of Benguet produced the names of

over seventeen hundred potential converts in twenty-five towns, who would submit to baptism and the ministrations of an Augustinian mission to be established in the region. As a result, Father Vivar came into contact with the descendants of Amkidit - and was able to document the changes that had occurred since Quirante's time.

Father Vivar found conditions for mission work in Benguet difficult since the people were highly mobile and only interested in their "business ventures in the mines" (Scott 1974:120; Scott 1975a:191). Further, there was little agreement between chiefs, who always consulted with each other over controversial issues such as conversion to the new religion and interferences with the normal operation of the slave trade - which Father Vivar deplored (Scott 1974:119). He also ran into hostile resistance when he tried to intervene in the sacred community rituals or to force entry into communities which were ritually closed to outsiders when such ceremonies were underway (Ibid:119). Nevertheless, he noted that the towns to the west of Amkidit's trade barrier were very large and prosperous (some of up to 400 people) while the chiefs of these settlements were said to "own" their individual gold mines and to possess great wealth in silver currency and cattle. The only mining which Father Vivar was allowed to view was the "little panning in the swollen streams during the rainy season by Tonglo poorer classes" (Ibid:115). However, Father Vivar's mission was soon destroyed by misunderstandings; he had little opportunity for observing the Igorot of the upper Agno valley - or the relationship of the chiefs to the people they "lorded it over" (Ibid:115).

On the other hand, a Dominican father, Fray Francisco Antolin, stationed in the upper Magat river area to the south and east of Vivar's mission, was curious about the true economic condition of the Igorot of Benguet, and he took every opportunity to send informants into the Agno River valley area (Ibid:146-7). In 1788, he employed lowland carabao traders entering this region to gather information for him - and later in the same year, he sent another lowlander for more information. The first informants travelled up the Agno River, through Bokod and on to Kabayan, which was:
 ...an impressive settlement of 37 houses - some of them of hand-hewn boards - with ripening rice fields and herds of grazing cattle and carabaos (Ibid:149).

Since it was just before harvest, food was scarce, but gold was everywhere. Kabayan and Lutab (the old name for Kabayan Poblacion) sat beside the oldest known workings

for gold in the entire Agno River valley - but Antolin's informants were not allowed to go to these mines or to proceed further up the Agno valley.

His second informant had better luck (Ibid: 151-2). He visited Acupan - one of the most productive mining districts in the Agno valley - where he saw extensive tunnel works. There he was entertained by a chief who told him that the mines were inherited from father to son and that "nobody worked any mine but his own; those who had none simply panned gold in the streams" (Ibid:152). The mines at Acupan had forty-five owners, who engaged in no agriculture, set their houses at the mouths of their mines to prevent theft, and used slave labor in the mine shafts (Ibid:153). Herds of carabao and cattle grazed under contract in neighboring villages; these animals were the miners' main source of food in the rainy season when trade with lowland suppliers was cut off.

Further, Father Antolin also discovered that many communities in the upper Agno River valley were agricultural - although gold, cattle and slaves were also incorporated into their economy. An epidemic in the upper Agno valley killed so many people in 1787, that there were no field laborers for the rice fields and starvation and misery were encountered everywhere (Ibid: 154). However, the Igorots were still not tempted by the security of a lowland lifestyle - they told their critics:

If we have gabe and camotes for food, and a little rice for our drinks, or basi, we're quite content... Wait for our fiesta at the harvest of the rice plots and see the killing of the carabaos and pigs, first in one town, then in another, and then in others, and see the crowds and merrymaking (Scott 1974:154).

Also, the Igorots scorned the political organization of lowland towns: Among you, anybody is mayor and anybody chief, but our chieftains are always the same and no matter how much they spend, they always have some left over for other occasions (Ibid:154).

In terms of the Ibaloi economy, Fray Antolin discovered a great deal of information. Rice was being grown throughout the southern Cordillera by this time; in 1759, Governor Arza's punitive expedition into Benguet destroyed granaries full of this grain (Ibid:177). Unlike the scattered residences of mining communities, the agricultural towns were well laid out in a cluster (Ibid:176). While the mines were individually owned, placer mines in streams during the wet season were a "public domain" which everyone exploited (Ibid:183). Frontier villages were often dependent on a middleman position between the lowland markets and upland producers - they prevented peddlars from entering the Cordillera and exacted a tariff on all gold going out (Ibid:184). The wealth

created by the gold mines entered all of the Benguet area communities and created internal usury and debt slavery (Ibid:184). Slavery of several types was a "well-developed and lucrative business" in the Benguet area; slaves were created in several ways: by birth, by slave raids into neighboring ethnic regions and by debt or punishment for a crime. The "best customers" for slaves were the mine owners and the mines had the worst abuses of slaves (Ibid:153). On the other hand, slaves in agricultural communities could hardly be told from their owner's children (Ibid:152).

In terms of the Ibaloi political organization, the wealthy leaders (the Spanish called them "principalia") in Igorot communities of the area had many dependents tied to them in a form of debt peonage and, in addition, were supported by freemen - the poorer class in the community who "formed a kind of warrior bands" in their service (Ibid:153). The power of these wealthy individuals was said to be limited by the authority of the elders, who enforced customary law (Ibid:186-7). Ritual played a large part in the installation of a chief, and in general, the ritualized feast was an endemic Igorot ceremony.

Community-wide rituals were often documented since they resulted in restricted access to the community by outsiders. Most important economic endeavors and all life cycles were also marked with animal sacrifices and a feast to placate the spirits of the dead. Gold mining, for example, was surrounded by ritual. If a vein ran out, pigs were sacrificed to bring back the gold; if a vein was discovered, pigs were sacrificed to keep it yielding (Ibid:193). These sacrifices were always born in economic terms by the wealthy of the community - who thus gained status "in strict stages" (Ibid:196). The most elaborate of these ritual feasts were reserved for the funeral of prominent people - the feasting "lasting as long as his estate could supply" (Ibid:192). These ethnographic details from the eighteenth century were rediscovered relatively unchanged in the twentieth century (see Moss 1922), although major upheavals were to affect Ibaloi society in the interim.

Most of these upheavals were to originate in the early nineteenth century when the contraband trade in tobacco was attacked largely through the efforts of one man - "the greatest despoiler of the Igorots Spain ever sent into the Cordillera" (Scott 1974:211-213). Beginning in 1829, Galvey attempted for ten years to control the

production and trade of tobacco in the Cordillera - mostly through the burning and destruction of Igorot communities in punitive raids. He was not an ethnographer, but he did visit Lutab where he examined the mummies in their caves, and documented "what must have been the results of a sudden expansion of wet rice farming techniques" since he mentions the "infinite" fields of Kabayan (Ibid:219). He also recorded the Ibaloi term "baknan" as the name for "petty plutocrats" as well as "main-gel" for those who gained prestige through military valour (Ibid:220). He carried out over 44 destructive raids into the Cordillera, and although he never lived to see it, the Benguet region "tolerated" Spanish garrisons within a decade of his first plans to establish a comandancia militares there in 1836 (Ibid:226). Twenty-five years later, Dr. Carl Semper who travelled through the region in 1860, argued that the decimation which he saw all around him was a direct result of such raids. He noted large irrigation works, stone terraces and abandoned settlements and blamed the Spanish for destroying "an agriculture much more advanced than that of many of its Christian neighbors" (Scott 1975b:25).

In 1848, Benguet was formed into a comandancias politico-militares and in 1854 it was established as a province (Scott 1974:233). The province was divided into pueblos (towns under a gobernadorcillo or petty governor normally called captain), in the normal colonial fashion (see Zaide 1949:175). Pueblos were divided into barangays (villages) and each was under a chief known as the cabeza de barangay. In the latter half of the nineteenth century the area was settled enough for several German scientists to travel throughout the Igorot region of the southern Cordillera. Their records show that the Spanish political system was imposed on top of, and sometimes through the medium of the customary Ibaloi political system (see Scott 1974:235). In 1842, S.B. Mas noted that the native villages were independent and governed by the bravest or the richest men known as "bacnanes" - of which there could be up to seven in each town with the territory of the town divided among them. Beneath them were the "paupers" who cultivated the lands (Scott 1975b:6-7). In 1882-1890, Hans Meyer's notes show that not much had changed with Spanish government; the elders made up the civic government in each village - and the elders council was usually drawn from the wealthiest (Ibid: 125). The wealthy owned "the land and soil in its totality", from them the "plebians" must "buy their farm land" (Ibid:125-6). Also, the wealthy owned the "iron,

copper and gold mines" in which the poor had to work "at the expense and account of the Baknangs" (Ibid:126).

Scheerer (1896) recorded interviews with the descendants of Amkidit and found that the wealthy were all descended from one ancestor (Amkidit) and were intermarried into each town and Ibaloi region. Nobility among the wealthy class was achieved by keeping or increasing wealth and by observing the series of ritual feasts known as the *peshit* (Ibid:199). It was the wealthy traders who promoted peaceful relations in the Cordillera - they repressed headhunting in their territory (Scott 1974:291) and offered no resistance to the organization of the region into manageable political districts of the Spanish colonial government (Ibid:233). Presumably their greatest fear was being cut off from lucrative lowland trading relationships. By this time they were involved with breeding and trading carabao as well as gold, vegetable production for Spanish consumption, tobacco and other commodities (see Scott 1975b:29-30, 39). The upper class quickly learned the profits to be had from their Spanish governors

The upper class quickly learned the profits to be had through abuse of public office, from their Spanish governors. They increased their power over the poorer class through constant bureaucratic assessments against them (Scott 1974:288-9). Taxation, for example, fell heaviest on the subsistence-level farmers of Benguet, where this tax was demanded in the form of currency.¹² Debt peonage resulted as these subsistence farmers were forced to turn to the "well-to-do owners of terraces" for loans or hire to pay their taxes (Ibid:291).

Late in the last decade of the nineteenth century, the conflict between the United States of America and Spain brought American support for the Philippine insurrectionists who had been fighting for independence from their Spanish colonial masters. After the Spanish left the Philippines, however, the Americans remained. By the turn of the twentieth century, when the Americans made their presence felt in the Benguet region, they found a rigid, stratified society among the Ibaloi, which was blamed on the influence of the Spanish (Jenks 1905:32, Richards 1950). As a result, few of the early

¹²Although it should be noted that evidence given to the American administration Philippine Commission in 1901, argued that the Igorot were not formally taxed, although Spanish officials constantly demanded "presents" of gold, cattle and produce (Report of the Philippine Commission 1901, Vol.3:325-329).

American researchers in the Cordillera cared to study them. It was up to later ethnographers such as Moss (1922) and finally, to Filipino historians (Pungayan 1980, Tapang 1985) to piece together the ethnography of the Ibaloi of that time. As in the past, each settled region of the Ibaloi territory was dominated by a few wealthy families (known as *kadangyan*), who controlled the agricultural lands and mining districts. The chief, or head of the settlement (called the *baknang*) was the richest, strongest man with the widest kinship network (Pungayan 1980:7). Rivals for the leadership position came from among the *kadangyan* class, members of which inherited the right to compete for the position through the graded rituals of the *peshit* cycle. These families tended to hand real wealth down along patrilineal lines (Ibid:7) and practised first cousin marriage in order to keep their wealth intact (Leano 1958:71; Moss 1922:210; Scott 1975b:210). They had large extended households comprised of their close kin (*agi*), unpaid servants or slaves (*baga'en*), serfs or laborers under a debt peonage (*si/bi*) and independent workers who tilled the land (*aeshe*) or tended animals (*pastol*) in exchange for a share in the yield (Pungayan 1980:10-19).

For the *abiteg*, or common people, marriage was restricted first by class, and then by kinship. Marriage outside of the *abiteg* class and with relatives to the third degree cousin level was forbidden (Keith 1963:206; Pungayan 1980:6). Affinal connections and even consanguineal ties to the rich class were repressed (Ibid:6). Through the mechanism of various ritual and economic practises the labor resources of the lower classes were co-opted to the benefit of the *kadangyan* class. For example, any illness, funeral or wedding ceremony required propitiating the spirits of the ancestors with a sacrifice of certain types and numbers of animals. Those who could not afford these animals would be required to procure them from wealthy persons and would thereafter work for the *kadangyan* until the debt was paid (Encarcion n.d.:385, 390; Keith 1963:78; Leano 1958:83; 250; Moss 1922:239). Another mechanism involved the *encat/o* share system of the *pastol* described by Tapang (1985:11-12). The *pastol* or cowhand received a share of each live calf born to the herd under his care, but no matter how many shares he totalled up during his years of labor, they never equalled whole calves which he could use to set himself up in competition with his employer (Ibid:11-13). Farm laborers on the other hand received no wages but food,

clothing and shelter at the expense of the *kadangyan* household (Ibid: 13).

Land ownership and control under the indigenous jural system was gained under the principle of primi occupans:

...the land was the property of the person who worked it first, except forestland, which though restricted in certain areas, was communally owned (Ibid: 14).

However, there is conflicting evidence in the literature as to how the rights in different types of real estate were defined, devolved and otherwise transferred.

Tapang appears to argue that all land resources were treated the same under the indigenous customary law. However, other researchers disagree. In discussing swidden gardens, Keith (1963:100) wrote:

In the past, lands were public. Anybody was therefore free to make kaingins wherever he pleased.

Since field rotation is necessary to retain fertility in swidden soils, the property rights in swidden lands were usufruct in nature - when a plot had returned to native vegetation, anyone else could use the land - although permission was always asked of the ancestors and spirits (Fiagoy 1985:17). According to Leano (1958:45), houselots were also held under usufruct title since houses, like swidden fields, often changed location. Other types of properties, however, could be devolved (passed down to the next generation) including rice fields, houses, animals, heirloom objects (Ibid:256), mine tunnels (Scott 1974:183) and, presumably, slaves (Ibid:187). Pasturage appears to have been controlled by communities, since gold miners contracted with neighboring agricultural villages in order to allow their rainy season food supply (small herds of cattle) to graze on village lands (Ibid:153). Competition in land-use allocation appears to have begun to develop by the end of the Spanish colonial period.

Cattle had become a trade commodity for the Ibaloi upper class, to be bred and traded into the lowlands, along with horses and carabao. This was a reversal of the former trade pattern. Losses from incidents of rinderpest, required that the herds be divided up into widely scattered holdings, and this in turn required that the upper class find a means of controlling pasture lands in a number of regions. Tapang (1985:15) seems to feel that this personal control of what appears to have formerly been community lands was achieved under customary law - by "extending the family landholdings by claiming pasturelands". *Kadangyan* families may or may not have been able to accomplish this under customary law - however, there is some evidence that

they were also likely to apply for and acquire land grants under the Spanish colonial jural system.

It is known, for example, that when American administrators attempted to distribute lands in the Benguet region to the poor landless class, a few wealthy families in each community could establish some sort of claim to all productive lands (Keesing and Keesing 1934:166-169). These claims were probably supported under Section 14 of the Civil Code of the American regime, which allowed for the "perfection of title to public lands which had been occupied by a native or his ancestors prior to 1898; or to which conditions required by Spanish laws had been met" (Pronouncing Gazeteer 1902:218). Many *kadangyan* families in Benguet currently trace their landholdings back to early Spanish grants; apparently obtained when the Spanish Royal Decree of September 21, 1797 made it possible to grant ownership to Igorot natives who could show continuous occupation and/or cultivation of lands for root crops or grazing (Philippine Commission Vol.3:1901:76-77, emphasis mine). Indeed, some *kadangyan* families may have received such land grants because of their loyal service to the Spanish military administration in Benguet (see Scott 1974:235, 284, 288-9).

The effect of the American regime on this class-stratified society was first to reinforce it, and then to weaken it through the introduction of education, wider employment opportunities and a more pervasive market economy. For example, Moss (1922:237) noted that the Ibaloi council of elders, which was the judiciary of custom law, was weakened because of the imposition of American laws. The process of arbitration by elders was replaced by rule of law as interpreted by a few influential men (presumably the *baknang*) who understood the new American rules and regulations (Keesing and Keesing 1934:49, 110). However, the American law also ended slavery in 1911 (Tapang 1985:13), and controlled the rates of interest which could be charged by the upper class moneylenders (Keesing and Keesing 1934:142-3), which in turn curbed debt peonage. Those *kadangyans* whose wealth had depended on cheap labor, quickly turned to "landgrabbing" as a means of keeping their economic superiority (Ibid:170).

Further, in the past, excess production and the wealth of the gold trade had been redistributed down through the social classes to some extent through the medium of the prestige feasts. Tapang (1985:23) argues that these feasts encouraged community

solidarity, and allowed the upper class to exchange wealth for prestige and political power (see also Keesing and Keesing 1934:198-9). With the arrival of the Americans and the introduction of an expanding market economy, the production, distribution and consumption patterns underwent a very radical change. Land was converted to vegetable farms, native mines were taken over by American entrepreneurs, the value of real estate climbed as an urban center developed in the Baguio area, and job opportunities in the cash economy drained labor from the land (see Tapang 1985). The *kadugyan* began to see public feasts as an expenditure rather than an investment. Public prestige and political power were no longer obtained in quite the same way (Ibid:34). Instead, the upper class began to invest funds in education and the pursuit of political office.

Kabayan Poblacion

The community of Kabayan Poblacion was technically created by the American administration when it located municipal offices and schools in the old barangay of Lutab in 1900 (Cosalan 1982:10). Thereafter, the old barangay of Kabayan - a few kilometers away, became known as Kabayan Barrio. Of course, these settlements existed long before the American regime. For example, Scott's (1974:106) map of the Agno valley in 1760 shows Kabayan and Lutab close to a marker indicating gold deposits. The Spanish were frequent visitors to the area; Galvey knew it as a region of mummy caves and rice terraces. In 1788, Kabayan was an "impressive" settlement of 37 households; Galvey found it had grown to 106 houses in the mid-nineteenth century (Scott 1974:174,219). In 1898, the Spanish census found 844 residents in "Cabayan", while "Lutab" had a population of 415 (Pronouncing Gazetteer 1902:397,609). Except for a severe drop during the war years (1939-1946), the population of Kabayan municipality has grown steadily, while that of Kabayan Barrio has dropped - to 292 in 1980. Kabayan Poblacion (Lutab), on the other hand, has grown with the municipality, reaching 1337 people in 1970 and subsequently dropping to around 1015 in 1980 (1980 Philippine Census and Cosalan 1982:25). The base line census for this research found just under 1000 residents in 172 households in Kabayan Poblacion in 1983-84.

Today, Kabayan farmers are subsistence rice and root crop producers who may or may not be involved in a marginal production of market vegetables. There is some

livestock production (mainly pigs and chickens) but this is generally for the local market within Kabayan or for home consumption. Two annual rice crops (*Oryza sativa*) are supplemented by rice supplies imported from the lowlands. Camote (*Ipomoea batatas*), which was a traditional staple before rice was introduced and is still an important food in the diet, is a sweet potato grown in dry hillside kaingin gardens. Another traditional staple, taro or gabi (*Colocasia esculenta*), is grown in wet areas. Kabayan is a subsistence community in the sense that the majority of household production is consumed in the household. However, it is fully integrated into the market economy since a sizeable proportion of household consumption also depends upon supplies purchased from outside markets. Cash for obtaining commercial goods is gained from several sources: salaries of some household members, occasional sales of vegetables when there is an excess, native gold mining and the sale of the small amounts of gold in Baguio City, occasional sale of a pig or chickens in the local market, renting space to teenagers who come to study at the Kabayan high school, and operating small-scale sari sari stores. Only forty-one households have farming as their sole source of income. However, one hundred and thirty-four households (or 74.7 percent) gain some or all of their income from farm sources (see Table 1).

Kabayan Poblacion has a large, extensive irrigation system with at least thirteen major canals drawing water from springs or surface runoff along the channels of two major drainage areas; the Pangtal and Asapa Creeks (see Map 6). These creeks join together below the houses of the lowest Kabayan sitio and flow down into the Agno River. The highest intake area of the system is at approximately 1400 meters above sea level while the lowest fields are just a few feet above the river which is at approximately 875 meters above sea level as it flows past Kabayan. This descent is accomplished in a little over two kilometers of terraced terrain¹³, fed by an intricate network of cooperatively maintained ditches. These ditches supply irrigation water for the dry season crop of rice, known as the *kintoman* or red rice. This is the most highly valued variety, red or brown in appearance, slightly sticky with a rich flavor and aroma. During the wet season, the irrigation canals channel excess water away from the paddies, protecting them from flood damage. During this season the *talon* varieties of

¹³Small terraced fields are found at even higher elevations, up to 1700 meters above sea level.

rice are grown since they mature quickly and will develop grain under less optimum conditions. It is said that the *talon* varieties were introduced after the war while the *kintoman* are the traditional varieties.

Signs of the integration of the community into the national economy are numerous. The vast majority of homes include galvanized iron in their construction materials and many include cement as well. Most homes have radios, some have tape recording machines and a few even have televisions. Electricity arrived in the community about a decade ago and most homes have running water as well -although the majority of sanitary facilities are still of the open pit variety. Many homes subscribe to national magazines and newspapers are sold in the stores as are comic books and a few foreign magazines. Clothing is purchased from the lowlands - a pattern followed in Ibaloi culture for centuries. One of the most important indices of the relative wealth of the people of Kabayan is the daily sale of meat in three local stores. At least two or three large pigs are killed every day and this fresh meat finds a ready market in the community. Other researchers in the Cordillera have found that in the majority of communities which they have visited, meat is still a prestige or ritual food and is only consumed on ceremonial occasions (Susan Russell, June Brett - personal communication).

II. ISSUES IN THE THEORY OF PROPERTY SYSTEMS

When anthropologists study property relations, two concepts are commonly brought to bear - corporateness and kinship. Dow (1973:906) for example, has pointed out that the discipline has generally used the concept of corporate group to fill two needs - the need to specify folk concepts of the organization of groups (especially those based on kinship), and the need to specify folk concepts of property control. Schneider (1984:48), on the other hand, has shown that one of the major ways in which kinship is interpreted, is as an idiom - "in terms of which other kinds of social relations and functions are expressed". Leach (1961:305), for example, writes that what social anthropology calls kinship structure, is actually "just a way of talking about property relations" - especially "rights and usages with respect to land" (Ibid:146). Further, while corporation and kinship have both long been connected to the study of property, they have also been strongly linked together - recruitment to corporate groups has usually been seen as based on kinship criteria. How has this conjunction of concepts come about?

Maine (1901:122-6) argued that the "primal condition of the human race" was "an aggregation of families" and therefore, that the first human laws dealt with corporate groups. Maine assumed that the primal family was patriarchal, a social entity with assumed perpetuity, and a property-holding unit. He (1901:141) wrote:
...we can hardly form a notion of the primitive family group unless we suppose that its members brought their earnings of all kinds into the common stock, while they were unable to bind it by improvident individual engagements.

In consequence of the responsibilities of the individual towards the family, and of the family towards the individual, Maine (Ibid:145) pointed out that some jurists considered the Roman parent and child as a "unity of persons" under the law. Finally, Maine (Ibid:148-50) also argued that for the Romans, and presumably for all ancient societies, kinship terminated where females appeared in the family tree, since corporate kinship units could not be subject to two paternal authorities - those of the wife's family as well as those of the husband's kin. Thus, corporate groups were not only kinship units, but specifically, kinship units based on unilineal descent - this has proven a very persistent

theme in social anthropology.

Radcliffe-Brown began the consolidation of this approach. He (1950:41) wrote: A group may be spoken of as 'corporate' when it possesses any one of a certain number of characteristics: if its members or its adult male members, or a considerable proportion of them, come together occasionally to carry out some collective action - for example, the performance of rights; if it has a chief or council who are regarded as acting as representatives of the group, as a whole; if it possesses or controls property which is collective, as when a clan or lineage is a land-owning group.

Although he discussed the ethnographic evidence for non-kin based, corporate village groups, Radcliffe-Brown (Ibid:42-43) went on to argue that only "unilineal" reckoning makes it possible to create corporate kin groups having continuity in time extending beyond the life of an individual or family". Since the main concern of Radcliffe-Brown and others of the Structuralist school was social cohesion and stability over time, and the role of kinship in promoting these (Schneider 1984:45), it is not surprising that he dismissed non-kin based corporate villages as "based on the persons who attach themselves to a headman" (Radcliffe-Brown 1950:42), while bilateral kinship was viewed as incapable of creating "distinct separate groups, each with its own solidarity, each person belonging to one group of any set" (Ibid:43).

There were some dissenting voices - of those who focused on non-kin based corporate groups, the predominant guideline was Wolf's (1957) analysis of corporate peasant communities. Perhaps taking a lead from Weberian sociology, Wolf saw closed corporate peasant communities as arising from "dualized" societies where a "dominant entrepreneurial sector" was opposed to a "dominated sector of native peasants" (1957:8). Others developed this idea further (see Rambo 1973, Behar 1984) but this position never seriously challenged the rule that corporate ownership of property was best demonstrated in societies with unilineal descent (see Befu and Plotnicov 1962). Research in bilateral or cognatic¹⁴ societies, on the other hand, often seems to have been blocked by the old Radcliffe-Brown strawman of social order. Appell (1976:5) noted that Radcliffe-Brown introduced the notion that bilateral societies were loosely organized and lacking definite structure - probably because of the "lack of an

¹⁴I should note here that I treat these two terms as referring to separate kinship concepts. Bilateral kinship systems trace relatives through either or both the maternal and paternal lines while "cognatic" refers to a mode of descent reckoning where all descendents of an apical ancestor/ancestress through any combination of male or female links, are included.

unambiguous method for assigning individuals to social statuses".

There are several problems with this approach. First of all, social status is assigned through many means not explicitly connected with kinship. Not only does such a perspective underestimate the organizational ability of members of cognatic societies, but it probably also overestimates the 'tidiness' of unilineal descent systems. Further, it ignores altogether the importance of other factors such as locality or common purpose in the formation of formal groups (see Shipton 1984). Nevertheless, when the various publications of Murdock (1960, 1964) and Goodenough (1955, 1961) are examined, for example, it is easy to see that social cohesion and order are still very much at the root of our theoretical difficulties with bilateral social organization.

One of the longstanding points of debate in reference to bilateral societies is whether or not sufficiently discrete units can be created to serve as the basis for corporate group formation. The problem is that with bilateral descent systems, the rules of recruitment based on kinship would create overlapping groups without clear boundary maintenance rules, and without clear rules for assigning status within the group.

Murdock (1960:4), for example, defined a corporate group as:

...an estate comprising rights over persons and various forms of real, movable, and incorporeal property in whose assets a number of individuals share in accordance with their respective statuses.

In bilateral social systems, Murdock (ibid:2-3) identifies two important kin-based units, the domestic unit which is "fully corporate" and the kindred which is too amorphous to serve as the basis for a corporate group (although he acknowledged that the "stem kindred" could be the exception to this rule (1964:129). This sparked off a debate between Murdock and Goodenough over the formation of social groups based on kinship.

In this debate, Goodenough (1955) developed the very important point that social theorists have long been confused over two organizational forms based on kinship, the ego-centered group and the ancestor-oriented group. He develops this point further in his (1961) article which points out that the "polar distinction" between unilineal and bilateral descent systems is masking the true distinction which is one of lateral or radial organization versus lineal organization. Both of these forms could occur in the same society and "non-unilineal" descent groups could form where principles of descent inclusion are other than unilineal (1961:1343). Further, lineally organized groups could be

exclusive with restricted membership or they could be unrestricted. Since non-unilineal restricted descent groups have much in common with unilineal ones, he proposes calling both of these forms "lineages" but notes that Murdock prefers the term "ramage" (ibid: 1344). It is interesting that Goodenough (1955: 75-76) draws on Barton's (1919) account of the Ifugao of the Cordillera Central to illustrate the existence of non-unilineal descent groups. Subsequent research in many bilateral (or cognatic) societies has fueled the debate which continues to focus on the corporate nature (or lack thereof) of the non-unilineal descent group¹⁵.

Further semantic debate is caused by the variety of definitions given to the corporate concepts as it is applied to ethnographic examples of group organization and tenure in property. Cochrane (1971: 1144) has argued that the concept has been applied in anthropology in two ways, either as "a kind of anthropological colloquialism" or as a term covering distorted ethnographic data. She (op.cit.) writes:

...there is evidence to indicate that misunderstanding stemming from use of the corporate concept can obscure the nature of property relations.

The difficulty lies in defining when and how a corporate group can be said to exist; in other words, what are its defining characteristics? For Brown (1974, 1976) who follows Maine (1901) and Smith (1975), a corporate group is an institution with presumed perpetuity. He (1976:40) writes:

...the corporate group is characterized by sufficient autonomy, procedures and organization to regulate its exclusive body of common affairs.

Such corporate groups develop under the appropriate conditions, from various quasi-corporate groups or "corporate categories", which exist in all societies (ibid: 33)¹⁶.

For Stoljar (1975: 175-177), on the other hand, the essential criterion for a corporate group is the joint ownership of property which is held as a strictly separate legal entity from the social group concerned with it. The members of the group do not merely have a joint interest as in voluntary associations, but a joint ownership which cannot be split up by the separate, individual owners (ibid: 44). He argues that without the separate legal entity which is the corporation, the corporate group can not centralize or distribute liability and property control (ibid: 177). He also distinguishes corporate groups

¹⁵See, for example, Davenport 1959, Eggan 1967, Ember 1959, Firth 1957, Gilbert 1981, Noricks 1983, Scheffler 1964.

¹⁶This perspective has led to some interesting speculation on how the formation of corporate groups from corporate categories might occur and/or be blocked by various forces (see for example, Goodell 1985).

from several other types of groups or entities concerned with common activities and property, such as the family, community, college and voluntary association.

When the difficulties of kinship and descent theory are considered together with the problems of corporate group definition, it is not difficult to understand why little gain has been made towards understanding group ownership in bilateral societies. Perhaps, as Appell (1976:vii) has suggested, it is time to remove "unilineal blinders" and to "investigate the question-set dealing with property relations" rather than the one which "starts off with an interest in kinship and descent" (ibid:67). He argues that it is necessary to trace the creation and devolution of interests in a scarce good back to the individuals or groups concerned with these resources and only then concern ourselves with the nature of the recruitment to the group, which is an empirical question to be decided by ethnographic investigation (see Schneider's (1974) similar conclusion).

However one chooses to define corporate groups, most analysts seem to agree that there are a number of different types of groups having some or all of the characteristics commonly associated with corporations¹⁷. Appell (1976:69) also recognizes a number of types of social entities which might be termed corporate by others; however, in his attempt to investigate the question-set dealing with property, he has rejected the term 'corporate' altogether. He argues that this term is a culturally-specific construct which is impossible to apply to other cultures without the danger of creating "social pseudomorphs" or cultural entities which only exist in the mind of the investigator (Appell 1976:70). Instead, Appell attempts to follow the property question-set approach and he has produced a systematic methodology with which to identify and define the phenomena of property ownership. These concepts are discussed in some detail below.

A. The Appell Models for Property Systems

In his book on the cognatic social structure of Borneo, Appell (1976:67) wrote: "...what I argue here and will attempt to demonstrate with ethnographic materials from the Rungus is that property relations are a universal aspect of all human societies; that social structure is primarily founded on the nature of these relations; and that the question-set dealing with property relations as a

¹⁷ The Cochrane-Goodenough debate (1971) focused discussion on what those "corporate" characteristics are and how the concept has been employed in anthropology.

result explains a wider range of phenomena than the question-set that starts off with an interest in kinship and descent.

While this seems to indicate that Appell follows the materialist school, he actually allies himself with the British structuralists (Appell 1980:2) with an interest in what he has termed "emergent structuralism" (see Appell 1980,1981). Appell wants to understand how the tension between the social structure (the cultural norm?) and actual behavior can create an "opportunity structure". It is within the opportunity structure that social behavior is tested to see whether such behavior will be accepted into the social structure. Members of a society can either recognize new behavior (a reflexive event which elevates new behavior to the social structure) or reject it and thus relegate it to the sphere of deviance.

This reflexive event which lifts behavior out of the sphere of the opportunity structure and into the sphere of the social structure, may have much to do with laws, rules and regulations and all the other positive and negative sanctions which surround, and support the social structure (see Appell 1974:2-4; 1976: 67-68; and Arno 1985). For this reason, Appell chooses to focus on the recognition of the jural or legal system as the defining characteristic of legitimate property-holding units, as versus the many other forms of nebulous groups forming and dissolving in relation to a scarce good. He (1976:68) wrote:

The jural entity may involve an individual or a social grouping. When a social grouping thus holds interests as a jural entity, I refer to it as a jural isolate, or corporate social grouping. However, when the social grouping does not hold the rights as a jural entity, when instead the rights are held by the individual members, I refer to this social entity as a jural aggregate. In certain instances, however, a jural system may recognize the existence of social relations between the individual right holders that belong to the social grouping and will, as a result, permit one of the members of the social grouping to sue on behalf of the other members and equal right holders. Such a social grouping which is not a jural isolate, ie. not a corporate social grouping, but whose social character is nevertheless recognized in the jural system, I refer to as a jural collectivity.

In Figure 1, I have modified Appell's (1976:68-69) diagrams of each of these social forms and have included an explanation of their salient features.

It is important to note here, that Appell makes no restrictive definitions of the membership criteria of these groups, nor their organizational structure. He has attempted to provide theoretical constructs which "will accommodate not only the analysis of cognatic social systems but all social systems" (Appell 1976:67). The hypothesis which this thesis tests, therefore, postulates that corporate theory, if based

on a concise definition and a clear methodology, is extremely useful in the analysis of property relation systems - especially in the historically troublesome, cognatic or bilaterally organized societies. At issue, is whether or not the Ibaloi conceptions of rights in property can be investigated and the empirical evidence found for corporate group operation. Following that, it is necessary to establish what rules of recruitment are being employed in building these property groups, how the property rights are distributed within them, and finally, how such groups respond to changes in the jural or economic sphere, which might affect their property interests. Only then, can I speculate on the role of kinship in recruitment to corporate groups, and on the role of corporate organization in the development of productive resources in the indigenous setting - and finally, from that basis, speculate on the role of corporate principles in the development of irrigation systems in small scale societies. When Appell's methodology was employed to investigate the property system of the Philippine Ibaloi, his concepts proved useful in identifying the social entities involved in property tenure as will be demonstrated in this thesis. However, certain problems arose, and these problems were not only concerned with what Brown (1984:813-815) has called a "plurality of jural levels" but they also involved the issue of inclusion/exclusion (boundary maintenance) and the diachronic development of property systems. These problems were productive in that they pinpointed certain areas which must be addressed if corporate theory is to prove useful in cross-cultural comparisons. These and other issues will be discussed in more detail in the analysis chapters to follow.

III. ETHNOGRAPHIC DESCRIPTION OF IBALOI SOCIETY

In most standard ethnographies, there is some discussion of what Schneider (1984:181) has called the "quartet of kinship, economics, politics, and religion as institutions" - and, as Schneider further points out, this "traditional quartet" has "survived every shift of theoretical orientation, anthropological aim, and problem" (Ibid:182). However, it must be remembered that from a holistic perspective, this quartet is artificially extracted from a unified whole forming a single human culture. Although these subject areas are divided for purposes of description and analysis, the traditional quartet are actually different ways of looking at the same thing. In the following discussion of the present-day ethnography of the Ibaloi, certain topics or threads of interest can be traced through the description of kinship, economy, politics and religion. These interests have determined what ethnographic information has been documented here - since, obviously, the whole of the culture of the Ibaloi cannot be covered in one chapter. The main topics of interest include property relations, group formation and the relationship between the rich and the poor in Ibaloi society. For example, Ibaloi economics involves a great deal of petty capitalism, market relations, distribution networks and employment opportunities not covered herein. Indeed, the production, distribution and consumption systems of the Ibaloi are not considered in their entirety for any one economic sphere of activity. The focus in economics is on agricultural production with some passing reference to distribution and consumption patterns. Similarly, the kinship system is not exhaustively described; however, those aspects of kinship which affect rules of access to property and devolution of property rights are focused on. Finally, politics and religion are merely touched on, since the diachronic aspects of these factors are covered in more detail in the analysis chapter.

A. Social Organization

Kinship and Social Class

The accepted designation for kinship systems in northern Luzon is bilateral descent, Hawaiian terminology, and the kindred traced to the third-cousin level (Eggan 1967), although there are local variations between ethnic groups. The variations within Ibaloi society tended to be rather extreme in the historical past, with the *kadangyan* families having patrilineal tendencies in their devolution practises and the poor or *abiteg*, following bilateral descent rules but having much smaller active kindreds (Pungayan 1980). Consanguineal relationships often were repressed between the rich and the poor while the affinal connections were rarely recognized at all (Ibid:6). The size of a person's kindred was an important indication of his wealth and political prominence; however, as in other areas of the Philippines, the kindred was only the basis for the development of a much larger following in the Filipino "dynamics of power" (see Hollnsteiner 1963).

Social class and power in Ibaloi society conforms to a large degree to those characteristics discussed for Philippine society in general. Lynch (1979:44) wrote, for example, that there are two kinds of people in rural towns of the Philippines - the "big" - or those with wealth but lacking labor and political support, and the "little" - or the poorer people who have excess labor and traditional skills, but no productive resources. These two types of people live in a "symbiotic union" of great stability based on the exchange of labor (employment) for patronage. Lynch (Ibid:45) argues that this "vertical, personal, and revocable for cause" relationship is stable because it meets the needs of both the "big" and the "little" people. Each has a place, and each understands and respects their rights and responsibilities. Hollnsteiner (1963, 1979) has investigated the characteristics of Filipino class and she points out that kinship is not a sufficient condition for the creation of an ally. The network of supporters which create a power base in Filipino society require close, emotional ties of alliance based on mutual loyalty and assistance (Hollnsteiner 1963:63). The basis for all alliance relationships is reciprocity (Hollnsteiner 1979:38). As Schneider (1984:72) has demonstrated, such relationships depend on a continual state of doing, as opposed to an inalienable attribute of being.

Schneider (Ibid:165,175) has pointed out that the fundamental assumption in kinship theory is actually a European-based folk wisdom: "blood is thicker than water".

Because of this implicit assumption, anthropologists view kinship bonds as dependable, compelling and stronger than all other kinds of bonds. This has led to the establishment of the "privileged" position of kin bonds in all anthropological theorizing. However, as Schneider demonstrated for the Yap, non-western societies often build enduring systems of relationships based on reciprocal requirements of doing what is proper rather than of being what is required. This principle can also be seen at work in Ibaloi society.

For example, in Kabayan, close relatives are called *agi* (kin) while more distant relatives are called *kait* (relatives)¹⁸. Second or third cousins may be termed *agi*¹⁹ or *kait*, depending on circumstances. In the past, it was *agi* who were required to revenge an injury or death to ego - and the larger the opposing party, the wider the *agi* circle drawn upon by the avenging group (Pungayan 1980:8). If one acted as *agi* - even if the relationship was one of *kait*, as determined by the genealogical grid, then the relationship would be a close, affective *agi* tie of mutual reciprocity. This principle of alliance based on reciprocal ties was especially important for the *kadangyan* families in their creation of political factions, and in their maintenance of wealth. According to many informants in Kabayan, the largest, wealthiest and best known *kadangyan* families in Ibaloi society before the Second World War, formed well-defined "clans"²⁰. These so-called clans were actually based on reciprocal ties which linked people vertically through "patron-client" relationships and horizontally through alliance networks which ramified outward throughout Ibaloi society and linked upper class people through contract, marriage or fictive kinship (see Pungayan 1980:20-21).

The common pattern within these *kadangyan* families was to practise clan endogamy. As one informant said:

For example, where you are a rich man; I am a rich man also. You have many properties; I have many properties. If you let your children marry somewhere, your properties will be distributed and redistributed to other parties far from this place. But if you let our children marry, our properties

¹⁸Conklin (1980:6) reports many similar terms among the Ifugao, including "agi" for kin and "ina" and "ama" for mother and father respectively. There are also many similarities in terms for the wealthy in Bontok and Ifugao society; for example, *kadangyan* in Ibaloi, *kachangyan* in Bontok and *adangyan* in Ifugao.

¹⁹Scheerer (1905) documented the Ibaloi use of "agi" in reference to brothers and sisters. The extension of such terms to cousins is normal in bilateral societies of this type.

²⁰This term was apparently applied to them by American administrators. The Spanish called them "caciques" (Scott 1974:117,240, 291).

will be intact - in the hands of your relatives. That is why even if we are relatives, we let our children marry. That was done before - but not now. Before, it was the property that was controlling marriage.

This practice was an attempt to control the distribution of property since the normal preference in inheritance patterns was to divide the inheritance among all descendants and some dependents. Other ways in which the *kadangyan* families attempted to prevent the scattering of family lands included marrying only other *kadangyan* (no interclass marriage), giving female offspring moveable property as their inheritance and/or favoring one child over the others in the distribution of land. The result of these strategies was a tendency towards a patrilineal bias among the wealthy, especially in reference to the devolution of real estate (gold mines, land). This tendency even reached into the ritual sphere, since only the patrilineal descendants of a *kadangyan* family were under pressure to maintain the *peshit* or prestige ritual cycle (Pungayan 1980:32).

Several factors which influenced Ibaloi society after the turn of the century, began to place stresses on the principles of class and power in Ibaloi society. The old reciprocal relationship between a *kadangyan* family and its *abiteg* allies began to operate in a fashion which benefitted the wealthy more than the poor. For example, some *kadangyan* took advantage of the discrepancies between traditional land tenure, Spanish tenure laws and the new American regulations to claim lands which had been developed into productive resources by others. *Baknang* who consolidated traditional prestige and wealth with new forms of political office, began to abuse the long-standing patron-client relationship between the *kadangyan* and the *abiteg*. These abuses began to develop under the Spanish administration in the late nineteenth century, and persisted well into the twentieth century (see Scott 1974:288-9).

After the arrival of the Americans, a new "class" emerged in between the *kadangyan* and the *abiteg*, which Pungayan (1980:35-36) has termed the "middle class". These could be downwardly mobile *kadangyan* or upwardly mobile *abiteg*. Often the former preserved their decreasing wealth through rejection of the family's traditional *peshit* obligations and through a rejection of traditional *kadangyan* responsibilities for reciprocal relations with *abiteg* clients. According to informants in Kabayan, this tendency was always strongly resented by the *mambunong*, by other *kadangyan*, and by close relatives all of whom pressured a visibly affluent family to "return the meat" by

performing canao, or by making it possible for others to perform canao by the lending of their wealth. But these downwardly mobile *kadangyan* recognized that the refusal to fulfill the *kadangyan* ritual obligations also meant the freedom to refuse the other traditional *kadangyan* obligations - such as supporting and feeding the poor by providing them with opportunities for employment, giving material and political backing to members of the kindred, retaining the status of the family in the face of continual competition from other *kadangyan* families. Those *kadangyan* families who chose to be "middle class", severely restricted their kinship circle at the same time that they reduced the expenditures involved in maintaining that status (Pungayan 1980:25). To many, this must have seemed an excellent trade-off for the reciprocal loss of support from the "expendable" relatives as it allowed them to invest their resources in education and political office.

In present day Kabayan, these old class lines are no longer so clearly drawn. People in the farther outlying sitios tend to be "land poor" in comparison with those in the central sitios - at least, they are land poor in the highly valued rice paddies. But the identification of a *kadangyan* family is very difficult now. Informants said that perhaps the only way to tell if a family was rich enough to have been *baknang* was if they had many educated children or children residing overseas. No one in Kabayan now owns the large herds of animals which once were a clear indication of *kadangyan* status. None of the present-day wealthy people in Kabayan live in the old-style extended households with married children, tenants, slaves and debtors residing on the same "homestead". Slaves no longer exist, although many Kabayan families trace their origins back to grandparents who were forceably brought to Kabayan as slaves, sold to a *kadangyan* family and forced to marry each other at the orders of the *baknang*. These indices of wealth are now gone.

But the holding of land, especially rice paddies, is still an important indication of relative wealth. The family which has more rice fields than it can work with household labor is considered wealthy. Poor families will approach such landowners with a request to *eso*, or sharecrop their land - a modern equivalent of the old household retainer relationship. Under this arrangement, the tenant is responsible for all the inputs; labor, seed, water management while the resulting crop is divided equally between the tenant

and the landowner. In the majority of *e'so* cases investigated in Kabayan, the *e'so* was a relative of the landowner, but the people themselves argue that there is no bias towards relatives in choosing a *man'e'so* (literally, "the one who will be *e'so*").

Kinship Terminology

The terminology employed in Ibaloi society to refer to various types of kin relationships, have been heavily influenced by outside contacts. Even the Ibaloi terms for mother and father, *ina* and *ama* respectively, are now infrequently heard and have been replaced with the Ilocano (lowland) terms of nanang and tatang. Other terms similarly affected include those for brother and sister which have been replaced with manong and manang respectively and the general term for grandparent (*apo*), which has been replaced with lola and lolo. These are more specific kin terms and they have been adopted from lowland, Spanish or American sources. "Uncle" and "aunt" are frequently used now whereas formerly the parental terms were applied to such relatives. "Brother-in-law" and "sister-in-law" have replaced *bayaw* which was a general term meaning literally "shoulder relative". Along with this change in terminology has come a change in conceptualizing kinship relations. Second and third degree cousins are rarely termed *agi* anymore; instead, they are termed *kait* in many cases. The obligations of *agi* remain strong but are no longer unavoidable. These include attending and contributing towards the costs of weddings, funerals and other *canao* occasions, and financial assistance when necessary. The obligations between *kait* have been reduced to hospitality and friendliness - although, like many other features of Ibaloi life, this varies between communities.

Unlike *agi* and *kait*, which refer to ego-centered units very similar to the western concept of the kindred, tracing rights in certain property categories in Ibaloi society demonstrated the existence of another social group which is lineally organized and resembles what Goodenough (1955:72) called a "nonunilineal" decent group. The members of this group consist of all individuals who can trace a consanguineal relationship between themselves and an apical ancestor/ancestress - whether traced through female or male links. All members of this group retain certain rights over land which was first opened for production and improved by the apical ancestor/ancestress. These lands are devolved from generation to generation in a direct line and are known as

ancestral or inherited lands. However, if the one who inherits a portion of these lands must liquidate them as assets to cover certain culturally-acceptable expenses, they must first be offered for sale - at a preferred rate - to the person who would have inherited them had not the present owner received them. That is to say, if A inherits land from B (his father), the lands in case of a sale would be made available first to A's siblings, second to their children, third to B's siblings, fourth to their children and so on. This group with residual rights in inherited property is called a *bunak*; however, it is fast disappearing in Ibaloi society since rights in property have become more dependent upon state tenure laws stressing the individual.

Marriage and Residence Patterns

Marriage patterns in Kabayan are said to be undergoing considerable change. In the past, marriage tended to be community endogamous and this is still true, especially if the community is defined at the municipality level. Of the 151 couples in the baseline socioeconomic census, 67 couples or 44 percent were both from Poblacion. An additional 32 couples were both from within the municipality. Since many members of the community who marry outside of Kabayan will subsequently reside outside of Kabayan, it is difficult to estimate from the census data whether community endogamy was a statistically significant practice. Among the census couples who included an in-marrying partner, it appeared that females in-married more frequently than males. In general, Ibalois say that they prefer to marry Ibaloi so that their "tribe will grow and flourish". This seems to be supported in the ethnicity of the couples in the census since those cases where both members were Ibaloi were clearly dominant.

First cousin marriage was not documented in present-day Kabayan, although one genealogy collected, which represented six generations, contained several cases of first and second cousin marriage in past generations. Informants claimed that even marriage with third cousins was discouraged since they believed that this could result in barrenness. Post marital residence is generally neolocal, although there is often a short period of uxorilocal residence until the first child is born or until the couple can be financially independent. It is obvious from the present settlement pattern in Kabayan sitios, that in the past, the newlywed couple would build a house in close proximity to

the parental couple from whom the largest inheritance of land was expected. As a result, certain areas within all sitios have taken on the flavor of an extended family compound. However, in the present generation, land shortages have meant that many children must emigrate to find employment or land in other areas of the Philippines - or possibly even overseas. Usually, the houselot and ancestral lands are now devolved to the eldest or youngest child, while the others are given financial support for an advanced education. Divorce is permitted in certain situations allowed by customary law; these situations include "bad luck" (an indication of possible disfavor among the ancestors), barrenness and in some cases, incompatibility.

Inheritance

In discussing current inheritance practices with informants, no clear statement of inheritance rules could be formulated. Informants acknowledged that the national law required equal inheritance by all offspring, but as one informant put it:

[Inheritance] has changed because according to our custom before, at the funeral, they had to butcher pigs. If [the deceased] had a carabao, then you have to butcher carabaò...a cow, then butcher a cow. Even if the cow of your deceased is gone, but if he had a cow before, the children must have to buy cow or if he owned a horse - then a horse. The child who could afford to buy these animals would inherit more. There are still some now - brothers and sisters - who quarrel about inheritance. They call some old men who voluntarily come to judge - to let them talk together until some agreement is reached. But there are some also - brothers and sisters - who agree to distribute equally among themselves. It is within themselves.

The informant went on to elaborate:

For example, we are three children inheriting. I will insist that that land was given to me by our parents. Or, if not, I will say: "That is mine because I spent more during the burial expenses." It is up to us three. Each one must have to force his decision. [Even if] there is a will - the children do not believe in it! Because one will say: "That will was dictated by the older brother because he wanted more of the land. I do not believe in that will of our father." Do you see? It is the one with the strongest will (laughter) who will inherit.

When a young couple marry, the parents of each of the partners will, when possible, give them some land to work. It is normally understood that this land is either part or all of their inheritance, but formal (state) title is rarely transferred at that time. Each of the newlyweds retains control over his or her inherited land, although the couple will work the land as a unit. Until children are born to the newlyweds, the rights in the inherited property are retained by the parental generation. If there are no children, and a divorce or a death occurs, the land reverts to the parents of the newlyweds - or, if the

parents are dead, it is redistributed among the legal inheritors. Inherited lands never pass over into the spouses family's hands. Once the couple have children, the land is held in trust by them for their offspring. If there is a divorce after the birth of children, the land remains with the spouse who takes the responsibility of raising the children. Informants said that if a man were to remarry, all of his inherited property remains with his first wife and their children. Conjugal property is treated differently.

When children marry, they are encouraged to open and improve new *uma* or *kaingin* plots and to increase their land holdings. Lands acquired after marriage in this way are termed "conjugal" property, and it is up to the couple how this land should be divided if a divorce should occur. It is the conjugal property which is sold or mortgaged first in times of financial distress. This is because there are still many ritual and social sanctions against disposing of inherited property, although these are becoming less effective. In Kabayan, however, there were several cases of "mortgage" between related households, with the one lending the money retaining use of the land until the "debt" was repaid²¹. Informants in these cases often complained of trying to redeem these lands by repaying the debt, only to have their relatives refuse to give the land back.

Subsequent conversations with researchers working among the Bontok to the north, revealed that there was a pattern in several Bontok communities, of distress sales of inherited lands to close relatives. Among the Bontok, however, these sales were not called mortgages, and the only obligation which the buyers held towards the sellers was that, should they decide to ~~resell~~ the land at some future date, they were required to offer it again to the original owners at the original price. There is the possibility that this practice also existed among the Ibaloi in the past, but it may have been eroded by the development of usury - which it should be noted, involved rates considered very outrageous even by colonial authorities (Keesing and Keesing 1934:142-3). The Bontok, on the other hand, did not allow usury in their communities.

Recently, inheritance practises in Ibaloi land-poor communities have involved the parents allowing the eldest child to work a part of the family lands while this child and his/her spouse "get on their feet". As each successive child marries, they may be allowed to work this land in turn. Or, children may be given the option of receiving an

²¹Von Benda-Beckmann (1979:169) also observed this pattern in West Sumatra among the matrilineal Minangkabau where he termed it "pawn".

education. If money is spent on higher education for a child, they are often considered to have received their share of the inheritance. Finally, when all offspring are adults, the youngest child is expected to remain behind with the parents, caring for them until their death. This child may inherit formal title to the "ancestral" or inherited family lands and to the original house²². Often, if the parents die while many of the children are still minors, the land will be transferred into the name of one of the adult offspring - who will then be the administrator of the property until all the children reach majority; then, presumably, an equal division of the property will occur. However, many land disputes have resulted when the administrators are reluctant to give up control of the property.

In the past, it was common for each Ibaloi community to have one or more *matonton* - or "aged individuals of the poor class" who acted as the genealogical "storehouse" of the community (Pungayan 1980:33). Whenever disputes arose over inheritance, or whenever one needed to know his/her exact relationship to another party, these *matonton* would be called upon to give evidence to a meeting of concerned individuals. There was no evidence of such a genealogical specialist in Kabayan during the field research period. However, like the *mambunohg* or pagan priest, these specialists were said to still be common in more isolated Ibaloi communities.

The Household

The basic unit of social, economic and ritual organization in Kabayan is the household. The common domestic unit in the community is comprised of a nuclear family; however, houses are found clustered in small nucleated settlements of families bearing the same names. Stem families are common when a member of the parent generation has been widowed and goes to live with a married child. Another less frequent household pattern is where the orphaned, unmarried syblings of one spouse come to reside with the couple. Thus, extended family arrangements are common, and as Pungayan (1980:28) pointed out, these cases of household organization often develop not only out of kinship, but out of the economic need for labor, as well. In this

²²This form of ultimogeniture has been noted in other Filipino populations - in Ilocos Norte where population pressure is very high, and in some Bontok communities where, combined with other inheritance practises, it prevents fractionalization of land holdings (see Cherneff 1982:66; Lewis 1978).

situation of labor-intensive agriculture, especially women are a significant resource to the household. One informant said:

Without women in the house, you must also your land, because if you have no women, who will do all the work?

By means of the two censuses and the CotCot-Salat survey, Kabayan household characteristics have been documented. As is to be expected, there is some variation between the findings in the two censuses; nevertheless, there was a broad agreement in the individual membership, resources, activities and interconnections of the households which make up the community. The second census is probably more accurate in certain areas for the simple reason that the community members were more familiar with the research project and its personnel. Also, since the findings of the first census were used to plan interview schedules and participant observation, the interviewer was more familiar with the community and could ask more informed questions in the second census. Finally, the intensive socio-economic survey of the households within the CotCot-Salat irrigation system proved useful in drawing a more detailed profile of the Kabayan household²³.

The bulk of Kabayan's population reside in what are probably the five oldest major sitios; Bakong, CotCot, Palanas, Opdas and Shontog. CotCot is the largest of these neighborhoods. Further, while approximately 77 percent of the households in the entire community have some access to land, slightly over 82 percent of the households in CotCot have land resources. Finally, CotCot has a self-sufficient irrigation network of two major canals from one major headwater (or *talukbed*) on Pangtal Creek (see Map 7). As a result, CotCot was chosen as the most likely area for a more intensive examination of household dynamics, land tenure and irrigation organization. All of the landowners along the CotCot-Salat canal were interviewed. Of these landowners, 80 percent reside within the sitio of CotCot while the rest reside in other sitios throughout the community. The survey interviews made up the third source for information on household characteristics in Kabayan; and, as mentioned above, provided more detailed information on income, expenditures, labor recruitment and allocation, productive resources and

²³It should be noted that in the following section, where the figures from the first and the second census are very close, the figure quoted has been rounded off between the two. Where they differ substantially, both are quoted and possible reasons for the divergence are discussed.

irrigation involvement for each of the 42 households interviewed. Much of this information is also reported in the following discussion.

The physical setting for the household is usually very small. Over 80 percent of the homes are four rooms or less, built of some combination of wood, cement and galvanized iron; only a few of Kabayan's households have the traditional house build of wood and thatch. The house usually sits in a small, cluttered yard or *ba'eng* with summer kitchen, fruit trees, pig pens, chicken cages and perhaps a small garden surrounding it. Only 10 percent of the households have two or less residents; around 40 percent have three to five residents and another 40 percent have between six and eight residents. The largest household has fourteen members.

Depending on which census is considered valid, there are slightly more males than females, or the reverse. In any case, the sex ratio is very close to 1:1. Approximately 11 percent of the population is comprised of preschoolers (5 years of age or less), 15 percent are of grade school age (6 years to 10 years of age), and 15 percent are of high school age (11 years to 16 years of age). Close to 55 percent of the population is between 17 and 65 years of age; between these ages one is expected to make a productive economic contribution to the household. Three to four percent of the people are over 65 years of age.

The level of schooling is generally high for a mountain community. Only 17 to 18 percent of the population has no schooling, and most of these are preschoolers. Close to 60 percent of the community members have some grade school education while 30 percent have some high school. Finally, between 12 and 16 percent of Kabayan residents have some college or university education. This high level of education may account for the popularity of various media sources within the community. Among the community households, close to 80 percent have radios, 67 percent subscribe to newspapers and/or magazines and somewhere between 20 to 30 percent have television sets.

Other amenities are also widespread in comparison with other mountain communities. For example, the majority of households have electricity and cold running water. Just over 60 percent of the homes have privies, while a few are equipped with flush toilets and the rest have some sort of septic tank arrangement. However, the

largest problem in Kabayan in terms of sanitary facilities lies in the lack of water during the dry season, when domestic²⁴ supplies are limited to a weak flow during the evening hours²⁴.

Aside from land, productive resources include livestock, fruit trees and coffee plantations and some forest products. In terms of livestock, approximately one half of the households are engaged in swine production; the majority of these raise only one or two native pigs at a time. Just under one half of the households produce poultry; the majority raise between one to five birds at a time. Cows, carabaos and goats are more rare. Over 90 percent of the households do not have cattle livestock; only 30 percent have carabao and only three households raise goats. Livestock production, with the exception of a few households, is for home consumption unless an excess or financial difficulties force a commercial sale.

Sources of income for Kabayan households, in their order of importance, include farming, gold panning, salary, commercial and rental income (see Table 1). Over 80 percent of the households get some part of their income from farming. In the second census, 47 percent of the households declared some income from gold panning as compared to 32 percent in the first census. This may reflect seasonal upswings in gold panning and mining during the safer dry season months as well as more complete reporting by informants. Commercial income, mostly from produce sales, sari sari stores and a few farm related service enterprises, was declared by 16 percent of the households in the first census and 25 percent in the second; again, probably due to more complete reporting. Rental income varies during the school year, but never affected more than 10 percent of the households.

In the second census, heads of the household were asked about the average monthly peso income available to the household. Almost 40 percent claimed to have no regular sources of cash income, while 15 percent claimed a very small income. Of those households which did report a monthly cash income, 19 percent claimed 500 pesos (approximately 28 dollars U.S.) per month or less. 52 percent declared an income of

²⁴During our stay in Kabayan an American Peace Corps worker was sent to Kabayan to try to improve this domestic water supply situation. He found his task very difficult since all of the available sources of water were already stretched to their limit for agricultural as well as domestic purposes.

between 500 and 1500 pesos (88 dollars U.S.) while a further 20 percent claimed an income of between 1500 to 3000 pesos (167 dollars U.S.) per month. Only 7 percent declared over 3000 pesos income per month. Since most households diversify as much as possible and since income from one source usually makes possible income from other sources, the majority of households have more than one source of income. For this reason, the monthly peso incomes quoted in the second census are probably underreported.

For example, those households involved in the occasional production of commercial vegetables, usually have one or more members bringing in cash income from a salary source or from regular gold panning activities. Patterns of income sources also depend on the natural family cycle. Young nuclear families residing in their own household more frequently have only one source of income. Older nuclear families with adult children residing at home often have several sources of income as do extended households. Older couples, with independent children living away from home, usually form single income households again.

In terms of land resources, the average household has very few rice terrace plots; over 90 percent have seven plots or less. These plots are usually quite small in size, over 77 percent are less than 1000 square meters²⁵. Dryland holdings are usually larger in size and may range in area from one fifth of a hectare to one and a half hectares, not all of which is planted in any one season. Some abnormally large dryland holdings are in the seven to fifteen hectare range and included holdings scattered throughout the region (see Table 11).

There is a significant difference between reported tenancy arrangements in the first and in the second census. In the first census, 81 percent of the plots were reportedly held under single tenancy, usually under private title. In the second census, just under 60 percent of the plots were reported held under single tenancy through a tax declaration certificate. On the other hand, joint tenancy or family tenancy reporting

²⁵This is based on the personal reporting of household heads in the two censuses; the tax records, on the other hand, indicated slightly larger holdings were the average. As it turned out, however, these records were often out of date, especially in terms of land transfers resulting from inheritance. As a result, the best estimate of household holdings in Kabayan, is just that, an estimate.

increased from 13 percent in the first census to 19 percent in the second, while plots of land held under lease or *e'so* arrangements increased from .2 percent to 15.6 percent. No mortgages were reported in the first census, while in the second census, 5.6 percent of the plots were held under a mortgage arrangement, usually between relatives. Independent assessments of tenancy patterns, through interviews and tax records, confirmed the figures from the second census as being more accurate.

The vast majority of plots worked by community households are located within the community boundaries. Approximately 19 percent of the plots held are located outside of the community but within the municipality, while less than two percent of the plots are located outside of the municipality boundaries. The length of time in which the present owners of these plots have held tenure in their land is one indication of the growing scarcity of good agricultural land. Very few of the present generation will inherit land from their parents - or, if they do inherit, few will receive enough to support a family. A full 34 percent of the plots of land have been held by their present owner for twenty-five years or more (42 percent according to the second census). A further 27 percent of the plots have been held by their present owner for between ten and twenty-five years (22 percent in the second census); 32 percent of the plots have been owned for between five and ten years (16 percent in the second census) and 7 percent of the plots have been held for less than five years (20 percent in the second census)²⁶.

The complexity of land holding and land use arrangements were not recognized from the first census. Farmers were very reluctant to admit to either owning too much land, for fear of taxation - or to owning too little land which would mean a loss of self respect. Also, with the land tenure situation in the Cordillera Central, farmers were hard-pressed to explain their tenure sources and agreements in western terms. They knew that the term "ancestral land" was applied by the government in those cases where an individual was allowed by virtue of ethnic group membership and residence in a

²⁶Several possible reasons may account for the difference in figures between the two census on this question, including a more accurate reporting in the second census. However, taken together, the figures do not vary that dramatically; for example, in the first census, 61 percent of the plots had been held by their current owner for over ten years. In the second census, 64 percent of the plots had been held for over ten years. This result would indicate the reliability of the sampling device - if not the validity of the results.

locality, to apply for permanent title in a piece of land. As a result, they often used this term to apply to their tenure in property. It took some time to uncover just when this term was used in the native sense of inherited property, and when it was being used in the bureaucratic sense of a tribal attachment to certain areas of the Cordillera. As a result, farmers consistently under-reported and simplified tenure arrangements in the first census. Mortgage, *e'so* and other tenancy arrangements slowly emerged through interviewing, and by the time of the intensive CotCot-Salat survey, and the final census, farmers appeared to have responded more fully to the more informed questions of the interviewer. It became evident in the second census that many households farm a variety of plots in a number of locations under several different forms of tenure.

For example, most households work some plots which are held under individual tenure through the medium of the tax declaration program. In addition, some of these households work plots through an *e'so* arrangement with landholders who are relatives or close friends. A number of these same households hold land jointly with members of related households with whom the yield must be shared. Finally, a few of these households would have, in addition, one or two plots (usually those plots which lay in a distant or inconvenient area) of land of their own being worked by another household under an *e'so* arrangement. Approximately 15 percent of the households within the community were identified as being involved in some *e'so* arrangement; however, interviews with farmers placed this figure as high as 30 percent. In cases of individual or joint ownership, inheritance is the primary source of tenure, followed by purchase. Other sources of tenure include government permit, squatter's rights, and native mortgage.

Households carefully estimate the requirements and returns on each crop for each plot of land at their disposal. Some plots of land will yield three or four crops per annum, usually in combinations of rice, vegetables for home consumption and mid-latitude commercial vegetable crops. In Kabayan, certain trends recognized in the field interviews were confirmed by the comparative analysis of the data from the two censuses; especially in regards to mixed cropping patterns. This was possible because in each census, farmers were requested to identify their crops for the previous wet and dry season for each plot of land planted. In the January census of 1984, farmers

reported on the 1983 crop seasons. In the August and September 1984 census, farmers reported on the 1984 dry season crop, recently harvested, and on the newly planted 1984 wet season crop. Thus, data was gathered on two complete agricultural cycles or four crop periods, two wet and two dry.

The dry season crop is the most significant crop according to farmers, and thus they term it the "first" crop of the year. This crop is normally rice; 85 percent of the plots in the first census and 79 percent of the plots in the second census were planted to rice in the dry season. The other plots were planted to camote, market and home consumption vegetables, in order of importance. In the second, or wet season crop, however, a more significant difference was observed between the two census figures.

Rice was again the most frequently planted crop with 60 percent and 69 percent of the plots planted to rice respectively in the first and second censuses. However, the data from the first and second censuses show a sharp change in respect to the application of plots to other crops. In the first census, the 1983 wet season crop showed 25 percent of the plots planted to commercial vegetables. The second census, in referring to the 1984 wet season crop, found only nine percent of the plots had been planted to commercial crops. On the other hand, plots planted to vegetable crops for household consumption rose from next to nothing as reported in the first census, to 4.5 percent of the planted plots reported in the second census. Slightly more land was also allowed to lie fallow in the 1984 wet season. Farmers often stated that they had responded to poor market conditions and the high cost of commercial inputs by increasing their production in traditional sectors of the economy and by reducing their involvement in commercial crops; the data from the two census support this claim.

This pattern is also supported by the data on those plots where a third and fourth crop were planted. On plots of land where only vegetables, with their short growing season are planted, four crops per annum is not unusual. Production of market vegetables fell on these plots as well, from 20 percent in the first census, to 8 percent in the second census for crop number three. Crop number four showed the same pattern; market crops fell from 14 percent of the plots planted in the first census, to one percent planted in the second census. It should be pointed out here that farmers showed a greater interest in discussing their cropping patterns on wet lands; dry land

was consistently under-reported, both in terms of size and in terms of crops grown. This reflects the high cultural value placed on irrigated lands, which consume most of the productive energy of Kabayan farmers - even though dryland camote production is very significant for meeting subsistence needs.

There are indications that some farmers who had formerly been involved in commercial vegetable production have begun to raise small amounts of commercial livestock instead. Many others have increased their production of subsistence crops as an alternative to commercial income. Taken together with the data on the possible upswing of involvement in gold panning over the research period, the importance of viable alternatives and continued flexibility in production decisions for the farming household in such communities is amply demonstrated. In terms of household socio-economic characteristics, Kabayan is not a homogenous community. While average income, average landholdings and average family size can give some indication of the standard of living enjoyed in the community, such figures give little indication of the range of individual household levels. In the intensive socio-economic survey of the 42 households farming land on the CotCot-Salat canal, much more detailed information was gathered, from which the following generalized household sketches are drawn.

Among the very poorest households, land holdings are very small (see Table 2), and may be held under an *e'so* or a joint family tenancy arrangement. Livestock holdings are usually worth less than 200 pesos²⁷. Stock or other means of production have been or must be sold to meet basic expenses such as school fees, taxes, utility bills or medical expenses. Indeed, for many of these households, such basic necessities must be considered luxuries which may not be affordable. The household is usually comprised of a young nuclear family or a single elderly person. There are no sources of salary or commercial income for these households, although infrequent gold panning may provide essential cash to supplement farm income. Very little can be saved to increase productive resources and there is little or nothing to fall back on in the event of crop

²⁷The Philippine peso has fluctuated wildly in value in recent years. When field research began in October, 1983, the peso was roughly equivalent to 11 pesos to the U.S. dollar. By the end of the research period in August 1984, the peso had fallen in value to more than 17 pesos to the U.S. dollar. Thus, rather than supply equivalences in western currency, I will merely list peso values in this thesis.

failure or family emergency. The members of these households are rarely involved in positions of leadership or authority in Kabayan social or political organization. They rely heavily upon *pol'deya* (wage labor) and *a'tang* (exchange labor) arrangements in order to supplement their own production. These people often expressed their situation by the saying: "salt is our only viand" (which supplements the daily meal of rice or camote). Approximately 19 percent of the households surveyed fell into this category.

The next household level is a mixed bag which might be termed the lower mid-income group. Comprised of larger nuclear families, with some adult offspring or extended family members, these households also have very small landholdings. However, a salary earner among household members may allow for land rental, or the land may be owned and small amounts of commercial crops may be produced with cash obtained through regular gold panning activities. Livestock holdings do not exceed a value of 5000 pesos, but may include a young carabao or a few pigs, the commercial value of which may be capitalized upon at a future time.

This category also includes households which sometimes finance commercial production through loans obtained at the community credit cooperative. Since land holdings are small, the scale of production is also very small and the profits realized may only be enough to re-establish credit at the cooperative for the next production cycle. Often there are losses experienced and the household will fall back upon gold panning to clear delinquent debts before beginning the cycle again. Since loans are kept to a minimum, from 1000 to 2000 pesos, delinquent loans are usually only a short-term problem.

Also included in this group are households which operate small commercial operations such as sari sari stores, small swine or poultry producers, bore-mill operators at the mining site, carpenters and other small-time tradesmen. Net income from these ventures rarely exceeds 500 pesos a month when it is averaged over the year. The members of the households in this category may be found in some authority positions within the community, especially if they are older men with good reputations. They may be elected water distributor of the irrigation system, barrio councillor on the Barangay Council or they may be considered a *na'ama* to be called upon in cases of dispute or conflict. Members in these households are often involved in reciprocal

exchanges of labor (*o'boan*) as well as in hiring in and hiring out *a'tang* and *pol'deya* workers. This group comprises 38 percent of the households surveyed.

The middle income households are usually comprised of landholders with enough land to have tenants and/or sources of commercial or salary income. These households are usually comprised of older, nuclear families with adult offspring still residing at home or they may be extended households spanning three generations. They usually have livestock holdings in the 5000 to 10,000 peso range and may be involved in commercial swine or poultry production on a larger than normal scale. They may also own more than one head of the prestigious carabao or cattle. There are usually a few professionals among the salary earners within the household; teachers or municipal employees are common. This means that it is often impractical for many household members to engage in extra-household types of labor arrangements.

The household resources in this category are usually sufficient to meet most emergency situations, but a significant drain on resources would result from division of household holdings in the event of marriage and/or inheritance requirements. Regular production of commercial vegetables may be possible on a medium scale without bank loans and some modest profit is usually made on such ventures as a result of superior market and transport contacts. Some of these households are involved in "supplying" other households for commercial vegetable production or they may be involved in trading gold in the market centers. A few such households are also involved in vegetable marketing and transport and may combine these with retail outlet holdings, either in the community or in the marketplace in Baguio City.

This middle income group includes many families of the old *kadangyan* class. Although the land and livestock holdings of such families has been reduced over the years through division among heirs or as a result of upheavals such as the Japanese occupation and post-war developments, they are still relatively large holdings compared with other households in the community. This, combined with their leadership position in the community, has meant that these families have the advantage when it comes to involvement in commercial endeavors which require cash outlay, connections in the market centers and education. A few such families have employed such advantages to their maximum benefit and are widely recognized as the wealthiest households in the

community. These upper income groups are responsible for most of the *e'so* or tenancy arrangements and they also make use of a wide number of labor types in their agricultural production. Approximately 26 percent of the households surveyed were of the middle income group, while the wealthiest or upper income group comprised 17 percent of the total households surveyed.

The upper class households in the sample were often extended family households with adult offspring residing at home and employed as professionals within and outside of the community. Some of these households had only older members left at home while the children resided in the larger Philippine urban centers or even overseas - in North America, the Middle East or Australia. Such households own over 10,000 pesos worth of livestock, with the largest holding being worth over 35,000 pesos. While most of these households have already passed large portions of their land over to married offspring, a few still own in excess of twenty hectares of dryland in a community where one to two hectares is a large holding. Such households commonly rent or tenant their productive lands out since most household members are involved in professional or commercial endeavors. Included among such households in the survey were an old-style *kalanguyan* household on the upper slopes with all of its wealth held in livestock. Also included were several bureaucrats or retired community officials and a household which owned a number of commercial and retail outlets including a butcher shop, general store, bar and commercial vegetable supplies firm.

It is obvious that in the economic and political dynamics of this community, the various socio-economic levels of household do not command the same resources, nor have the same attributes. However, there are numerous connecting variables. Kinship is an important one of these - even though kinship ties will often be repressed in situations where the socio-economic levels of the two households vary widely. Informants often expressed the maxim that all people in Kabayan were related in some way or another - and genealogical investigations tended to bear this out. Poorer family members will often find support from wealthier relatives in the form of *e'so* arrangements and/or mortgages. Cooperation which is not based explicitly on kinship ties, such as irrigation activities and the coordination of the planting schedules, is also essential if viable agricultural production is to continue. This cooperation is found too, in the various

forms of work exchange between households which makes rice production under time constraints possible. For these, and other reasons, the households in Kabayan tend to interact across socio-economic barriers more than might be expected.

B. Economic Organization

Agricultural Production

As a farming community, the most important calendar in Kabayan is the agricultural calendar, which is tied to the seasons. Benguet Province has two distinct seasons, the wet, from May-June to November-December and the dry, from December until March-April. The wettest month is August-September while the driest is February. Average rainfall in this area is 448.89 centimeters annually, with an average temperature of 64 degrees fahrenheit (Benguet Province 1981). Depending on the altitude, variation in temperature between seasons can be as little as a few degrees or as much as ten degrees. This can be a significant factor in the cultivation of rice and other crops which have a limited temperature range tolerance.

The natural vegetation in this rugged terrain, follows from the conditions of altitude, degree of slope and direction of slope to create a varied environment. Lower slopes and valleys support tropical vegetation; whereas higher altitudes result in cooler temperatures and pine trees (Pinus insularis) flourish. In open areas between these two extremes, the cogon (Imperata spp.) and the tough arrow grass (Miscanthus spp.) grow. On the highest slopes, mixed montane forest stands used to predominate, but in the Kabayan area much of this has been logged through and the pine trees have spread into the upper slopes as well (see Conklin 1980:5). Forested areas are valued for building materials and fuel and for the planting and maintenance of selected orchard products; grasslands are valued for grazing and runo (canegrass) supplies as well as for possible future kaingin development. Any area where permanent water sources make it possible, will be terraced for rice fields. Sunny, protected slopes, especially those close to settled areas, are reserved for individual kaingin holdings.

Agricultural production follows a seasonal round with the production periods of several crops overlapping so that a continuous round of activities is necessary for

economic survival. The dry season crop of *pagey* or rice, is termed the first crop by farmers in Kabayan²¹. Before this crop can be planted, the irrigation canals must be cleaned of several months accumulation of weeds, washed-in soil and vegetable matter. This is done in December usually, but may be done as late as February in some years. The seedbeds (*ped'ag*) for this crop are prepared (*baybay*) in late December or January. The rice seeds are left on the panicle and soaked before they are laid (*memed'ag*) in the mud of the *ped'ag*. Water control is extremely important at this time, not only to prevent drowning of the seeds, but also to prevent rodents from entering the *ped'ag* and eating the seeds. As the seedlings sprout and grow, water levels are also slowly raised. In this first rice crop, *kintoman* varieties, the native red rices, are always planted.

Land preparation for the *kintoman* crop begins as soon as there is sufficient water to soak the paddies. This can be anywhere between late January and early March depending on rainfall patterns during the past wet season and the resulting water levels in Kabayan creeks and springs. The rice paddies are plowed (*sa/u'soy*) while dry, then they are soaked and plowed again to mix the soil and water. Water buffalo are always used for plowing the paddies, unlike dryland plots which are worked by hand. Green manure, which is usually the leaves of the wild sunflower plant, may be mixed in at this time. Finally, the wet field is harrowed (*ara'cho*) up to three or four times and leveled with a flat, wooden board (*pa'tang*). More water is introduced just before transplanting or *tu'ned*.

When the seedlings are approximately eight or nine inches tall, they are uprooted (*da'lat*), bundled and two or three inches of the top growth is twisted off. These are then transplanted into the prepared fields, usually during late February and early March. Six to eight weeks later, the first *ka'mas* or weeding of the rice paddies is performed. The second *ka'mas* is completed three weeks before harvest which takes place in July. During the rice flowering and grain formation stages, the walls surrounding the rice paddies are cleaned (*chalo*) of all growth so that the ripening grain will not be shadowed. As the grain ripens, scarecrow-type devices (*ta'kot*) are strung across the rice and small children are given the task of driving birds away. The rice is harvested (*ani*) with a small harvest knife and since the *kintoman* are tall varieties of rice, the harvesters advance

²¹See Conklin (1980:20) for a detailed description of mountain rice production techniques.

through the field, cutting the panicle from the rice stalk a single stalk a time. Later the remaining rice stalks may be cut and fed to the carabao.

The harvested rice panicles are grouped into bundles (*bu'tek*) about six inches in circumference and are laid in the sun for a few days to dry¹⁹. Finally, these bundles are stored in the attic portion of the house, usually directly over the cooking fireplace. A modern variation on this practise, is to store the rice in a cement-lined room attached to the house; however, only the more wealthy families can afford to do this. Granaries, as a separate building, are not used in Kabayan.

During the height of the dry season, in April and May, farmers begin to burn off (*pa'ol*) the ground cover on the steep hillside dryland plots known as *uma*. These are not terraced fields, nor are they irrigated. Vegetables such as camote (*Ipomoea batatas*), known as *dok'to* in Kabayan, sweet corn (*Lea* mays), peanuts (*Arachis hypogaea*), sweet peas and beans (*Phaseolus* spp.), tomatoes (*Lycopersicum esculentum*), onions (*Allium ascalonicum*) and other vegetable crops are planted in the *uma* once the rainy season begins. After the *uma* are burned over, the larger, tougher shrubs and grasses are uprooted (*pa'wa*) with a bolo. The soil is then turned and loosened (*seb'kil*) with a long crowbar-like digging tool; and finally, the three pronged hoe is used to cultivate the soil. When camote is planted the soil is piled in small hills, while commercial vegetables are planted in heaped rows of soil which cut across the slope of the plot in order to reduce soil erosion during heavy rains. This technique, and other commercial vegetable production methods have been learned over time by observing or working first for the Japanese and later for the Chinese vegetable farmers in La Trinidad and other mountain areas (see Davis 1978:63).

The planting of the *uma* commences with the first rains which may start as early as late April, but usually begin in early June. Fertilizers and pesticides are applied in commercial vegetable production, but not on camote or rice. The soil fertility is rapidly depleted in the dryland gardens and commercial vegetable crops are not productive without chemical inputs. The rice paddies, on the other hand, are fertilized by the flowing action of the water. Since the introduction of commercial fertilizers, compost

¹⁹Rice bundles come in several sizes but the *butek* is the common size for grain storage, land yield estimates and traditional rates of pay for labor. A *butek* holds approximately five kilos of rice grain.

and green manure are rarely used and the fallow periods of the *uma* plots are less frequent. For this, and other reasons, the amount of *uma* fields in active use by each household has been reduced. The increase in population, however, has resulted in a larger absolute area being planted to dryland crops.

Alternate sources of income also affects the amount of dryland under cultivation by any one household. For example, the average market price of gold will affect the numbers of people involved in *pansejew* or gold panning. Despite the fact that camote yields are consistently high (see Lizarondo et.al. 1979), people in riverine settlements such as Kabayan, devalue it as a food, arguing that it is too much work to produce. Subsequently, if gold commands a good price, many young people in the community will pan gold rather than work in the *uma*. When the price of gold is very high, even the rice paddies may be neglected in favor of gold panning or small-scale mining operations.

The *kintoman* rice harvest must be carefully timed to avoid the height of the rainy season in August and September or typhoon damage to the crop may result. The *ped'ag* for the wet season rice crop - a post-war innovation - are prepared in early July. This crop, called *talon*, includes several varieties of rice requiring a shorter growing season. Because of the rigors of the wet season weather, *talon* rices are often sterile; they produce no grain. But informants claimed that before this second crop was planted in Kabayan, famine was common. Therefore, even the small and less certain returns of the *talon* crop are welcome³⁰.

The rice stalks from the *kintoman* crop are mashed into the wet mud during the harvest and more water is poured into the fields so that these stalks will rot (*bago'dong*). For this crop, there is only a wet plowing, followed by several harrowings and a leveling. The *talon* is transplanted in late August or September and depending on the

³⁰Informants gave conflicting reports on the origins of *talon* rice varieties; since there are many different types of *talon*, there may be more than one source for them. Most informants said that *talon* varieties originated in the lowlands and merely differed on the dates of introduction into the Kabayan area. A few men argued that except for a soft, white variety called "California", which was introduced into Kabayan as a result of post-war famine relief, *talon* varieties are indigenous to the uplands as are *kintoman*. However, *kintoman* varieties are tall, photoperiodic, and require up to eight months to mature. *Talon* varieties are usually dwarf, ripen in three to five months and are not photoperiodic. This argues for some of them originating in the high yield varieties of the green revolution.

variety and the altitude of the field, it may be harvested as early as December or as late as February. Some informants claim that the schedule of the *kintoman* crop has been seriously altered by the introduction of the *talon* crop. In former times, the *kintoman* was planted in December and grew during the long, sunny days of the dry season. Yields were higher and the plants were more resistant to disease and pests. Now the *kintoman* ripens during the early part of the rainy season, and yields and crop health have suffered. For this reason, the old people used to say that the *talon* "ate" the *kintoman*, and should not be planted. However, the rainy season *talon* rice varieties are now a predominant second crop in Kabayan.

Since the *talon* grows in wet season, rainfed paddies, the irrigation ditches are usually not cleared for the *talon* planting. These ditches are used for drainage only from August to December. The importance of drainage in these areas, however, cannot be overemphasized since the heavy downpours experienced in the rainy season can destroy terraces if not deflected properly (see Conklin 1980:28). The same pattern of two weeding, plus a wall cleaning is observed for the wet season rice. A few informants also claimed that even considering the introduction of the second rice crop, the planting cycles in Kabayan are becoming more and more erratic. Formerly, the *talon* was harvested in December, now it can be as late as February or March - which in turn, makes the *kintoman* planting even later.

Towards the end of the dry season, rice paddies which are in a disadvantaged (tail-end) position in regards to the irrigation system, and thus cannot be planted to *kintoman*, may be planted to commercial vegetables. These can ripen in the short time before the *talon* crop must be planted. The onset of the rains after the vegetables are planted, makes up for any insufficiency in the irrigation water supply which may be sufficient for a small vegetable crop, but not for a major rice crop. The main rice paddy section affected by water shortages in the dry season is Ensangaay (see Map 6). Another region in which vegetables are often planted is CotCot, where water is plentiful, but the surrounding mountain ridges shadow the paddies and the cool night temperatures destroy the productivity of the rice. Here small plots of vegetables such as those called *aba* (gabi), as well as potatos, and other subsistence crops can be found all year round.

Camote, which is planted in June, along with other vegetables, is harvested between six months and a year later. Gabi, of which both the starchy root and green tops are eaten, is planted in November and it may take up to a year before harvest. Informants say that in the past, among the poorer class, only gabi and camote were grown as staples. A very small amount of rice was grown to produce the ceremonial *tapey* or rice wines, necessary for many rituals. As one informant said:

Only camote and gabi to eat! When I was a boy I got so sick of camote - all the time camote. Fresh or dried - it only made you hungry again to eat it! That is why I am so small. The rice was for wine - the *tapey*, the pigs were for *canao* or emergency - that left camote or gabi to eat.

Many of the old strains of rice, suitable for making wine because of their sticky quality are still raised. Others are *osaway* which means, as one informant explained: "...they came but they went away again". These strains of rice have disappeared since no one grows them now. The wide variety of types available to Kabayan farmers each have their individual characteristics and names. One informant listed them in the following way:

Here are our rices: Nge'la'an, bata'linao, shi'ket, tu'doy, puti'an, ke'leng. Shi'ket is dark. Nge'la'an is white with yellow skin. Tu'doy is red skinned and is usually for wine. Puti'an is a round grain. The nge'la'an is not grown much any more, it is slowly fading away. The bata'linao is violet colored and is the best for *tapey*. The California is new and white and becomes very soft when stored a long time. Then there are the talon - these are the ke'tel which is white the *chaya'ot* which has a tail, the *ba'ey* which is white, and another bata'linao but this one has a tail³¹.

Aside from the cultivation of rice and vegetable crops, the Ibaloi of Kabayan also plant a large number of arboreal cultigens such as banana (*Musa* spp), avocado (*Persea americana*), coffee (*Coffea arabica*), mango (*Mangifera indica*), sugarcane (*Saccharum officinarum*), pomelo (*Citrus grandis*), areca palm (*Areca catechu*), jackfruit (*Artocarpus heterophyllus*), and sometimes even pineapple (*Ananas comosus*)³². These are grown in individually-held lots adjacent to streambeds, or springs or alongside of *uma* plots. Bananas, mangos and coffee are the most common of these cultigens; all are used for home consumption as well as for sale when there is an excess.

All Kabayan agriculture is extremely labor intensive and agricultural implements are usually hand-made locally and are of a simple design. Many of these implements are

³¹See Barnett (1967:287) for types of rice grown in Kasadan in 1963.

³²Coffee was an especially important crop in Benguet at one time (see Report of the Philippine Commission Vol.2:325) and appears to have been raised in large amounts in the Kabayan area (see Pronouncing Gazeteer 1902:96).

wooden such as the plow (*saluy'soy*) the harrow (*ara'cho*), wooden leveling boards and the mortar and pestles (*bad'ju'an* and *bayo*) for pounding rice and coffee. Metal tools are imported from other mountain communities or from the lowlands and these include the digging stick (*sup'shop* or *kalid'kid*), shovel (*shang'kap*), spading fork (*sped*), sickle (*kom'pay*), bolo (*et'tak*), agricultural knife (*ta'ed*) and pesticide spray can. These tools fall into two broad tool assemblages, for wet and dry land cultivation. It is common to borrow tools between households, especially among kin since few households have a complete collection of both types of tools.

Vegetable Production And Sources of Capital

Buguias is a municipality to the north of Kabayan which has a largely Kankanaey-speaking population. Many of its larger, more prosperous communities lie along the main provincial mountain road system which bisects Benguet from north to south - the Halsema Highway. As this highway was the first and only road system to penetrate the northern portion of the province, vegetable production began earlier in those areas which it serves. Loo Valley was one such community in Buguias Municipality, and it has been the subject of an intensive study by the Cordillera Studies Center of the University of the Philippines, Baguio City. This study has been conducted in cooperation with the Program on Environmental Science and Management at the University of the Philippines, Los Banos, and a great deal of socio-economic and environmental information has been collected to date on the community.

The study has found that Loo Valley was generally cooler than Kabayan and traditionally, rice cultivation was less significant there (see Fiagoy 1985). Instead, the area was known for copper pots and vats which were traded to surrounding areas for salt, cloth and other lowland items. Agricultural production was based on grazing animals and swidden root crops. In the early 1930's, some rice paddies were constructed on the valley floor, but the rice produced was predominantly used for ritual wine production. The Loo Valley area was covered in dense oak and pine forest and was near a historic copper mining area (see Scott 1974:246-7). Once these native mines were opened for commercial production by the Spanish and the American Regimes, lumber for mine operations and construction was harvested in the Loo Valley. This significantly

deforested large areas of the valley and these deforested areas were quickly converted into agricultural lands. This was possible because of the introduction of mid-latitude commercial vegetable production through the active promotion of vegetable dealers from Manila and Baguio City. These dealers were mainly ethnic Chinese with cash cropping expertise and capital for investment, but restricted from owning agricultural lands themselves by the national policy of the Philippine Commonwealth Government (a policy inaugurated in 1934. See Jenson 1975:34).

There were several arrangements by which these dealers promoted vegetable production in mountain communities such as Loo Valley. Sometimes they became silent partners in a farm and provided the capital and expertise for local farmers whose name would be placed on the land title. Sometimes they became "suppliers"; a term which has come to mean any person who provides a small landowner with the capital and market connections for commercial production. Seed, chemicals and cash for hiring laborers are given to the farmer by the supplier; in return, the farmer agrees to sell the resulting crop to that supplier, at a price set by the supplier.

During the early years of the development of the vegetable market, the number of producers was relatively low and the prices for the crops were generally high. Farmers in Loo Valley prospered as did their suppliers. Soon, however, vegetable production spread to other areas of the Philippines. The costs of chemical inputs rose dramatically at the same time that market prices for the crops were falling. Caught in their obligations to their suppliers, Loo Valley farmers began to fall into debt, despite opening new lands and significantly expanding their production levels. Smaller operators (with farms less than .50 hectares in size) were disadvantaged in regards to capital sources, technological application and manpower, as a result, the yields of these farms were generally lower and losses were more consistent. However, even larger operators (farms between .50 and over 5 hectares) were also experiencing losses with some vegetables (see Lizarondo et.al. 1979:32).

By this time the population in the valley had also significantly expanded and population pressure was beginning to result in environmental damage as vegetable plots were opened further up the mountain sides (see Fiagoy 1985:17). The originally settled areas of Loo Valley had never been that amenable to rice production. The areas into

which vegetable production had subsequently expanded could not be planted to rice. Furthermore, many farmers could not revert to subsistence farming since they had used their lands as collateral with suppliers and with other credit institutions and required a cash income to meet mortgage payments.

Farmers in Loo often preferred not to borrow capital for farm inputs from sources which would charge them interest or which would require documentation of land title. Since the interest being charged by suppliers was a hidden interest - that is, it was taken in the form of lower farmgate prices, and since suppliers did not require documentation of land title, farmers originally preferred borrowing from suppliers. Suppliers also provided numerous services, such as delivering inputs to the farmgate, managing all marketing and sometimes even arranging for the harvest of crops. But as market conditions worsened, the relations between suppliers and the farmers also worsened.

Farmers sometimes sold their crops to higher bidders despite previous obligations to their suppliers, claiming typhoon or pest damage to avoid delivery. Suppliers responded by tightening their cooperation with each other, setting vegetable prices among themselves and threatening to take delinquent loans to the court system. This situation resulted in farmers beginning to approach the rural bank system which the government had organized to promote market agricultural production. However, the government-initiated cooperatives and credit agencies have usually operated to the benefit of the larger landholders. As a result, small farmers often continue to rely on the "suppliers" for operating capital (Jenson 1975:140).

Credit problems are only one of many related factors which have contributed to the worsening situation of vegetable farmers in Loo Valley and in other areas of the Cordillera. At a symposium with the Cordillera Studies Center (CSC) and the Program on Environmental Science and Management (PESAM), Loo farmers listed the following topics as major problems for commercial vegetable producers in mountain areas: 1. insecurity of land tenure, 2. insufficient capital and credit arrangements, 3. marketing difficulties, 4. transportation problems, 5. scarcity and high cost of farm inputs and information on their proper use (including seed, fertilizers, pesticides), and 6. lack of reliable irrigation. Marketing problems included depending on middlemen for market information and the

wild fluctuation of market prices, lack of post-harvest technology such as packaging, grading, and proper transportation of produce to market, inadequate bulking and debulking centers and the lack of cooperation among producers.

The farmers pointed out that organizing farm producers on a cooperative basis may help to address some of the above problems; however, many of the problems required government involvement and initiative. Also, attempts to form farmer cooperatives in their communities in the past had largely failed - not because farmers could not cooperate, but because there was very little local involvement in the planning of such rural cooperatives. To justify their argument they pointed to the success of the locally initiated and small-scale Kabayan Credit Cooperative.

The problems which the Loo Valley farmers face in their commercial production of vegetables, are also problems for the farmers of Kabayan. A farmer must first get the capital to buy seed, fertilizer and chemicals. Once he has arranged capital, he must find and obtain good quality seed for those vegetables which are or may be demanding a high price in the marketplace. The farmer must then gain access to land, water and labor for the production of the crop. Once the crop is produced, he must get the crop to market without too much post-harvest delay or damage. He must consider whether it is best to sell the vegetables in local markets, or to transport the crop to bulking centers for sale in more distant markets. If he chooses to transport the crop to centers where it will demand a higher price, then he must arrange this with a middleman and negotiate a transportation fee or outright sale. If he owns or can arrange to rent or borrow a vehicle, he may attempt to take his produce to Baguio or even to Manila himself. However, retail outlets rarely are willing to endanger their relationship with their middlemen suppliers by dealing directly with farm producers, so this is usually not a viable alternative. These problems are also compounded by the fact that many Kabayan producers are intermittently involved in vegetable production and therefore do not have regular contacts in the industry.

Although there are many ways in which the Kabayan and Loo Valley farmers face similar problems, the overall affect of commercialization on the two communities has been very different. In Loo Valley, farmers are commercial producers who also plant some subsistence crops. In Kabayan, farmers are subsistence producers who may grow

market vegetables when conditions are favorable. Many environmental and historical factors have contributed to this difference - including the fact that one major subsistence crop does not do well in Loo Valley; on the other hand, historical records indicate a longstanding involvement in wet-rice production in the Kabayan area. Also, vegetable production was introduced into Kabayan by non-commercial interests such as the local Roman Catholic priest, and by boys returning from the provincial high school in La Trinidad where they had observed vegetable production in market gardens in that community. As a result, one interesting factor is the different role that middlemen vegetable dealers have played in this community.

With the development of the National Road into Kabayan in the late 1950's, the small post-war commercial production of vegetables there expanded rapidly. Vegetables no longer had to be back-packed out to kilometer 52 on the Halsema Highway - a hike of many kilometers over an intervening mountain range. As the scale of production increased, chemical fertilizers replaced green manure and compost, chemical control of pests became necessary and regular seed purchases had to be made. All of these new requirements demanded cash which at that time was not readily available in any mountain community.

At first, the Kabayan farmers also borrowed from suppliers who were vegetable dealers or middlemen. The students from Kabayan who were sent to La Trinidad for further education, made contacts in the vegetable marketing industry in that community. They learned the methods employed by Chinese truck farmers and they also learned that large profits could be made by selling vegetables to bulk buyers who supplied the large Manila markets. When they returned to Kabayan and became vegetable producers, they were often angered by the prices offered by the vegetable dealers who were the end link in a long chain of middlemen between mountain producers and lowland consumers. Each link in this chain made profits by buying cheaper than the market price, until the producers were often offered only one third or one half of the Manila market value of his crop. As market prices dropped and input costs climbed, Kabayan farmers could not make any profit from their involvement in vegetable production, and like their Loo Valley counterparts, they began to fall into debt.

The first farmer response to this situation was to appeal to the local Catholic priest who had encouraged their production of European vegetables by importing seeds from overseas. He then encouraged them to form a unified front against the vegetable dealers. If they agreed to refuse to sell their vegetables below a certain basic price at which a profit could be made, the middlemen would be forced to pay that price or return to the lowlands with empty trucks and a loss for their trip. This cooperative movement purportedly had a limited success and this later prompted a local businessman to initiate a registered savings and lending institute along cooperative lines in Kabayan. Opened in 1972, this credit cooperative has proven quite successful with a membership now approaching 1000 and financial assets of close to two million pesos. The politics surrounding this success have led to a great deal of gossip and speculation, but nonetheless, it has had an interesting impact on vegetable production in Kabayan.

Most of the current commercial vegetable producers (both large and small) in Kabayan were interviewed regarding their sources of capital for production. Of those interviewed, all claimed to have borrowed production capital at one time or another from the credit cooperative. Loans from the cooperative are extended up to twice the amount of a member's savings account balance. The loan committee meets once a week to decide on loan requests and those who make application for loans will know within a week whether or not it will be granted. This compares favorably with the local rural banks which may take months to process a loan agreement. The average deposit in the cooperative is between 500 to 1000 pesos. The average loan is around 2000 pesos. Although the policy is to restrict loans to under 10,000 pesos, in the case of a few large depositors, loans of up to 30,000 pesos have been granted. Loans may be made in the form of cash, or may involve some combination of cash and farm inputs from the cooperative seed and chemical supply store which has organizational and technical assistance from the Ministry of Agriculture.

The Kabayan Credit Cooperative drew its organizational and operational by-laws from guidelines provided by the National Bureau of Cooperative Development. It is a member of the Cooperative Union of the Philippines, of the Ilocos Region Cooperative Union and of the Provincial Federation of Cooperatives. Its only branch is in Poblacion, but other communities within the municipality have been assisted in organizing their own

cooperatives, and their funds are held by the K.C.C. under a trust fund agreement. They all follow banking policies established by the Development Bank of the Philippines which sets rates of interest and other banking policies. Further, local organizations such as the Parent's-Teacher's Association deposit their funds in the K.C.C. Finally, all members must belong to a Mortuary Plan which helps meet debts and funeral costs should a K.C.C. member die. Financial institutions of this nature are rare in Cordillera mountain communities.

Anyone may open a savings account in the cooperative, and this has provided not only vegetable farmers, but other agricultural entrepreneurs with a source of operating capital within the community. Although the cooperative has a policy of only funding agricultural entrepreneurs from its own funds, it is the institutional linkage within the community for several agrarian credit programs organized by the national government to stimulate rural development. Therefore, money is also available for establishing small businesses as well as for funding commercial agriculture.

While, in some communities, these national credit programs have experienced a very poor pay-back rate, the programs operated through the Kabayan Credit Cooperative have been highly successful. The local vulcanizing shop owner, for example, opened his business with such a loan and has since managed to clear the original debt and expand his operations. From the commercial farmers point of view, it has been better to scale down their level of operations and borrow when possible from the cooperative, than to keep their production levels high, but to fall deeper and deeper into debt to their suppliers.

Another advantage which Kabayan farmers have over other mountain producers in this regard, is the fact that their community is the municipal administrative and business center. As such, it contains the municipal offices, schools, market, hotel, shops, rice mill, vegetable dealer and several full-time jeepnie drivers who transport people and goods on a daily basis. Kabayan also has a daily bus service, when the roads are open, to Baguio City and connections there throughout the country. All of this commercial activity and the many opportunities for employment have resulted in more cash being available to be tapped by the commercial farmer. Farmers often borrow from employed relatives or friends and the usual agreement is that the proceeds from the

vegetable sales will be shared equally between the farmer and his source of capital, after expenses are deducted. A similar arrangement may be made with a poesto or stall owner in the Baguio Market. Farmers agree to provide regular supplies of produce for such stall owners and they in turn provide a regular outlet for the crop as well as the necessary capital for production (see Davis 1973 for a discussion of social relations in the Baguio marketplace).

Finally, another important source of capital for the Kabayan community is *sayo* or gold mining. There are several methods employed, including *pan'se'jew* or gold panning in streams and rivers or removing *nava* (gold-bearing soil) from mine sites and washing it in a *sa'je'wan* or rectangular sluice box. There are a few small gold-bearing deposits which support small native mines near Kabayan and these are treated somewhat as a communal resource as will be discussed in more detail later. When luck is with the miners, sacks of *nava* may be redivided, again and again shared among relatives and friends who are willing to wash the material to extract the gold.

Income from this source is erratic, but a surprising number of families are dependent upon *sayo* for all or part of their income, especially among the landless. During the school vacation period, membership in the miners' association may rise as high as 300 or more. Parents complain that it is hard to keep their teenagers in school once they become involved and that much of the gold income is spent on alcohol and "travelling around". However, other people argue that the mining provides employment for the unemployed or the underemployed sector of the community. Those families involved in commercial vegetable production usually have at least one family member involved in *sayo*. One full-time jeepnie driver in the community obtained the down payment for his jeepnie from one unusually productive sack of *nava*³³. Gold mining often provides the initial capital for vegetable production, commercial enterprises and in some cases, higher education. Drawbacks to *sayo* include the extremely hard and dangerous work that it involves for the miners, the lack of water for washing the gold, and the landslides that are sometimes caused by the tunneling.

³³In contrast, another regular jeepnie driver borrows the vehicle from a lowland compadrazgo (see Dart 1977:19 for a discussion of ritual kinship in the Philippines) with whom he then has to share his proceeds. Others work as drivers for wealthy vehicle owners who reside elsewhere.

All together, the opportunities to acquire capital for vegetable production, from sources other than the vegetable dealers and/or the banks, have meant that producers in Kabayan have been able to avoid the heavy debt load that has plagued farmers in Loo Valley. Some vegetable producers told us that while they had been delinquent in their loan payments to the Kabayan Credit Cooperative at one time or another, they had always managed to finally pay off their debts. The secretary of the KCC agreed, saying that the payback record on their loans was surprisingly good. The cooperative makes loans from their own funds solely for agricultural purposes and the majority of these have been for vegetable production, although a few have been for swine or poultry production. The secretary pointed out that, of course, some loans have not been paid back, but that is to be expected. Borrowing from the cooperative has meant that farmers do not lose the use of some of their lands, as would be the case if they mortgaged land to relatives or friends to obtain their operating capital, since this traditionally requires the borrower to forfeit the land until the loan is redeemed. Farmers can also sell their crops to the highest bidder - either to a vegetable dealer who comes to their community, or to a poesto (market stall) owner or bulk dealer in Baguio City. Jeepnie drivers are frequently commissioned to take a load of vegetables to Baguio City on a pesos per kilo arrangement. This means that farmers can eliminate at least one middleman in the marketing of their produce and therefore obtain a better price.

Another advantage that the Kabayan producers have is that they can easily maintain subsistence farming alongside commercial production, or revert to subsistence farming when prices are too low and input cost too high. Following the assassination of Benigno Aquino in August of 1983, the Philippine peso was devalued several times, making the cost of foreign imports skyrocket. Farmers in Kabayan reacted by scaling vegetable production down even further, or eliminating it altogether. Another option is to lower input costs by reducing the amounts of chemical inputs and growing vegetables for which the seed can be cheaply obtained. These strategies are possible, first, because Kabayan fields are generally suitable for rice production and second, because farmer debts are small, can be allowed to fall delinquent for a time and because farmers are not being pressured by suppliers to continue producing to meet former loan agreements. As a result, farmers in Kabayan are in a better position than the farmers of

Loo Valley to withstand setbacks in the commercial vegetable industry. On the other hand, they have been in a less advantageous position to benefit from the highly profitable periods which have occurred in the past.

The importance of the flexibility of production arrangements in Kabayan cannot be overstressed. Davydd Greenwood (1976:) wrote:

...I think flexibility should be considered [traditional agriculture's] defining characteristic, as contrasted with the specialized, market-oriented and market dependent form which has emerged with the spread of agricultural capitalism.

In terms of agricultural development, this lack of recognition of the role of flexibility in the survival of traditional economic societies can be disastrous. Especially since "agricultural capitalism" has not always provided a reasonable rate of return or a secure lifestyle for farmers in the developed nations (see Durrénberger 1984a:6-7).

In fact, western agriculture, the role model for agricultural development planning in most Third World countries, is facing a crises of increasing proportions. Recently, the post-war policy of promoting high input/high output models of farm system management has come under increasing criticism and ironically, some analysts are suggesting that we look to the flexible traditional farm management system in order to learn more about viable lower-input, labor-intensive regimes (see Raymond 1985).

Livestock Production

Older Kabayan informants remembered very large herds of animals, including pigs, carabao, cattle and horses, being taken past their houses to pasture every morning when they were children. These herds were mainly the property of the *kadangyan*, but even poorer folk had their few pigs and chickens for use on ceremonial occasions. In the past, grazing animals were so numerous that all dryland fields had to be fenced against their intrusion or crops would be destroyed. Many old stone walls can still be seen surrounding former *uma* which are now unused or fallow lands. However, livestock production in the post-war years has fallen dramatically in Benguet Province in general (see Tapang 1985). Pigs are still raised by many households but in reduced numbers. Since they can no longer be allowed to roam freely seeking their own food, they must be handfed (*timo*). The native pigs are small, black and will grow on table scraps, camote and gabi peelings and spoiled vegetables. People may raise two or three of these at a time. However, the much larger imported pigs are now favored for

commercial production and they require expensive growing mass and imported feeds, making their cost prohibitive for most producers.

Even more rare are cattle, of which only one household has a few head. There are a few goats raised in the community, but dogs are preferred because it is said that they will eat a wider variety of scraps and garbage and can roam freely, scrounging for themselves. Chickens are usually kept in small quantities, and they too must usually forage for themselves. Most of the fresh meat and eggs sold in the sari sari (general goods) stores in Kabayan are imported from lowland producers, although some local people raise a few pigs for sale. The majority of livestock raised in Kabayan is for home consumption and meat is still not considered a staple for most families - especially among the households on the upper slopes where only *uma* are cultivated.

The water buffalo or *nu'wang*, known in the lowlands as "carabao", are the only draft animal used in the village and are also important sources of prestige in Kabayan. They are essential to the plowing, harrowing and leveling of the rice paddies and are the center of many complicated loan and tenancy arrangements during land preparation season. In a community of 961 residents, only 39 people own a carabao. These owners hold a total of 59 grown animals and five calves. The difficulty with maintaining carabao is providing their feed. Communal pasture areas no longer exist in Kabayan, and if a carabao owner does not have pasture land or access to grazing areas, his carabao must be *sing'ed*. This is the common practise of tying a buffalo in one spot and handfeeding it bundles of grass and rice stalks carried in for that purpose.

Draft animals, like other forms of livestock, are a significant economic asset to their owners - but more importantly, they may be the means to gain access to land. Landowners who sharecrop some or all of their land pointed out that when they are considering a tenant, they look for a good farmer, an upright person, and hopefully, a carabao owner. Since production costs are deducted before the rice yield is divided between the tenant and the landowner, it is to the landowner's advantage to try and keep these costs down. Labor and irrigation arrangements cannot be avoided, but the draft animal fees can be dispensed with if a tenant is chosen who already has such an animal. Thus, for landless people, the acquisition of a Carabao may assure access to land. However, the drawback is that the carabao must be fed and cared for during the bulk of

the year when it is inactive.

If a household does not own a carabao, one must be rented during land preparation season, although relatives often lend these valuable animals, among themselves free of charge. A carabao is usually rented on a contract basis, to work a certain amount of land. The fee depends on the estimate of the time required to do the work; minimal rental costs at the time of the study was fifty pesos, and the maximum cost was two hundred and fifty pesos. If a person cannot afford to pay cash for the use of a carabao then other arrangements are possible. For example, the person borrowing the animal may offer to do the land preparation tasks on the land of the carabao owner in return for the use of the animal on his own land. Various arrangements of this sort are common in Kabayan during land preparation season.

Carabao are usually owned as individual property; however, there are many caretaking and use arrangements surrounding these valuable animals and these arrangements usually mean that the benefits of owning such an animal cannot be monopolized. Since pasture land is scarce, owners of several carabao must usually entrust these animals to separate relatives or friends in scattered areas. This practise is still called *pastol* and is a longstanding traditional agreement usually associated with female carabao and cattle (see Tapang, 1985: 11-12). The caretaker of the carabao is responsible for providing fodder, hand-feeding salt so that the animal remains tame, and general care of the animal. In return, the caretaker receives a share, called *bi'ngay*, of all offspring born to the carabao. Sometimes the share is every second calf, although in the past, a whole animal was never usually granted to the *pastol*.

In terms of pasturage, as was mentioned above, most carabao are now tied in a sheltered spot and fed hand-cut grasses collected from the mountainsides. Others are allowed to graze (*bu/as*) on private or unimproved lands. Sometimes grazing fees of ten pesos per month will be charged for the use of private grazing lands, but usually animal owners have access to some unimproved lands of a relative or a friend and this is the only reason that they can afford to own an animal. At the time of the research, carabao were extraordinarily expensive. A female who was not yet fully grown (*buma'dasang*) would demand three thousand pesos, while a large, fully-grown male (*kalaki'an*) would cost between five and six thousand pesos. A *bumalo* or growing male would cost

between three and four thousand pesos. There is a long period of care and expense involved before these animals become an economic asset since they normally cannot be worked until they are fully grown - that is, between five to seven years old. Nevertheless, once the animal is of working age, it may become the means to tip a large landholder's favor towards the animal owner.

Labor Sources in Agricultural Production

The majority of agricultural labor in Kabayan is provided by the household. In the economic census of 42 households along the CotCot-Salat irrigation canal, for example, a total of 22,054 man/hours of labor was declared for the last crop cycle by the household heads. This labor was applied to rice, subsistence vegetable (mostly camote) and commercial vegetable production. This means that, on average, each household required 538 man/hours of labor per crop cycle. These figures were based on an eight hour day which farmers claimed was the most that the average adult could work considering the need to rest during the hottest hours of the day and the constraints of daylight hours and other household task requirements. Of this total labor figure, 13,815 man/hours (or 63 percent) were performed by household members. Several other forms of labor arrangements made up the balance of the labor requirements (see Table 2).

There is a sexual division of labor practised in Kabayan, but this is not inflexible. In rice production, the men generally perform most water management and irrigation labor, land preparation tasks, cleaning the rice stalks from the harvested fields and preparing the *ped'ag*. They also tended to build and repair the walls, irrigation canals and water transfer devices. The women are usually responsible for soaking the seed, planting the *ped'ag*, preparing the seedlings for transplanting, *tuned*, the two weedings, harvest, drying the palay, storing, pounding and cooking the rice. Either sex may clear growth from the paddy walls, turn water into the fields, chase away rice birds, and bring the palay in from the fields. In *uma* or dryland production, the men generally clear the field, turn the soil and apply chemicals. The women cultivate the soil, plant, weed and harvest the crops. However, there is a general tendency for men to manage more of the commercial vegetable crop production, including arranging for the purchase of cash

inputs, market outlets, and transportation to market.

Several factors influence the recruitment of labor from outside of the household. These include the development cycle of the nuclear family, the number, sex, health and ages of family members, the specific tasks to be performed and many other factors. Some tasks require a great deal of labor and must be performed in a relatively short time; these include transplanting, weeding, and harvesting in rice production. Other tasks require specialized tools, skills or a draft animal which the household might not have; these include plowing, harrowing and leveling the paddies. How the household recruits additional labor and what arrangements are made depend upon the task, ready capital, kinship ties and existing mutual obligations. In general, there are three labor arrangements common in Kabayan: *o'boan*, *a'tang* and *pol'deya*.

O'boan or exchange labor is still practised in Kabayan although it occurs in some sitios more than others. Most informants describe *o'boan* in reference to large tasks which cannot be handled alone and which are shared by all community households at one time or another. In the past, such tasks included building a house, a stone wall or rice paddy, and other large construction tasks; these are now usually performed by cash laborers. However, weeding rice fields and *komboy* or the backpacking of produce out from isolated fields are still commonly performed by *o'boan* or exchange laborers. For such tasks, a group of workers forms, completes the task and is fed a meal by the recipient household. The recipient household then owes each member of the work party an equivalent amount of work hours on a similar task.

In terms of agricultural production, *o'boan* is most frequently performed in traditional subsistence chores involving several female workers. It may also be used to overcome a temporary shortage of labor, as when, for example, a family is called away from the community for a short time and must request others to tend their fields. All such donated labor must be returned in full by the recipient household. Sometimes, labor exchange is less formal, as when a group of long-time friends aid each other in certain boring repetitive tasks that can be done by a group such as weeding, cultivating *umb* soil or harvesting rice or camote.

Another form of traditional labor recruitment is called *a'tang*. In this form, people contract out to landowners to perform certain tasks during the transplanting and

harvesting of rice. The usual agreement is that the same workers who transplant the rice, will return for the harvest as well. In return, the workers receive four small bundles (which together form the large bundle called the *bu'tek*) of palay per day of labor. If the workers only labor during either the transplanting or harvest season, but not both, they receive two small bundles of rice per day of labor (which equals one half of a *bu'tek*). This form of labor arrangement is still very popular in Kabayan for two reasons. First, it ensures that the farmer will have workers during the crucial peak labor periods. Second, it assures landless or land-poor families of a supply of the highly valued traditional varieties of rice.

With the introduction of market gardening, farmers were sometimes willing to pay garden workers in the form of palay if the workers so desired. However, a more practical salary was cash, since it often happened that market gardeners were leasing garden lands and did not own rice lands of their own - or, that they produced only sufficient rice for their family consumption needs. As a result, *poldeya* or cash labor is more common for vegetable producers. Daily wage rates were set at fifteen pesos for a male worker and twelve pesos for a female worker during the fieldwork period in Kabayan. It must be pointed out that despite many devaluations of the peso during the fieldwork period, the government was attempting to keep the market price of rice in the three to four peso per kilo range. This meant that the daily salary for male *poldeya* workers was roughly equivalent to five kilos of rice per day. This is a similar rate to that paid to the *a'tang* workers. The medium of exchange is different, but the evaluation of the value of labor is the same in both arrangements.

Farmers stressed that the form of labor recruited depended to a large extent on the needs of the workers and the employers. If the worker desired labor in return, *o'boan* arrangements could be made. If the worker wanted rice, and the employer had rice to give, an *a'tang* arrangement would be made. Finally, if the worker required cash, and the employer had capital, then *poldeya* arrangements were possible. Since many people now require cash for paying utility bills, taxes, school costs and agricultural inputs for their own production, *poldeya* agreements are becoming more widespread. However, in the analysis of the labor figures for the above-mentioned 42 households, it was found that for certain agricultural tasks, certain types of labor were preferred by

the majority of producers.

For example, *o'boan* was still very common for *kamas*. *A'tang* was preferred for transplanting and harvest while *pol'deya* was found connected to those labor-intensive tasks where a high degree of drudgery and a low degree of skill are required. One exception was plowing and harrowing, where approximately 25 percent of the households hired labor. This is probably a result of the fact that carabao draft animals cannot always be borrowed and farmers must sometimes pay for an animal owner to do these tasks. In rice production, household labor predominated, followed by *a'tang*, *pol'deya* and then *o'boan* (see Table 2). In camote or subsistence vegetable production, household workers performed over 90 percent of the labor, with *pol'deya* workers making up the balance. In commercial vegetable production, household workers performed 75 percent and *pol'deya* workers the remainder of the required labor.

There are many reasons for the patterns observed in these 42 households. The household obviously prefers to have the most control over those tasks which substantially affect the yield for any crop. Therefore, *pol'deya* labor was extremely rare during harvest (only one household hired rice harvest labor) and was non-existent for seed planting and chemical application. Seed, fertilizers and pesticides represented the most expensive inputs in commercial or subsistence production, while poor harvesting practices represent one of the largest areas of post-production losses. A person who is being paid a daily cash rate will not be as careful during harvest as one who is gaining a share of the harvested crop. For that reason, informants said that they still preferred *a'tang* workers for rice harvest tasks. Finally, in a mixed cropping system, farmers require more flexibility than in a mono-crop environment. Labor patterns are just one area in which Kabayan farmers have attempted to maintain a high degree of choice in their production allocation decisions. Of the 42 households surveyed on labor allocation, 90 percent were producing rice during that crop cycle, 61 percent were growing camote, and 34 percent were producing commercial vegetable crops. It is necessary for such households to maintain a flexible potential pool of labor, based on various arrangements to meet their mixed cropping schedules. On the other hand, for those households with more labor available to them than land on which to employ it, the present system allows for an intensification of labor and an increase in production

without the necessity of obtaining more land. This is a boon in the typical peasant situation of land shortage and a growing population base.

Property Ownership - Land Tenure

Property in Kabayan falls into several categories in terms of the type of ownership found connected with it. The majority of land is individually held, inherited directly from one individual to another with purchase, mortgage, rental and tenancy arrangements, commonly occurring. Each individual has sole control over his/her thing, personal effects, lands, tools and implements, animals, trees, crops, plants, household furnishings and residence. There are, of course, numerous exceptions. Often, land is held jointly, as with conjugal property or land inherited collectively by siblings. Some property is considered communal such as the barangay forest reserve, the community water resources, and the native gold mining site. There is even a case of corporate ownership with the Kabayan Credit Cooperative. But the majority of property in Kabayan is held under individual tenure.

Having said this it is important to point out that this legal sense in which property is held, has very little to do with how it is employed as a productive resource, who has access to it and who has the right to benefit from its productivity. This is the result of many factors, not the least of which is the discrepancy between western legal concepts of ownership and the indigenous traditional concepts of the Ibaloi. The area surrounding Kabayan has had more than two hundred years of contact with western concepts of property ownership. It sometimes appears that this community has adopted many of those concepts; but appearances are only superficial indices of the complexity of the issue. It is difficult at this stage to fully unravel the sources of Ibaloi concepts of ownership and to provide a diachronic record of how these concepts have been changed or developed over time. Nevertheless, such a diachronic perspective is necessary to fully understand the current disputes and property relation problems in Kabayan. For that reason, I will save discussion of the diachronic developments for later, and focus here on the current practises in the Kabayan property system, and especially on land tenure relations.

According to the base-line socioeconomic census which was taken upon entry into the community, Kabayan consists of 182 households with over 980 permanent members (not counting high school students who board in the community during the school year). Of these 182 households, 141 have some access to land (or 77 percent), while 41 (or 23 percent), declared themselves to be landless. The jural principles of land tenure which control access to land for those landholding households in Kabayan, are quite complex.

Often people speak of having "ancestral title" to the land in the Cordillera, this "ancestral" title usually refers to tribal identification with a specific region, as well as community control over its territorial boundaries. Members of the ethnic group or community have a birth right in the land and are free to develop any previously unclaimed ones for individual tenure through improvements. On the other hand, ancestral lands can also refer to lands handed down through the generations from the establishing members of a descent group (or *bunak*) to their specific or general heirs. In either case, few people in Kabayan rely exclusively on native tenurial patterns to ensure control over their land. For this reason, it is necessary to discuss the various state or national tenure regulations in the dynamics of land use in Kabayan, as well as the indigenous forms of tenure.

In many Cordillera communities, the indigenous property relations system is still intact (see Conklin 1980, Drucker 1977, and Prill-Brett 1985) and forms a cyclical pattern with various types of property falling under different types of tenure as determined by the type and extent of "improvements" to the land. Those lands which fall within the territorial boundaries of the community are open for economic exploitation by community members. The creation of tenure in land through improvements may be undertaken by individuals or groups. Permanent improvements are more normally undertaken by a single individual or a married couple, thus creating individual tenure, subject only to the community's restrictions on alienation and the customary law on the devolution of property. Lands of this type include rice paddies and sometimes orchards or woodlots. Tenure which is not permanent is created in lands where short-term improvements are made such as clearing an area for kaingin farming. Due to the technological limitations for improving or maintaining soil fertility in such plots, long

fallow periods are required during which the plot returns to the climax vegetation stage. Once this has occurred, the temporary tenure in the land lapses and a new individual can create tenure in that plot by re-clearing and planting it. There are many variations in the above pattern (see Aranal-Sereno et. al. 1983, Conklin 1980, Prill-Brett 1985); however, the basic outline remains the same. There is evidence that residents of Kabayan also followed this general pattern until a number of economic forces initiated many changes in the region.

The official Philippine Government tax classifications list seven broad land types applicable to Kabayan at present; wet rice land, camotal and vegetable, fruit, pasture, virgin and residential lands. However, fruit trees are usually planted on residential lots or within camotal fields, virgin land is usually land not presently in use for dryland farming or pasture, and vegetables will sometimes be planted in rice paddies. The main distinction from the Kabayan farmer's point of view is between wet lands (*pa'yew*), of which the community tax records document approximately 34 hectares within Poblacion boundaries, and dry lands (*uma*), of which the tax records document approximately 152 hectares. The rice paddies are much more valuable than the dry land fields; however, both *uma* and paddy lands are currently documented for taxation purposes. This is the only form of state-recognized tenure arrangement presently available to landholders in Kabayan since it lies in the protected watershed of the Ambuklao Hydro-electric dam (see Aranal-Sereno et. al. 1983, for a discussion of the conflicting legislature affecting tenure in the Cordillera Central).

Wet lands are terraced pond fields of various sizes and shapes, located at various altitudes and in different soil type areas and having different degrees of reliability in their water sources. Fields of this type are given various forms of generic names based on their above physical characteristics (for example, *che'ko*, "small" or *ten'neng*, "three-walled" which denotes a larger size). They are also often given specific names based on their individual histories (names of past owners, destructive events in the past which caused their reconstruction). Dryland plots, especially those which lie close to the townsite, may also have specific names given to them which refer to their history or physical characteristics. These *uma* fields may be left to fallow and/or used for pasture as well as planted to gardens; rice paddy land, on the other hand, which

does not receive sufficient water for a dry season crop of rice may be planted to commercial vegetables. Such land use decisions rest on a number of factors; these include household development cycles, capital availability, environmental considerations and more. Of all the lands found within the community boundaries, very little has not been individually registered through the tax declaration program, in anticipation of future improvements and development. In addition to these individually-held lands, a communal forest has been granted to the community by the Bureau of Forestry and there are, as well, public lands which may be used for agriculture with a permit from the Bureau of Forest Development.

Three types of tenure through title exist for individually-held lands, corresponding to the three major, external administrative regimes. The Spanish regime granted a few titles in Benquet, based on a system of land distribution known as "repartimientos", where large tracts of lands or "encomienda" were given to loyal Spanish subjects. Royal decrees were also issued in order to provide the means of perfecting rights of individual ownership in the land. A Royal Decree of September 21, 1797, for example, granted ownership to Igorot natives who could show continuous occupation and cultivation of lands for root crops or grazing (see Report of the Philippine Commission 1901, Vol. 3:76-77). Few records of such titles still exist, especially in Kabayan where all municipal records were lost during the Second World War. Nevertheless, some *kadangyan* families base their jural rights in such lands on the basis of Spanish land grants.

The American regime granted titles through the Department of Justice, Land Registration Commission, but these titles are commonly called "Benson" titles in Kabayan, after a government official whose signature was said to have appeared on every landholder's copy. These titles were of the "Torrens system" type, where the obligation of proving ownership rested with the landowner (Keesing and Keesing 1934:163) and where, once granted, the state guarantees the "indefeasibility" of title (Aranal-Sereno et al. 1983:434). Usually, only the wealthy class was able or interested in acquiring such title (see *Ibid*:450). The granting of Free Patent titles began in 1903 by virtue of the Public Land Act No. 926 (amended act 979). This gave rise to land grabbing in Ibaloi areas suspected of containing profitable gold deposits - thus, the Ibaloi *kadangyan*

learned very early to take advantage of the title offered through the Torrens tenure system to protect their productive resources. The Philippine Commonwealth, and later the Republic, also granted free patent titles, (normally called "pre-patent" in Kabayan). In each case, the former titles were allowed to stand uncontested by the new regime.

In most cases, it was the more sophisticated *kadangyan* class which quickly grasped the requirements to be met and who therefore subsequently gained formal title. This fact was documented by American officials of the time (see Keesing and Keesing 1934: 170) who made several attempts to address the situation; however, these usually proved fruitless. Some of these measures, in fact may have facilitated the *kadangyan* take-over of land. For example, some titles granted under the free patent system, often covered large tracts of land containing the fields of several landowners under the indigenous tenure system - or so it has since been claimed. This "block titling" resulted in many disputes in later generations; these land disputes have continued into the present generation. Further, more problems were created by a practise of the American Regime which allowed several landowners to combine their land, for registration purposes, under the name of one among them - which also created block titles.

Some landowners claim that this practise was promoted in an attempt to limit the tax burden on subsistence farmers, although how the system worked to reduce taxation cannot now be explained. The practise may have been related to an attempt by the American regime to distribute all unclaimed lands to the poor landless class in the Cordillera. No such unclaimed lands could be found in the Ibaloi regions, as a few wealthy families in each community could establish some sort of claim to all productive lands (see Keesing and Keesing 1934: 166). It is known that taxation was widely feared as a result of Spanish practises (see Scott 1974), and the *abiteg* may have viewed government efforts on their behalf as an attempt to increase their tax burden. Or, the *kadangyan* may have managed to subvert these efforts to their own benefit¹⁴. Whatever

¹⁴When one considers the problem faced by the Bontok descent groups, however, who hold land as a corporate unit, in the face of bureaucratic pressure towards individual tenure (Prill-Brett pers. comm.), another reason for such group titles in the Ibaloi past presents itself. If these corporate ancestor-based descent groups existed in Ibaloi communities as land-holding units in the past, attempts to reconcile group ownership of land resources with tenure laws favoring individual tenure, may have taken the form of the registration of land for tenure under the name of a senior member of the descent group.

the reason for block titles, the practise has led to problems in subsequent generations when the original agreement is no longer honored by the family holding the official title.

Further complexities are raised by the possibility of mortgaging land to either relatives or to credit institutions, (the traditional mortgage or *benben* will be discussed later). In terms of the mortgage through formal credit institutions, there have been frequent cases of a block title holder obtaining a mortgage based on an assessment of all the land falling under the title. Later, if the borrower is not able to repay the loan, the bank forecloses on the entire piece of land, including that of all the landholders who were not party to the loan agreement. In order to retain their lands, the landowners must pay off the loan, even when it far exceeds the commercial value of their land. In the event that they are not able to do this, the credit institution may attempt to hold a public auction of the lands. Usually, however, the banks are not able to regain their capital, and these loans remain in default (Susan Russell, pers. comm.). Thus, although the debt load on many of these lands may appear overwhelming on paper, often the actual situation results in the farmers continuing to farm lands that, on a state jural level, no longer belong to them.

A major problem with all lands in this area is that such titles as do exist are many generations out of date. Tax assessors frankly despair of ever using such titles for tax purposes. Inheritance divisions, mortgage foreclosures, sales and other property transfers within the boundaries of one title are often never documented officially. The usual practise is to inform the *na'ama* or respected elders among the community members when property changes hands. The local tax officials attempt to document as many changes as possible, but theirs is a difficult task. Furthermore, since 1954, when the Ambuklao hydro-electric dam was completed, lands within the dam watershed have fallen under the administration of the Bureau of Forestry and all title processing on such lands has been suspended. This is part of a government program which is attempting to halt the clearing of the forests, and the resulting erosion and watershed destruction in these areas. Government regulations concerning land in the Cordillera Central have been continuing to multiply as the national government has been under pressure to exploit this area for the national benefit. Many of these regulations are contradictory or conflict with each other in practise. They all come into conflict with native tenorial practises of

the Cordillera minority groups (see Lynch 1983, and Prill-Brett 1985).

For example, the Revised Forestry Code, Section 15 (Presidential Decree 705), rules that all land over 18 degrees slope is public lands under the protection of the Bureau of Forest Development (see Aranal-Sereno et. al. 1983:444 and Prill-Brett 1985:16). This means that the native owners of such lands cannot gain formal title to their property, and may be evicted at any time. This ruling includes most of the Cordillera landholders since the majority of agricultural land in this region lies at more than 18 degrees slope (see Map 5). Where such lands were already cleared and in agricultural production, the law has not been strictly enforced. In fact, in 1974, the government passed PD 410 which gave "ancestral landowners" a grace period of ten years to secure title for their lands (see Lynch 1983:27). As of March 11, 1984, this regulation effectively rendered millions of Cordillera landholders "landless", since failure to meet the regulations within the proscribed time period meant forfeiture of the original owners rights in the property. The difficulty was that few such landowners could afford the costly process to register their lands, and many may have found themselves frustrated in the attempt to do so, since the lands may have fallen under one of the sometimes contradictory regulations governing title in this area.

For example, some government officials argue that where trees are still standing, no further agricultural tenure can be established (Lynch 1983:20-21). The result has been a standoff between the farmers, who "accidentally" burn the trees off wide tracts and then declare them as agricultural lands, and the Bureau workers who plant seedlings wherever possible in order to extend their protection over watershed areas. Finally, Presidential Decree 1559 (1978) allows for the forceable ejection of minority landholders from their tribal lands at the discretion of the government upon determination of the "best use" of such lands (see Prill-Brett 1985:16). These lands may then be awarded to private enterprise or government agencies for the extraction of important resources. The displaced landowners will supposedly be relocated to suitable government "resettlement" areas; however, this practise has been badly managed in the past and as a result, Cordillera farmers strongly resist this alternative (Aranal-Sereno et. al. 1983:451).

Another serious problem in the Cordillera relates to the lack of proper cadastral surveys of the area. Tax assessors and land assessors for credit institutions, both complain that their job is made very difficult by the serious lack of a proper land survey in the Cordillera. Tax mapping a parcel of land is extremely difficult, since an adequate legal description of the land size and location is impossible. This is a problem that is complicating the present land tenure practises in Kabayan. Farmers in the Philippines are currently able to register lands which they have "improved" for agricultural production and this registration requires that they pay taxes. In return, they are granted usufruct rights to the lands if no former title is found to be currently valid. Then, after a set number of years of paying such taxes, the taxpayer may be granted a more secure title in the land if he applies for it. (This is not possible in Kabayan which falls within the Ambuklao dam watershed). However, in the meantime, the usufruct right through tax declarations is allowed to stand for purposes of mortgage, sale and lease of such "improved" lands (again, see Aranal-Sereno et. al. 1983 for a discussion of the dubious legality of this stance). In other words, more than usufruct rights, but less than secure title is granted. Since there is no adequate tax mapping of the land, it may happen that the same area of land may fall under more than one tax declaration parcel description.

If this were not enough, more problems are created by the landowners themselves. The old pattern of lumping several landowners' properties under one declaration (block titles) is sometimes still practised for several reasons. Due to the expenses involved in transferring titles or tax declarations from one name to another, family lands may often be registered under one member's name long after subsequent divisions have occurred. Or, if a parcel of land is too small for subdivision, a group of siblings may agree to keep it together under one name while sharing the proceeds among themselves. Sometimes two or three generations pass before trouble develops, but land disputes among descendants of such owners are very common.

Secondary title or usufruct rights to the land through mortgage, lease or tenancy at the wish of the primary owner are also common in Kabayan. Mortgage in the indigenous setting often occurred as a result of an illness or death in the family. The ritual requirement in such cases involved the butchering of animals to propitiate the ancestral spirits or to accompany the spirit of the deceased into the afterlife, as will be

discussed further later. Suffice it to say that these ritual requirements created a great deal of hardship - and the deprivation resulting from them can still be quite severe. In fact, in order to deal with the hardship created by this practise, a local Kabayan formed a Mutual Death Assistance Program in August 1973. This has saved bereaved families from mortgaging their lands or butchering their entire livestock holdings to meet funeral requirements. The Kabayan Credit Cooperative has also initiated a Mortuary Plan and each depositor in the K.C.C. must join this³⁵.

Another variant of the indigenous mortgage arrangement, which may actually amount to a forced sale, is still common practise in Kabayan. Often such arrangements will be between kin because of the moral obligation to offer inherited lands to members of the *byanak* or descent group, first. A frequent reason for such mortgages is to obtain the cash required to give children a higher education, or to meet debts such as medical expenses or gambling losses. So long as this type of mortgage remains unpaid, the one lending the money retains use of the land. Many people in this position told me that even when they had tried to redeem the land through repayment of the original loan with interest, it sometimes happened that their relative would refuse to take the money and return the land. This often occurred where the mortgage arrangement had lasted over many years. As is often the case in Kabayan, however, comparison of this practise with related practises in other more traditional communities in the Cordillera presents an alternative explanation than those offered by Kabayan residents.

According to similar Bontok arrangements (Prill-Brett pers.comm.), the money-lending relative may actually have purchased the property at a reduced kinship rate. The one receiving the money can only regain the land when and if the "lender" decides to resell the property in the future. The difficulty lies in the fact that such arrangements, although considered "fair" in the indigenous setting, may now be coming under increasing attack in Ibaloi culture as western mores become established. However, it is important to point out here that Ibaloi culture tolerated the development of many

³⁵ In MUDAP, each member pays a ten peso membership fee plus a 50 peso deposit in a special bank account. At least 50 pesos must be maintained in each member's name at all times. Upon the death of a MUDAP member, each member pays five pesos out of this account to the bereaved family in order to help them meet funeral expenses and outstanding debts. Then, within a grace period of 30 days, MUDAP members must bring their accounts back to the 50 peso level.

forms of mortgage, debt and usury which did not occur in the indigenous Bontok setting.

Secondary tenure in rice fields often occurs through a traditional tenant arrangement known as *e'so*. Informants explained that in the old times, members of the *kadangyan* class would have many fields which had been built at the *kadangyan* family's expense or obtained through mortgage. Poor members of the *kadangyan* kindred, or slaves, or someone who owed the *kadangyan* a debt would work these lands. These *abiteg*, *baga'en* and *silbi* respectively, would be members of the *kadangyan* extended household. All yields from the lands they worked would go to this household; but in exchange, the workers were clothed, housed, fed and cared for as members of the *kadangyan* family. Some retainers might even inherit a portion of the estate and many became wealthy as a result of the share system which was sometimes practised between animal owners and animal tenders. If there were an illness or death in a worker's family, the *kadangyan* would provide the ritual requirements. As a retainer's children grew to marriageable age, the head of the *kadangyan* household would choose a spouse for them. The control of the wealthy may have been absolute, but informants stressed that their obligations were also numerous.

Such extended households no longer exist. Now, when a person owns more land than can be worked by their own household, a poor person will usually approach them and request land to work as an *e'so* or share-crop tenant. The *e'so* takes all responsibility for production decisions, labor and water arrangements. The owner receives one half of the yield after all expenses are deducted. Informants stressed that an *e'so* may be chosen as a result of friendship, proximity to the field in question or because of their sound reputation. However, it was found that an overwhelming majority of *e'so* relationships investigated were between kin. Also, it was found that most farmers are both landowners and tenants in relation to different pieces of land. This situation probably arises from the inheritance practices of the Ibaloi wherein an individual may inherit several scattered plots from a number of relatives. Various arrangements are followed in order to make the working of such scattered holdings feasible. The result is that one farmer may be an *e'so* in relation to one piece of land, an owner/operator in relation to other land, and the owner with an *e'so* tenant in relation to still other fields.

Since the introduction of a cash economy, and the production of market crops, cash rental agreements for secondary title to land have begun to occur in Kabayan. There were a few cases documented of land lease, but it was still relatively rare. Leased fields were usually rice paddies which did not receive sufficient irrigation water in the dry season for rice production. In such cases, rental was usually per crop and not per annum. Unlike *eso* arrangements which are very stable over long periods of time, land lease is generally short-term. In all cases of land lease documented, the crop was a commercial vegetable crop.

Kabayan is a "land poor" community in the strict sense of the term, although a high rate of out-migration to Nueva Viscaya, Baguio City and other regions has eased the situation to some extent. Most landowners possess between one-quarter to one-half a hectare of wet lands and between one to two hectares of dry lands on average (see Table 3); the fact that this is insufficient land to meet the subsistence needs of the community is the result of many environmental, cultural and external market factors. For example, rice is the culturally preferred food staple, although taro retains ritual importance and camote provides the staple starch in many households (see Barnett 1967:286). Camote is considered a poor man's food, and although much of the abundant camote lands are uncultivated every year, rice paddies are intensively cultivated and yield up to two rice crops or one rice crop and several vegetable crops per annum. Some informants claimed that the *uma* fields were just too much work to clear and plant. However, the analysis of the labor figures quoted above from the CotCot-Salat survey, showed that both rice and vegetables were more work per crop than was dryland farming of camote (see Table 2). Older informants claim that the *uma* lands are no longer worked as often because the younger generation is growing lazy and does not like the very hard work involved in clearing the tough cogon and arrow grasses from *uma* fields. They argue that the gold mining has drawn workers away from the land since it offers "quick cash" which can be spent on alcohol and other amusements. Even the rice paddies were no longer properly cared for in the estimation of some elders.

In any case, few households rely solely upon agriculture as their sole source of income, whether or not they have sufficient lands to support themselves. Indeed, it was often noted that if a household had abundant lands, there was also a large cash income

from commercial or salary sources. Informants confirmed that such households have often acquired much of their lands and that land was a highly valued acquisition which brought much prestige to the wealthier households in the community. According to the baseline census of the community, only 13 percent or 23 households had no farm income at all, despite the fact that 41 households had no landholdings. Those without lands of their own often work as farm laborers for others; 12 percent of the households gained some part of their income from working on farms as casual laborers (see Table 1). Therefore, households with some income from farm lands comprised over 75 percent of the total.

This would seem to indicate that farm sources of income are the predominant sources in Kabayan; however, 30 percent of the total households also had some form of salary income and 16 percent had some form of commercial income. Also, 32 percent of the households in the baseline census claimed gold panning as the main, or a significant source of their income. This indicates a significant involvement in the national and regional market economy. Considering the geographic location of the Ibaloi, and their sustained contact with external influences, what is surprising is not the presence of the market economy, but the relative resilience of the subsistence economy along side of it. Patterns of capital acquisition and ownership may account for the differences found between Kabayan and Buguias, the community discussed in reference to comparative commercial farming practices. Other factors have played a significant role, of course, but in comparing the two communities, the role of capital in the development of the vegetable industry stands out as a significant difference.

C. Jural and Political Organization

In 1900, Kabayan was formed into a township by the Americans. The government at that time was vested in a presidente and a council composed of one representative from each barrio or barangay of the township. This pattern was said to have been adopted by the Americans from the old Spanish administration (Bello 1972:123). In 1909, Kabayan was organized as one of 13 townships comprising Benguet Province. Kabayan Poblacion was formed sometime after this, as the administrative capital of the township - which survives basically unchanged to this day

(see Map 3). In 1966 the congress of the Republic of the Philippines, through Republic Act No. 4695, renamed such townships "municipalities". These municipalities are now governed by a municipal mayor and a Sangguniang Bayan (municipal council) comprised of a Barangay Captain and several Sangguniang Barangays (barangay councillors). Each barangay within a municipality sends representatives to the Sangguniang Bayan and these are drawn from the local Barangay Captains and Barangay Councils which manage the affairs of the individual barangay within the municipality boundaries. Since Kabayan Poblacion is the municipal capital, there is a resident mayor as well as the Barangay Captain and Barangay Council. The Barangay Council is comprised of a representative from each sitio. There is also a Lupong Tagapayapa or Barangay Court, and finally, a community office of the INP or Integrated National Police force located in Kabayan.

Regular meetings of the Barangay Council are held in which the mayor and the Barangay Captain are included. The Barangay Captain is responsible for the resolution of all civil disputes and is the first court of appeal (after the respected elders or *na'ama*) for land disputes, divorce, rape, murder, theft and other conflicts. In most mountain communities, the Barangay Captain is the governing position although the office holder is expected to work under the advice of the Barangay Council. In Kabayan, since the mayor resides in the community and takes on many tasks normally performed by the barangay captain in smaller communities, the Barangay Captain of Kabayan also assumes responsibility for helping in the organization of irrigation, although some canals rely on his help more than do others. The Barangay Captain is usually a younger man, while the Barangay Council is normally drawn from members of the traditional *na'ama* group. These people act as intermediaries between the state political system and the local community organization, and also play an important role in the internal government of the individual community.

The mayor provides the linkage between the community and the local and national governments. This position is an extremely powerful one in most mountain communities, and as such, is the means to benefit the entire community or for great abuse of the position by the incumbent. Many national and provincial rural development funds are channelled through the mayor's office. Applicants for rural loans through these programs must apply for the mayor's approval for the proposed project before the

applications can be forwarded to the various program offices. Complaints from the members of the community, on the other hand, will also be funnelled through the mayor's office in order to be channelled upwards to the proper state bureaucratic offices. The mayor is responsible for the solicitation of funds for any project within the municipality such as road construction, domestic water supply improvements, irrigation materials, bridge construction, and the maintenance and construction of public buildings. This is perhaps the most difficult task of all those required of the mayor.

Communities within the very large area covered by one municipality (see Map 2), forward their requests for assistance to the mayor through their barangay captains or barangay councillors. These individuals are expected to have "the ear" of the mayor and retain a good rapport with him, just as the mayor in his turn is expected to be aware of all beneficial programs available through national and international agencies. There is stiff competition for such positions of authority and many political factions within each community vie for the social and economic benefits which accrue to those who hold them. Thus, as Bacdayan (1976) pointed out for the mountain regions in general, there is a dual authority structure in Ibaloi communities. Depending on the degree of integration and contact with as well as dependence on the national political and rural sphere, the state or the traditional authority structure may be more effectively in control at any one point in time.

Internal government within Ibaloi communities still depends in large part, on the traditional, informal leadership of the wise and experienced *na'ama* (respected elders) and *aba'kol* (respected old women). Members of this group can be called upon at any time to help individuals who are in conflict or in emotional difficulties. As one informant told me:

My mother is *aba'kol*, and people respect her opinion and consult her on many matters such as quarrels or inheritance. She is known to be sympathetic.

The greatest asset of these people is that of effective listening. In an open forum or *tongtong*, they attempt to guide those involved to an amicable resolution of the problem. They rarely dictate, but instead rely on commonsense and good conscience to prevail. However, they also work from a set of well-known and respected legal concepts concerned with property relations, family law and civil torte.

For example, in one *tongtong* attended, the disputants were arguing over whether or not to divorce. Relatives of the couple were allowed to discuss the entire matrimonial history of the disputants; including former marriages, property settlements and property allocations to offspring of former marriages, advice given and the public and private behavior of all concerned. This open forum was quietly observed by the *na'ama* who had gathered to hear the case. They made their decision, however, not so much on the points presented by the couple, but on jural considerations drawn from Ibaloi tribal law, which like other customary legal systems, stresses dispute resolution in the arbitration proceedings. In Kabayan the valued resolution is the "amicable settlement".

In this divorce case, the elders pointed out that they had already allowed the woman one divorce, and while the Ibaloi did not agree with the national law prohibiting divorce, neither did they think it wise to allow too many divorces either. This, the elders argued, would not be fair to the children of such marriages, nor would it be offering a good example to young adults in the community³⁶. Second, they argued that the second husband was warned when he took this woman as his wife that he would not be allowed to discard her later if she proved too old to bear him children (barrenness is normally acceptable grounds for divorce among the Ibaloi since it might be the result of the disfavor of the ancestors). Further, the woman had born her second husband a child, although it had later died. Third, since the second husband was the cause of the failure of the wife's first marriage, he had to take some responsibility for her subsequent behavior and the behavior of her children by that first marriage (of which he was complaining bitterly).

Finally, the elders concluded by admonishing the couple that although there were many grievances on both sides, none were severe enough not to be forgiven and as a result, there were no grounds for allowing them to divorce. After their decision was rendered, the *na'ama* were given a meal by the wife, while the husband, who was angered at the decision, left the scene. Later this man left his home and began to reside elsewhere, despite the *tongtong* decision. This the *na'ama* could not prevent, although

³⁶ When the husband responded to these comments with derision, the elders were sharp with him and suggested that he could always try for a divorce in the state-court system. This sarcasm was effective in silencing the husband since he had to be aware that this was unlikely.

they could prevent him from marrying again in their community. Other *tongtong* cases documented included irrigation disputes (which will be discussed later) and a number of family quarrels similar to the one discussed above.

If the problem is too large for a resolution through a *tongtong*, or if the parties are dissatisfied with the opinions of the *na'ama*, they may approach the Barangay Captain or their *sitio* representative on the Barangay Council to hear their case. Very difficult cases may be referred to the mayor of the municipality. Few cases reach the national court system; most problems are resolved at the community level. Even intra-community conflicts have been resolved by meetings between the parties in question and the two barangay courts of the involved communities.

The Barangay Court is a recent innovation, established in 1978 by presidential decree. It is comprised of between ten and twenty members who are appointed by the Barangay Captain, subject to the approval of the people. These members are usually drawn from the ranks of the *na'ama*. From this larger membership, conciliation panels are drawn to settle such disputes as are put to the court (see Appendix for the Organization and Operation of the Lupon). These cases are heard at the request of the Barangay Captain and the local INP. The conciliation panels contain three members and these can be chosen by the wider membership of the Barangay Court or by the disputants involved. The decision of such conciliation panels are based on a mixture of common sense, traditional customary law and the state legal code (see Appendix for examples of these). The decisions must be reported to the Minister of Justice. All cases taken to the municipal courts or higher, must be heard by the Barangay Court first unless they are of a certain nature (see Appendix 2).

The Barangay Court in Kabayan is comprised of eighteen members. The Chairman position is held by the Barangay Captain. In addition, there is one secretary and a treasurer. The members include one member of the INP and several barangay councilmen, an ex-mayor, several men who were also named as irrigation canal leaders, and a few individuals who were pointed out as *kadangyan* stock. See the appendix for two examples of representative cases which were handled by the Kabayan barangay court.

D. Religious Belief System

The traditional religious beliefs of the Ibaloi have been described well by Moss and others (See Keith 1963, Leano 1958 and Moss 1922). These beliefs mix a form of ancestor worship with a respect for a remote pantheon of gods. The Ibaloi also are wary of a large number of spirits or *anitos* who are said to interact more with humans, mostly to the detriment of the latter. These spirits occupy animate and inanimate objects such as streams, irrigation water, trees, boulders, mountains, breezes, domesticated and wild plants and animals. Signs, portents and indicators of their activities were carefully observed in the old days and in some cases, up to the present time. The chief religious functionary in Ibaloi culture is the *mambunong* (literally, "the one who will be saying the prayers") or "pagan priest" (as they are now called). In many communities these religious officaries still command enormous respect and power. *Mambunong* follow certain dreams or other powerful indicators in becoming a pagan priest, and they apprentice for many years with an older practitioner before they can intercede on behalf of the living with the above "anitos" or, more importantly, the ancestral spirits (*keh'daring*).

The *mambunong* plays the role of an intermediary between the spirits of the natural world and the afterlife, and living individuals. They are called upon in cases of physical or mental ill health (especially where western medicine has been unable to effect a cure), bad luck, unusual dreams or any other deviation from the norm. Their task is to uncover the spirit who is causing the problem and to determine what is demanded of the affected individual. The usual remedy is an animal butchering (sacrifice) and attendant ritual to propitiate the spirits involved. Often the source of the problem is determined to be a direct ancestor of the client of the *mambunong*. This ancestor is believed to be demanding meat or some other material object to be "sent" to him/her in the afterworld. The offering is often demanded as a form of redress for some wrong perpetrated against the spirit by the afflicted one.

The ancestors are held to have a continuing interest in the affairs of their descendants, especially those descendants who control property developed or worked by that ancestor (see also Conklin 1980:32). Their dissatisfaction with the management of such property can cause barrenness, madness, bad luck, poverty, ill health and even

death". It is interesting to consider at this point, that Appell (1976:84) suspects "that the ritual symbolization of social isolates follows their entification in the jural realm." That is to say, if a social isolate (comprised of a group or an individual), has a corporate existence in the ritual realm, then it probably follows that the social isolate has a corporate existence in the jural realm as well; furthermore, the existence of the social isolate as a jural entity, probably precedes its existence as a ritual isolate.

Evidence from Ibaloi society seems to indicate that the recognition of groups such as the *bunak* (descent group), in the ritual realm may, possibly, outlast their recognition in the jural realm under conditions of social change. This will probably be especially true when the conditions of change directly affect the situation within the social relations of production. Thus, for example, property which is passed down through the generations may be treated as individual property by the individual in any one generation who inherits it, but there are ritual sanctions against treating such property as if the residual rights of co-descent group members did not exist. This is because the ancestors are considered to retain a strong interest in material property which initially originated from their labor investments in land. For that reason, many restrictions operate on inherited property and most significantly, on inherited rice paddies.

Selling or disposing of such property without good reason was, and in some cases still is, considered to result in serious consequences for the living descendants. For this reason, inherited property must always be offered to *bunak* members first if there is some acceptable reason that the current owner must dispose of it. Culturally acceptable reasons include illness, death and sometimes marriage since all of these events require ritual sacrifices. Although this restriction on land sales is no longer strictly followed in Kabayan, informants said that any "notorious person" who was "foolish enough" to take the risk of selling such property outside of their cognatic

³⁷Dozier (1967:56) has suggested that this stronger emphasis which the Ibaloi place on ancestral spirits may be a result of corporate ancestor-based descent group ties in Ibaloi culture. The Bontok also have a strong element of ancestor worship in their religious beliefs and they have such corporate bilateral descent groups and these play an important role in their culture. Conversely, such groups are not found among the Kalinga, who emphasize nature and evil spirits in their explanations of misfortune. Others have pointed out, however that there is a similar emphasis on the ancestors among the Ifugao, yet, there is no evidence of bilateral descent groups as property-holding units in that society (Conklin 1980:12).

descent group, would be "murmured about" in the community. However, if they were "strong to withstand murmers", then there were no jural sanctions to prevent them selling such property - unless it was the loss of future kinship support networks. The *bunak* is no longer recognized in the jural realm in Ibaloi society.

The ancestors are also believed to contact their favored descendents through dreams in which they offer the dreamer wealth or status symbols. If the dreamer takes these symbols in hand during the dream sequence, it signals their acceptance of the ancestor's gift. In order for this gift to appear in the material world, the dreamer must hold a *kape* or good-luck canao. Finally, the ancestors also concern themselves with certain ritual obligations which are said to be passed down - inherited from one generation to the next. To ignore these ritual properties could also bring the displeasure of the ancestors down on their present-day descendents. The best-known inherited ritual property is the *peshit* or "rich man's canao"; however, other inherited rituals were not restricted to the rich. The *ba'jug* or power of sorcery was also said to be an inherited trait and one informant told of an uncle who "became like crazy" until a *mambunong* interpreted his difficulty as arising from the fact that he had ignored various supernatural indicators that he had inherited his grandmother's *ba'jug* abilities.

In the past, any event in the life cycle of living individuals in which spirits, of ancestors or otherwise, might hold an interest, were accompanied by sacrificial butcherings of certain types of animals. The more significant the event and the larger number of people required to attend, the larger and more expensive the type and number of animals to be butchered. These ubiquitous feasts were often not discerned as separate types of ritual by early observers, and the Spanish lumped them together under the term "canao"; however, the Ibaloi give individual names to each ritual depending on the reason for performing it and the nature of the individuals involved. A *mambunong* would normally judge what was required, but many rituals had a traditional element in the sacrifice. The opening of a new irrigation canal or kaingin field, for example, might require a single chicken as well as the required rice wine and proper ritual. An illness may call for a chicken, a dog, or even several pigs. Marriage usually required several large pigs or a water buffalo. A death could demand many pigs, cattle, horses and carabao. The higher ranks of the *peshit* or prestige cycle could also require tremendous

butcherings involving twenty or thirty animals. The sacrifices are supervised by the *mambunong* who also enacts the required rituals (*shilos*) and prayers (*bu'nung*). Needless to say, the wealthier the individuals involved in the ritual, the higher the assessment of the animals required.

Historians and ethnographers who have documented Ibaloi culture over time, have found references to the *canao* (or "mag-anito") as one of the earliest ethnographic details known about the Igorots of the Benguet area (see Scott 1974:44). Tapang (1985:23) notes that over 40 different rituals practised by the Ibaloi were documented by Moss. Of these 40, a great number are or were, implicitly or explicitly, concerned with property - whether for its creation, increase or transfer. Folk wisdom in Kabayan, on the other hand, holds that the *canao* originally developed to curb headhunting and to allow for inter-community peace pacts and contracts. These rituals are often downplayed now by Ibaloi informants, who stress that such "pagan" rituals are more often found among the "uncivilized" people of the heights or "in other places". Unfortunately, many Ibaloi have come to view their religious beliefs as "backward" and they take pride in their involvement in western churches and religious movements. I say this is unfortunate because the religious sanctions and mores of the past were part of a larger set of mechanisms whereby respect for natural resources, and control of their use was regulated among the present generation.

Past and future generations of Ibaloi were once held to have as many rights in property as the present generation - who held such rights in trust only. The long chain of past and future members of the bilateral descent group exerted a profound constraint on the improvidence of the present generation. This "corporate" nature to productive property has been documented among other mountain ethnic groups (Prill-Brett 1985), as has the role of religion in the maintenance of respect for the rights of others (Prill-Brett 1983). In present-day Ibaloi culture, such religious beliefs are still found, but in an attenuated form. Death and other rites of passage remain the single most important occasion requiring the *kah'dot*, *bat'bat*, or *canao* - the Ibaloi terms for the generic ritual feast. However, most agricultural cycle feasts and community rituals still common elsewhere (see Conklin 1980) have fallen into disuse in Kabayan.

The *kah'dot* requires at least the butchering of a pig, the making of *tapey* (rice wine) and the cooking of camote, gabi and rice. The more elaborate forms of this ritual feast include the performance of group chants known as *bad/w* and individual dancing known as *tayaw* - both of which are based on traditional themes. During funerals (*pinat'djan*) the consanguineal kindred gathers and brings the *o'po* or the sacrifices for the dead. Rice is given by neighbors as well as by affines and more distant consanguineal relatives. The immediate family provides the burial clothes and blankets as well as a large percentage of the animals to be tied and butchered during the feast. It is this ritual, more than any other which the *ibaloi* respect and which requires the attendance of up to the fourth cousin level of the kindred.

One of the reasons for this continued respect for the funeral feast is the strong role which it plays in notarizing the devolution of property held by the deceased. This is probably the main reason that the older and wealthier the deceased, the more elaborate the *pinat'djan* (or *aramag*) is expected to be. As was mentioned before, the rituals surrounding these elaborate funeral ceremonies have a great deal to do with who will inherit what properties. The spirit of the newly deceased has to be propitiated - the spirits of animals which he/she had owned during life, have to accompany the deceased into the afterworld in order that the newly departed spirit will be favorably disposed towards living descendants now and in the future. In the past, most of the deceased's moveable property was consumed during the funeral feasting which could last for weeks or even months (see Tapang 1985:26), while real estate was awarded according to customary law. The descendants who could afford to finance this propitiation of the deceased would receive the largest share of the inheritable properties; and the respected elders, present at the feast, would supervise this devolution of property, remember the divisions agreed upon and notarize boundaries for future reference.

Another aspect of property transfer associated with funerals and illness included mortgages, debts and forced sales of real estate. As one informant explained:

...when some other [person] died and he has no animal, the rich man will get one of his pigs - because before, the *canao* was imperative! If somebody dies and I have no pig to butcher, then among the rich who can afford it there will be one who will give the pig. Then, if the one who has to butcher has a ricefield, that will be the payment. They will do *canao*. The rich man will bring pigs and get the field. Then, if the poor cannot pay [for the pig] the rich will keep the field. Yes, *canao* was everything to the non-Christian. If you were sick and the *mambunong* told you to have a *canao*, then you must have it! It might be an "ani" or spirit who made you sick. The forefathers, the

ancestors are asking, through the mambunong, for a canao. And this sometimes still occurs. That is how the rich end up with all of it (the land). And the mambunong, the pagah priest, they also received much, the hind quarter of the butchered animal was for them.

As indicated in the above quotation, other occasions which still call for the performance of the proper rituals include marriage and especially illness. Informants pointed out that families which did not provide the feast appropriate to their socio-economic level in the event of a marriage, could not be expected to have that marriage properly acknowledged by community members. Similarly, families which did not attempt to heal an ill member with the proscribed type of illness ritual would be "whispered about" since they had not shown the proper love and care for their family member. If the illness has been caused by an ancestor, several types of curing ceremonies are possible to placate the ancestral spirits. The *amdag* is performed for minor ailments and usually only involves a chicken. *Temo* is enacted to cure a temporary derangement which takes a violent form, and requires either a pig, goat or dog as sacrifice. *Sinampulo* is proscribed by the *mambunong* in cases where the ancestors are making their material wants and needs known through the illness or erratic behavior of one of their descendants. If the illness is caused by an ancestor who is angered for some transgression on the part of the afflicted one, then a *kiyad* may be called for. This ritual demands the sacrifice of a cow, carabao or horse and since it is a very large ritual the whole community is required to attend. The *somjang* on the other hand, is called for when the illness has been caused by a living person through the black magic of an *angja* or sorcerer. This requires the butchering of either a dog or a duck.

Of course, the most elaborate canaos (aside from funerals) occurred within the context of power politics in the stratified Ibaloi society; the graded series of rituals by which an individual gained political recognition as a *baknang* are known collectively as the *peshit*. There are three basic levels to the *peshit* which may only be performed by those whose family have a history of *kadangyan* status. These levels are called the *ted'do* (three pigs), the *dim'ma* (five pigs) and the *sampulo* (ten pigs). It must be pointed out that besides the required number of *mol'mol* or big pigs, the celebrant must also have cattle and carabao in reserve for butchering at each level of the *peshit* since all who attend must be fed and must be sent home with their proper meat portion. For the Ibaloi, two, four, seven and nine are numbers associated with the dead. For that reason, they are not

used in the numbers of animals butchered in the *peshit* stages.

Informants say that the *peshit* cycle is not only for prestige, but also to share wealth with the members of the community - which at its widest, includes all Ibaloi. The feast is always hosted by a single household; however, relatives and tenants of that household are expected to assist in the preparations. All *caso* occasions have a double function - not only are they remedial against certain afflictions, but they also fulfill a sacred duty towards the departed ancestors (Leano 1958:20-21). Perhaps this is the reason that even the poorer classes had a form of *peshit* in which they honored the achievements of their ancestors. In the past, *kadangyan* celebrants would invite people from all of the surrounding communities and would send animals home with the headmen of these communities to ensure that all who lived there would share in the meat distribution.

To perform the final stages of the old-style *peshit* now is said to cost in excess of a hundred thousand pesos, and although there were a few held in other regions during the research period, no one in Kabayan has attempted to complete the *peshit* cycle. Money which used to go into such rituals is now used to send children to school, pay taxes and to acquire material objects from lowland markets such as televisions, radios and automobiles. However, political candidates for municipal, provincial and national offices will often perform *peshit*-style feasts during the period of their campaign; thus, it still serves as an important political and social indicator in Benguet Province.

Economists have interpreted the *peshit* as a distribution mechanism which, in the lack of a market economy, redistributed meat and other consumables and also allowed the wealthy *kadangyan* families to exchange excess production of consumable goods for prestige and authority (Tapang 1985:24)¹¹. The folk wisdom as expressed in folk tales in Kabayan also gives an exchange rationale for the *peshit*, as can be seen from the following story:

There is a tale told, that once the rich and the poor lived separately. The rich had so many pigs or animals that they used the animal fat for fuel in their cooking - no wood - only animal fat to feed the flames. The poor - living in their place, would go to the forest and get wood for their cooking fires. One day the rich looked down and saw the poor cooking with wood. They wanted some. But there was no one to go for the wood. So the rich went to the

¹¹The mechanisms by which such generalized exchanges create alliances and social stratification are discussed by Gregory 1982.

poor and said: "Let us live together. We will share our meat with you if you will go for the wood." And after that the rich and the poor lived together.

The extensive distribution network of the *peshit* meant that all *namshit* households (ie. "among those who have completed the *peshit* cycle") received regular allotments of meat from other Ibaloi regions. This was a result of the reciprocal obligations and relations within the wide-flung alliance network of the *kadangyan* families. These obligations tended to regularize the supply of meat to individual households (see Tapang 1985:26). Exchange and distribution, of animals, land, power and prestige were all formalized in the ritual process.

The canao had other political functions which affected vertical as well as horizontal ties. The process of enacting a *peshit* allowed the *baknang* to document the numbers of people resident in the area under his control. The figure was clear from the *bwatbwat* requirement - in which each individual man, woman and child had to receive an equal share of the meat distributed. Alliance ties were reinforced in the same process since in the final stages of the *peshit*, the *kadangyan* families from all the surrounding Ibaloi territories would also be invited - along with their retainers. Also, when a *peshit* was held, the celebrant had to be sure to send animals to all affinal kin living elsewhere in order that these relatives could "share in the meat". Finally, canao-like feasts notarized public agreements between communities and ended conflict between individuals. It was a valuable mechanism in the process of internal and external government in the indigenous Ibaloi society.

Ibaloi informants today often denigrate the canao and argue that it creates indebtedness and poverty in the families which still practise the old rituals. They tell of families losing property to the wealthy class because of pressures to hold such rituals and of whole families being forced to move out of communities because they resist the pressure of relatives and neighbors to meet these canao requirements. While "good luck", "medicinal", wedding and funeral canaos are still common in Kabayan, the prestige rituals are no longer celebrated in the old form. In a similar fashion, while in the smaller, less accessible communities, many community-wide rituals are still common, they no longer occur in Kabayan; one of these is the *kod'dey* which is said to ensure a good harvest. This ritual requires the ritual involvement of all community households and during the period of its enactment, the community is ritually closed to all non-residents.

Other rituals which are rarely practised in Kabayan now focus on the nuclear family unit or the members of one household; these include the *pasang* which the old people advise in cases where a couple remain childless for a few years after marriage and the *di'yaw* which is performed to bless the materials used in making a new house.

It should be pointed out here that one of Appell's (1976:66-86) criteria for the empirical evidence of a social entity involves its recognition in the ritual realm. Further, if a social entity is given recognition in the ritual realm, as demonstrated by the corporate ownership of rituals or the performance of rituals as a group, then this ritual entification may be indicative of the empirical existence of such social entities in the jural realm as well. In Kabayan, the fact that few of the rituals concerned with the village as a whole, or the cognatic descent group are still performed may be significant not only for their ritual entification but for their jural recognition as well. This is interesting since it may indicate that such entities no longer exist as important property-owning groups.

Most people in Kabayan now profess to be Christians, although a few still claim to be "pagan" believers. One advantage in adhering to the western religions, which informants stressed over and over, was that the *canao* lost some of its hold over people. Families are no longer impoverished by funeral requirements and those who should inherit no longer have to give up their inheritance to those who can provide the proper burial requirements. Mortgages are no longer required in order to gain the animals for curing an illness or to hold a wedding. This effectively removed one means by which the wealthy *kadangyan* class could monopolize land resources. However, people still enter into mortgages in Ibaloi communities; they borrow money in order to plant a commercial crop, send their young to school or set up their offspring in commercial endeavors. They may borrow this money from relatives - in which case they lose the use of the land for the duration of the loan, or they may borrow the money from credit institutions which means that they may lose their already insecure title to land in the event of a default on their payments. Taxes, education costs and consumer goods have replaced religious ritual as the major drain on household income sources.

Since the Christian churches in Kabayan frown on the performance of pagan rituals, the old forms of butcherings and feast have been modified somewhat when they are performed. These feasts may now be called "pamisas" or "a mass for the dead,

wedding anniversaries, good luck parties, or reunions. The traditional requirements of the prayer chants, the dancing, butchering and distribution of *bwatbwat* meat portions is still generally practised. In addition, the *peshit* cycle, with its many levels continues to be one means of validating political and economic status.

In Kabayan, the introduction of foreign religious concepts was probably initiated by Spanish Roman Catholic missionaries, with little or no success. The first regular mission established in the area was situated in Itogon and a missionary travelled regularly to Kabayan, first from Itogon and later from Bokod. The first church in the community was built in 1926 and a permanent missionary was stationed in the community some time after that. Several years later, a local *baknang* who had converted to catholicism, had a falling out with the catholic missionary in the community. It was said to have been over his desire to divorce his wife for barrenness, although the missionary was also said to object to the man's misuse of his *baknang* status to "rob the people of their land and cheat them on their gold exchanges". This *baknang* left the Catholic church and invited a Protestant sect into the community; he donated the land on which they subsequently built their church. This group, called the U.C.C.P. (United Church of Christ in the Philippines), were followed by the Baptists in 1950 and the Wesleyans some time later.

The degree of penetration of foreign belief systems in Kabayan society can be demonstrated by the church memberships declared in the baseline census. According to this census, fifty-seven percent of the population of Kabayan Poblacion is Catholic, thirty percent is Baptist, three percent is U.C.C.P., nine percent belong to other Protestant sects and the remainder declared themselves to be pagans.

IV. IRRIGATION

Irrigation³⁹ is essential to the production of the highly valued rice crops in Kabayan, as it is in other mountain ethnic communities. The means by which the Philippine mountain tribes have been watering their terraced rice paddies for centuries have only recently received careful study. This is despite the fact that these intricate irrigation systems and attendant mountainside terraces have long attracted attention as tourist attractions and national curiosities. There are a variety of types of cooperative groups and irrigation infrastructures employed by the tribes in northern Luzon. Even within ethnic regional boundaries, variation can be extreme. The irrigation system studied in Kabayan is similar in many respects to irrigation systems in other Ibaloi communities, and even shares some similarities with systems found in other ethnic communities; however, there are also significant differences. This chapter will describe the Kabayan system in some detail, and will point out some environmental, social and historical reasons for the above similarities and differences. Further, it will provide a detailed examination of one major irrigation system within the community which will serve to illuminate the discussion of various issues.

A. The Watershed

The Kabayan irrigation system draws water from two major streams and several springs which originate on the upper slopes of Mount Ambobongan and Mount Al-Al to the northeast of Poblacion (see Map 3). These mountains rise to 2,248 and 2,318 meters above sea level respectively and the drainage from their slopes empties into the Agno River directly below Poblacion. The two main streams employed for irrigation are the Pangtal and Asapa Creeks, which join together below Palanas sitio to form the Nandokeb Creek (see Map 6). Numerous springs within the area are also tapped for irrigation (Map 7); several of the more important springs are perennial and others are

³⁹ Scheerer (1905:143) documented the terms *sibog*, *man'ibog* and *mam'pa'sibog* for "irrigation", "to be the one who irrigates" and "the one who will be ordering the irrigation" respectively, as irrigation-related terms. These were not heard in modern-day Kabayan.

seasonal. The most important water intake points of the irrigation system occur where perennial springs are found along the above two creekbeds. Such points, where the water wells up with sufficient force to be tapped as the headwater for a canal system are called *talek'bed*. The take-off point for the CotCot-Salat canal system is one such headwater found on Pangtal Creek, and it is also called Talek'bed (see Map 7).

Residents of Kabayan have noted that water sources in their drainage area have become less reliable in recent years. While prolonged drought or irregular rainy seasons have occurred in the past, some informants felt that this could not account for the water shortages that are now becoming more frequent. We were told that the forested areas which lie on the upper slopes above Kabayan were given by the national government as part of the lumber concession area to a large mining firm in operation in Benguet Province. A great deal of commercial lumbering was done by this firm in the past, and this, along with cutting by residents of the community, for construction lumber and firewood, have contributed to a deterioration of the watershed surrounding the town. Some informants felt that this commercial cutting may have also resulted in several slides in the area, one of which destroyed rice paddies in the Obil, Adapang and Dutak areas (see Map 7). A former mayor of the community said that during his administration, the above-mentioned mining firm donated plastic and metal pipes to improve the efficiency of the remaining irrigation system after the slide - but denied all responsibility for the damage arising from a typhoon, which is an "act of God"⁴⁰.

Another concern of many Kabayan residents has been the ongoing native mining operations near Kabayan Poblacion. They feel that tunneling into the mountainside could divert underground streams which may be their irrigation water sources. They also complain that the tunnels can cause slides below the tunnel sites. Further damage to the irrigation system is caused by diverting water from the upstream areas of the watershed for gold washing and the clogging of canals which results from using irrigation canals for gold panning. During the research period, even domestic water supplies were sometimes very scarce and several schemes to improve the situation by piping water

⁴⁰It should be noted, however, that other residents of Kabayan blamed gold mining activities for causing such slides. Finally, many elders expressed the opinion that destructive slides were sent by the ancestors to punish the people of Kabayan for neglect of the rice paddies and/or for allowing the removal of mummified remains from several local burial sites.

from distant sources were being considered; however, these would depend upon the financial assistance of the national government because they would be prohibitively expensive for the community to undertake alone, and would involve gaining the approval of other affected barangays (see Map 3).

The creeks which supply the large expanse of irrigated paddies surrounding Kabayan are very small, especially during the dry season when the agricultural demands for water are at their highest. It is amazing that such small sources of water have been so efficiently utilized⁴¹. The rice terraces follow the contours of the ridges and valleys wherever sufficient water was found to irrigate paddies; concave terraces follow the ravines and old water courses while convex terraces rim the mountain slopes⁴².

B. The Infrastructure

The Kabayan irrigation system is a simple gravity system, comprised of diversion weirs, major canals or *kola'kol*⁴³, branch canals and small feeder canals as well as several large flumes which carry water across dry gullies and smaller flumes called *tar'oy* which move water across intervening fields to individual paddies. The system is largely constructed of locally available materials such as stone, bamboo logs, pine flumes, flattened tin cans, rope, wire and mud. The occasional imported items, such as cement, rubber or plastic hose, metal pipes, steel cables and preformed cement culverts, are also used. In some locations, the canals have been bored through solid rock and in others, extensive rock riprapping has been used to line significant drainage canals where discharge rates vary widely in the rainy season.

The highest intake in the system occurs above Sagto sitio at approximately 1700 meters above sea level (see Map 6); however, this is a seasonal intake since Asapa often dries up at the height of the dry season. The next highest intake point is found at Talek'bed above CotCot sitio at approximately 1400 meters above sea level. The

⁴¹Many informants stressed that they marvel at the accomplishments of their forefathers, considering that the terraces and canals were constructed without modern tools.

⁴²For a discussion of terrace construction techniques see Conklin 1980:15-16.

⁴³This term actually means "to dig" or "to scratch" and Fray Antolin first documented it in the late 18th century in reference to Nabaloi gold mining (Scott 1974:149). Scheerer (1905:153) noted that it means, among other things, an irrigation canal, a hole bored through something or an awl.

descent from intake to final paddy, in the overall system is accomplished in approximately two kilometers of terraced terrain. The water diversion structures such as the one found at Talek'bed are constructed of stone weirs which may or may not be cemented. These divert a portion of the flow of the stream into canals which are generally between one and two feet wide and between six to fourteen inches deep. The weir at Talek'bed diverts water into a tunnel which passes under the footpath approach to the stream and empties into the highest *kola'kol* in the CotCot system of canals (see Map 7). All of the downstream landowners work together to rebuild or repair this intake at the beginning of the dry season, when the preceding wet season's growth of shrubs and bushes must be cleared away, and the stone riprap replaced. All undergrowth is also cleared away from the canals, creekbeds and footpath, and stones are repiled along the weir wherever rainy season high water levels have dislodged them.

In places where former natural runoff channels have been adapted into use as *kola'kol* or as drainage ditches, these major canals may be several feet deep and as much as four feet wide (see for example, the canals separating the Adapang, Dutak and Changda field sections - Map 7). Normally even major canals are much smaller than this. Canals may be lined with cement or carefully laid stone riprap, but this is usually only done where erosion is likely to occur. Canals are generally engineered at a low enough degree of descent per meter that lining within the canal is not essential. Farmers often complain, however, that cement lining for their canals would significantly reduce water loss and their maintenance requirements - if only they could afford the cost of the cement. Following the contours of the hills, canals often extend for long distances before reaching the area for which the water is intended⁴. These long stretches of canal must be patrolled regularly during the dry season to ensure that branches or plants have not blocked their flow, nor worms or rodents undercut their banks.

The main canals deliver water to the rice paddy field sections through branch canals which have the same name as the field section they serve. Diversion into fields is accomplished through a variety of methods. If the field lies directly along the *kola'kol*, then channels will simply be cut into the canal bank, directed into the field and the flow

⁴One canal supplies water to several fields just above the river which belong to residents of Kabayan Barrio to the north. This canal known as Bokadan, is said to be just over three kilometers in length (see Map 6).

controlled with a few strategically placed rocks. No measurement devices are used to regulate amounts here, or at any other point in the system. If the field does not lie along the major canal, or branch canal which can provide direct access, then minor water diversion channels may be cut through intervening walls or obstructions to lead to it. Paddy overflow from one field into a lower one is also used, although this can often lead to conflict if the owner of the paddy above fears that erosion of soil or destruction of the paddy wall is resulting from this method. Farmers generally prefer to let the paddies drain through internal outlets which empty into the paddy below, wherever the construction of the terrace has allowed for this. In situations where neither of these methods can be used, or where the fields in question may be slightly higher than the canal, *tar'oy* or simple flumes may be constructed. These are made from hollowed out bamboo or pine tree sections, and more recently, from rubber or plastic hose or pipe. In the past, such bamboo or pine *tar'oy* were also used to cross gulleys, ravines or ditches, but now steel pipe is used for this purpose. *Tar'oy* are either strung from metal support cables or propped up on crossed poles.

The physical characteristics of the irrigation infrastructure are such that the entire Kabayan irrigation system is divided into several independent groupings of canals^o and field sections which form smaller cooperative groups. This is a result of the water sources, their attendant major *kola'kol* and the historic development of the entire system. In a broad sense, since the canals all draw water from the same watershed area, cooperation at the maximum level is required for optimum use of the water. This large-scale cooperation is achieved during the land preparation period in the dry season as will be discussed in more detail below. Usually, since many of the sources for the individual canals originate along the streambeds where independent springs well up, most of the major canals have a large degree of autonomy during most of the irrigation season. Sometimes, however, a need for inter-canal cooperation results from the fact that canal water sources are often so close together that a depletion in one may also seriously deplete the flow in another. The response to such a situation will be outlined in more detail below.

The number of major *kola'kol* in the community of Kabayan Poblacion varies depending on whether or not those with related sources are grouped together. There

are at least thirteen major canals, grouped into six or seven regions within the community; these together irrigate approximately 34 hectare of riceland, according to the 1982 tax records. In addition, there are several very small privately-owned systems in outlying areas of the community. Each *kola'kol* is again divided by branch canals which correspond to the named field sections connected with them. Sometimes these field sections and their associated canals are said to have been named after the first individual to develop fields in that area. Finally, within the field sections, there are further divisions based on feeder canal service areas. These field sections, branch canals, and major canals all correspond to important levels of organization in the cooperative groups which manage irrigation in Kabayan. The CotCot-Salat system, for example, irrigates approximately 12 hectares of riceland, divided into several field sections (see Map 8).

C. Social Organization

Irrigation in Kabayan is accomplished through a loose confederation of the above major *kola'kol*. The cooperative groups which maintain and operate these canals are highly informal. Neither the overall system, nor any of the individual parts have a named irrigation society affiliated with them; nor are there membership lists, fees, charters, official leadership or authority hierarchies as are common in the lowlands (see Lewis 1971). However, the irrigation system in Kabayan operates successfully despite many constraints and socio-economic changes in the community. The highly flexible, democratic, segmented and informal social organization may be responsible for the success of the overall system.

Several sources of information were utilized to gain more information on the social organization found at the major canal level in the various irrigation systems in Kabayan. These sources of information included informal interviews with many townspeople, formal interviews with officials and government bureaucrats, and the questionnaire given to the 42 household heads of the landholding households on the CotCot-Salat canal system. Much of the following information was taken from the questions answered by those household heads.

Membership

Over 90 percent of these farmers agreed that an irrigation society exists, of which they are members. None gave any name to this society, but all agreed that it was a cooperative organization. However, there seemed to be two broad trends of thought regarding the basis of membership to the organization. At least 67 percent of those interviewed said that it was the owners of the rice paddies who were entitled to the water; especially those owners who had inherited their land from the original owners of the rice paddies and of the irrigation system. Other people were able to open new rice paddies only because the original-rice-paddy owners agreed to allow water to be drawn from their canal for this purpose. Membership, therefore, belongs to all who own land within the system - with the most weight given to the vote of those who were descendants of the original owners⁴³. Another group of interviewees, however, claimed that water is a communal resource, the benefits of which all are entitled to share in; this is a right which is passed down through the generations - a communal right. Therefore, if a person is working land within the irrigation system, and works cooperatively to maintain the system, then that person has a right to membership in the system and to as much water as is necessary to make his land productive. At first glance there appears to be very little operational difference between the two groups of opinion; however, the subtle distinction in rights has proven significant in the past - as will be discussed in more detail below.

Farmers validate their membership within a canal group by sending a representative from their household for each cooperative labor day announced by the group leaders. The major labor requirement occurs during canal cleaning, when all concerned farmers begin from their land location along the canal and work upstream towards the canal source. Depending on their agreements with surrounding canal groups, farmers may be expected to clean only that section of a canal running alongside their land, or they may be expected to work in cooperative groups, from the point where the canal serves their land, back to the diversion weir at the headwaters of the

⁴³When "weight" in terms of a "vote among equals" is discussed in the Philippines, it must be kept in mind that Philippine society in general tends to be divided along lines of wealth and power. Some are "more equal" than others in such societies (see Lynch 1979).

canal system. Since many farmers own land adjacent to more than one canal, households may be required to send a representative to three or four such cleanings during land preparation season. For this reason, major canal groups usually stagger their cleaning days so that they do not fall close together. Another time when cooperative labor may be required is the height of the rainy season when blockage or damage may occur as a result of typhoons or slides. This must be repaired immediately to prevent erosion of the paddies; in the rainy season, drainage is the most important function of the irrigation channels.

Membership in the irrigation system may be devolved in one of several ways; through inheritance or purchase of land within the system, or secondarily, through tenancy or lease arrangements in the land. Since the *e'so* tenant, mortgager and the leasor are responsible for all water-related work and decisions during their temporary tenure in the land, they become the de facto irrigation group members. However, they do not create any tenure in the infrastructure or water during their temporary membership. Like access to land, access to water may be based on several different types of tenure.

An important point regarding membership in irrigation systems only became obvious when land tenure records were cross-checked with genealogies and kinship charts drawn up for the community. Along the CotCot-Salat system, for example, the land is registered to 60 individual owners. Twelve of these individuals (or 20 percent of the total), were deceased, and their land was under the administration of various relatives. Further investigation found that these 60 individuals were all inter-related in a way which formed six major family clusters and four minor family clusters. Major families are represented in community genealogies for at least three preceding generations and are generally held to be of *kadangyan* stock. Minor families have acquired land within the preceding generation only, and usually identify themselves as the offspring of slaves or *sabo* (outsiders). Clustering about these major and minor families are affine connections, some of which are common to other major or minor families. In addition, two of the major families have intermarried, and one of these two has also intermarried with two minor families, while the other one has intermarried with a third minor family in the present generation. In fact, when all of the affinal linkages are traced

carefully, no single major or minor family is free of some inter-connections with at least one other major or minor family.

It is clear from this analysis, that once the marriage barriers between *kadangyan* and *abiteg* had broken down, rapid intermarriage and fractionalization of land holdings occurred. The genealogical record shows that this happened in Kabayan in the generation preceding the present-day landholders - or approximately in the period surrounding the Second World War. Further, when the tax records were compared to the list of irrigators on the CotCot-Salat canal, a further 26 families were found to be benefiting from the land in *eso* tenancy or land rental. Therefore, approximately 86 households are gaining some income from approximately 12 hectares of riceland within the CotCot-Salat system. This works out to an average of just under 1400 square meters of land per household.

These findings suggest two things: first, the population pressure on wet rice land within Poblacion has reached a serious level of imbalance as a result of the breakdown of various methods to control fractionalization of holdings. Second, the degree of inter-connections between households within this irrigation system suggests that kinship may play a significant role in irrigation organization, especially in leadership and authority patterns.

Leadership

Leadership and authority within an Ibaloi community such as Kabayan Poblacion is situational. Leaders are chosen from among community members who are respected for their personality, economic standing, family background and knowledge of local custom. The respected elders may not be very "elderly", although they are usually older than forty years of age. They fill leadership roles in the community which are often informal, without title and without national jural-legal sanction. Aside from such formal offices as do exist, as a result of Kabayan's involvement in national governmental organization, informal leadership roles include *na'ama*, irrigation canal leader, *mambunong* and other traditional positions of authority due to wealth and family background. It is not surprising that many positions, both formal and informal are occupied by the same group of people.

These influential community members own rice land and farm like anyone else in Kabayan. Often, they own more rice land than other farmers and have land in many different field sections. Sometimes, their lands cover a larger proportion of the field section along any one branch canal. When the farmers along such a canal gather to discuss irrigation, these individuals are deferred to and become de facto leaders. However, meetings are democratic and decisions are usually reached through consensus wherever possible; therefore, leadership depends to a large extent on the charismatic qualities of those involved and their ability to utilize seniority in kinship relations and landlord/tenant relationships to exact loyalty from among their followers.

Despite the fact that present-day informants denied the existence of an Ibaloi term for canal leadership positions, clearly such positions do exist⁴. In the interviews with the 42 household heads, informants were asked to identify the canal leaders for their group. Several interesting factors emerged. First, more than a quarter of those interviewed stressed that the barangay councilmen and/or the Barangay Captain must be included in meetings and formally notified of decisions. Presumably, in this way an impartial public official can be witness to majority decisions and enforce them should conflicts arise at a later date. Second, people were not only able to identify major canal level leaders, but field section leaders as well. In many cases, some past leaders were mentioned as well as the current holders of the position. Some informants would not name individuals but referred instead to those "active elders" who "owned wider rice fields" and whose lead the majority followed. There was strong agreement on the names mentioned by the informants.

The role of these people appears to be leadership by example; they motivate the entire group through their personal industry and organization. They are the first to begin dry plowing - thus indicating that it is time to start cleaning the canals (see Chart 1). They request that the Barangay Captain serve formal notice of upcoming meetings. They lead the work on canal maintenance or repair days and direct the efforts of others. They are called upon to approach those who shirk work responsibilities and/or those who steal water, break agreements or do not cooperate in general. Their ultimate threat as they upbraid such individuals, is that the entire group would agree to deny them any further

⁴Scheerer (1905:143) found the term *mam'pa'sibog* or "the one who will order the irrigation" in use in the past.

irrigation water. But all informants stressed that once such an individual is caught and embarrassed, he would never behave in such a fashion again. It has never been necessary to deny water to anyone. Finally, these older men are valued for their knowledge of the traditional divisions of water between field sections and of the history of the development of the system. For this reason alone, they are invaluable in dispute settlement.

Water Distribution

During the dry season, all canals follow water rotation practices which result in intermittent flow to the paddies. The distribution schedules must be devised in such a way that maximum use is made of the water, without individual paddies experiencing water stress from too much drying between applications. Water rotation schedules are arrived at by common agreement of the combined landowners, at the beginning of each dry season crop (see Appendix for an example of a Water Distribution Agreement). Depending on the canal involved, these schedules may vary every year or have remarkable stability over the years. It is this group which agrees on a date for their annual meeting and informs the barangay councilmen and Barangay Captain, who will be invited to witness the agreements reached. However, the operational group for each canal is drawn from a much larger group of people, including all tenants, mortgage and lease holders and owner/operators, some of whom may not even be residents of Kabayan Poblacion. It is this larger group which is actually working the land; they are the ones responsible for attending meetings, informing the group of production plans for individual fields, working cooperatively on the canal maintenance, choosing a water distributor and responding to any emergencies. In terms of major water rotation schedule agreements, not all of these people will always have as much say as they would like.

Groups are formed and operate for the most part, at the major canal level - although maintenance and water distribution groups may also form at the branch or sub-canal level for convenience. It is the major canal group which meets together at least once a year. It will set a time for the annual canal cleaning which must be done before the land preparation for the dry season crop can proceed. If members of the

canal group do not attend this annual or biannual meeting, they will be kept informed of the decisions reached by the majority and they will be expected to abide by them. At the same meeting, the farmers will decide whether there will be a need to designate one among them as the *man'dapis* or water distributor (literally, "the one to be distributing the water"). The *man'dapis* may be elected from among those volunteering, or the elder members (original-paddy owners) may appoint someone to the position. Once a *man'dapis* is formally hired, all responsibility for water delivery rests with that individual. Unless the farmers in a field section agree among themselves to turn the water into their own fields during the time allotted to their section in the water distribution schedule, the *man'dapis* will be responsible for delivery up to and including the individual paddy level⁴⁷. However, it may not be necessary to hire a *man'dapis* every year. It depends on the volume of water in the creeks and streams and the timing and amount of rainfall received in the upcoming wet season.

The *man'dapis* position is a very time consuming and demanding job since most canals operate on a twenty-four hour rotation schedule. Also, farmer dissatisfaction with the amount of water received, or with neighboring field owners' behavior, or with the *man'dapis* water delivery decisions will be directed against this individual. Luckily, the responsibilities of the *man'dapis* end when the rains begin, so that the position usually only lasts for a few months of every year. In return, each farmer must pay a per-paddy assessment of palay to the *man'dapis*, usually four *butak* of palay per field. The assessment may be larger if the field is very wide or if the crop is very good; it may be less if the crop has been poor. The *man'dapis* begins his duties just after transplanting in February or March and he may be rehired season after season if all are satisfied with his performance.

Although canal groups have a certain degree of independence in water distribution, some canals cannot act totally independent of others. The water sources for some canals are so close together that a depletion in one causes the water level in the other to drop or results in one canal being forced to augment its supplies by trying to tap water from another canal's source as well as its own. This occurred for example, when the Salat canal provided insufficient water to support new fields opened in the

⁴⁷This can be an incredibly complex job if one considers the paddy landscape - see, for example, Map 8 and Conklin 1980.

Ebongao and Obil area - perhaps because of excess amounts of water being drawn from the Talek'bed area directly upstream from their source to supply expansion in the CotCot area (see Map 7). Water was then drawn from the Talek'bed headwater area as well as from their own Salat canal headwater. Problems resulted from this solution as will be discussed below.

There is also a certain degree of cooperation required between all canals as was discussed above; for example, when there is slide damage. However, the most important period of cooperation at the system-wide level is during the dry season crop, land preparation period. During this time, water demands are at their highest when available water supplies are at their lowest. Usually all of the available water is only sufficient to thoroughly soak the paddies in one field section at a time. As a result, an arrangement has been worked out whereby the upstream canal on the water source, and the upstream field section on these canals, are allowed to monopolize all of the water until their land preparation is complete. Water will continue to flow from springs in the streambed further downstream, of course, and where this is sufficient, other field sections will also begin their land preparation. However, the flow in the streams will usually be reduced to the point where the majority of downstream canals will be forced to wait to accomplish their land preparation tasks. Once the upstream field section and/or canals have completed land preparation, water will be turned into the next field section or canal and so on, down the terraced mountainside, until all canals have had their turn (see Map 6).

After this period, water rotation meetings are held at the canal level. The amount of water available is judged and the area of the rice paddies to be planted in each field section is determined. If there appears to be sufficient water to support the area to be planted, a very simple timed rotation of water between field sections along a major canal will be worked out; or it may not be necessary to make any rotation arrangements at all. This occurs very rarely, however. Depending on the size of the field sections and the number of field sections along a canal, the rotation schedules may operate over a twelve or twenty-four hour period. In the case of more than one canal drawing water from the same source, an entire distribution cycle may take two days to complete. During drought or dry years, a *man'dapis* may be required to operationalize the agreed

upon schedules and to reduce friction and open conflict over water. The *man'dapis* is a relatively new innovation in Kabayan, and not all canals will use one, even in very dry years.

The farmers on those canals which do hire a *man'dapis* during the height of the dry season, however, frequently pointed out that it has meant the difference between peaceful cooperation and fights and water theft on their canal. The use of the *man'dapis* results in a larger degree of flexibility in water arrangements. While he is required to follow the overall water distribution agreement as decided upon in meetings, he is also authorized to make whatever "fine tuning" adjustments he sees as necessary. If water conditions change, or if a vegetable garden is planted in the midst of rice paddies, he will be responsible for ensuring that everyone's water needs will continue to be met. People who disagree with his allocation decisions discuss their problems with him freely, and he will usually try to respond in a way that will satisfy everyone. This is the real difficulty in the *man'dapis* position.

Finally, the *man'dapis* acts as an early warning system and a court of first appeal. Since he is required to travel up and down the canals as part of his water delivery responsibilities, the *man'dapis* regularly patrols the system and watches for damage which must be repaired. Finally, he is the first one which farmers will approach when they notice irregularities in the system, either man-made or natural. He is then responsible to notify the elders or the Barangay Captain of any significant problems which he cannot resolve himself.

Sanctions and Conflict Resolution

During canal cleaning and other infrastructure maintenance, no official role call is taken, but absences are noted. People who do not attend will be pressured later to provide food and/or drink, or the money for these things, for those who did work. Some canals have more formalized sanctions than others, but in each case, it is the canal leaders who assess and collect the fines⁴⁴. If a person is not assessed a fine, they may be expected to contribute labor on a small repair task later. Other sanctions for more

⁴⁴Some informants mentioned a 15 to 20 peso a day fine for shirking cooperative labor while other informants said that fines varied according to the seriousness of the offense and could be paid in palay, alcohol, food or cash.

severe infractions such as breaking the water agreement, stealing water or cutting another person's *tar'oy*, usually involve a public scolding. The older, more respected canal leaders may do this, or they may request barangay councilmen or even the Barangay Captain to speak to recalcitrant farmers.

Serious disagreements will sometimes be referred to the *na'ama* for arbitration, or to the barangay court. If the disputants agree to accept the decision of the respected elders of the community, an informal airing of their disagreements will usually result in an amicable settlement. Most disputes occur within the field section level between neighboring farmers and these are usually settled between the two involved with only the aid of an impartial third party. There are some exceptions, however, and some of these will be discussed under the section on water rights to follow.

Water Rights

According to Kabayan elders, several time-honored principles are followed in the native allocation of water rights; the most important of these principles resembles the primi'ocupantis principle in customary land tenure. The first person(s) to develop a water source (build irrigation canals and rice terraces) establishes a right in perpetuity for free and unlimited access to whatever water is required for the upkeep of the original rice paddies. If a spring or water source originates on individually-held land, that water is considered the property of the landowner until such time as it flows off of the property boundaries. One informant said "You cannot control the water because, after all, water flows!" Similarly, the excess water which drains away from the bottom end of an irrigation system and affiliated rice terraces, is free for use by other landowners. However, during drier years, paddies constructed later in time, at the tail end of the original system, have no right to demand a share of the reduced flow of water.

When an irrigation system contains the fields of more than one landowner, distribution of the water is proportionate to paddy size. In other words, the owner of each paddy is entitled to as much water as is needed to make that field productive. Glick (1970:230 and 1976) has called such land and water tenure "the Syrian model" to distinguish it from a contrasting system where land and water tenure is held strictly separate (Yemenite) and in which each can be sold separately. Distribution of water in the

"Yemenite model" is usually determined through a fixed-time measurement of water "shares", which can be sold like any other form of property. This does not occur in the "Syrian" type of system, as is found in Kabayan.

A farmer has a right to draw irrigation water from a canal which serves land which he owns or works; he cannot draw his "share" of the water if the land is lying unproductive. He cannot channel his "share" away to another field, nor sell it if he decides not to plant anything that season. At the beginning of each planting season, the landowners within an irrigation system make their plans and needs known at a general meeting. The water is then distributed according to the amount of land to be planted and the amount of water available. Finally, a water source which is being used to irrigate a terraced field system will be protected by the landowners within that system from encroachment by any other potential users who would deplete the water supplies to the original fields. These principles were sufficient in the past, when each Ibaloi community was an independent state, managing their own affairs and protecting their resources by force of arms. However, challenges to customary tenure laws have a long history in Kabayan - as can be seen through a discussion of some irrigation-related disputes which have occurred over the last fifty years.

Originally, water was plentiful in Kabayan Poblacion and when people from a neighboring community wished to develop rice paddies downslope from a spring rising within Kabayan boundaries, a traditional agreement was notarized through a public feast for which the people of the neighboring community provided the pigs and carabaos⁴⁹. A long canal was constructed and many rice terraces were built on Ambokadan flats near the Agno River (see Map 6) making use of the water from Kabayan Poblacion. After a few generations of terrace expansion within Kabayan Poblacion, however, water shortages began to occur. The people of Kabayan Poblacion agreed that they could no longer afford to allow their water to be channelled away for the benefit of members of another community; consequently, they attempted to renegotiate the agreement. However, the farmers on Ambokadan flats refused to reopen arrangements which had been worked out by their ancestors. As a result, conflict arose between the two communities and the Ambokadan canal became the scene of inter-village fighting as one

⁴⁹Informants said that this occurred perhaps a century ago.

side tried to cut the canal, and the other fought to keep the water flowing. This dispute lasted many years and during that time, relations between the two communities were cut - no inter-village marriage was allowed. The dispute finally ended (if not all of the hard feelings), when the Ambokadan landowners worked out alternative irrigation arrangements which reduced their water demands on the Kabayan source.

Another irrigation conflict arose when there was a short-lived commercial mining boom at a site close to Kabayan Poblacion. An American prospector alerted a local *baknang* to the possible commercial capacity of gold deposits at this site, and the *baknang* responded by filing a mineral claim⁵⁰, building a canal to bring water to the site for processing gold ore and beginning some tunnels with the help of American mining engineers from the Baguio gold fields. This development alarmed other *kadangyan* landowners within Kabayan since it was felt that the plans to pipe water to the mine site from the headwaters of Pangtal Creek would threaten the supply of agricultural water to the paddies below. However, since the mine development was proceeding legally under the free hold system of the American regime land tenure laws (where "a prospector who staked a valid claim only needed to perform P200 worth of assessment work annually in order to maintain his property rights" (Tapang 1985:30), customary rules of land tenure and customary priorities for water rights could not be enforced. As a result, a prominent landowner within Kabayan decided to seek state legal protection for his water needs.

This man organized the few landowners in the Asapa Creek area, and the then thirteen major landowners in the CotCot area to contribute funds for obtaining two separate water rights, one for each stream. According to informants who were living at the time these water rights were obtained, the document listed the name of each beneficiary of the water and protected their rights to water in perpetuity. The landowner who had obtained these water rights has since died and his son was left in possession of the water documents. This son was never able to produce these documents, although he remembered them being used a few years before to force compliance with water

⁵⁰This may have occurred in 1936, according to informants. This agrees with Fry's (1983:179) claim that the gold rush of 1930-35 brought confrontation between indigenous land and water tenure and government regulations for mineral claims. Prospectors and mining companies generally disregarded customary land laws (see Tapang 1985:30-31).

distribution agreements on farmers who subsequently had opened new paddies in these two areas⁵¹.

Many informants remembered these water rights being invoked several times in the decades since their acquisition. In the post-war years, the failure of the mine site as a commercial endeavor did not stop some members of the community from attempting to open small native tunnels there and from drawing water from the old mine canal to wash the resulting *nava*. Because of their state-granted water right, the rice field owners were able to force the local miners to restrict their water use to the rainy season. As one informant explained, this was not a difficult agreement to reach since, first, most of the gold miners also owned rice terraces in Kabayan and second, the mine operation was no longer based on state-recognized mineral rights and thus the miners were not willing to take the issue of water rights to a state court. The old mine canal continues to cause problems for the farmers, however, since it was subsequently purchased by an in-marrying male who extended it for use in building terraces on his land which lies below the mine site. So far, public pressure has kept this man, and the miners, from using the old mine canal during the dry season.

The state water rights were also used whenever subsequent expansion of paddies on the original agricultural canals began to threaten the water supplies in the oldest field sections. However, in these disputes, agreements were not so easily reached or enforced. For example, the CotCot canal (see Map 7) was originally built to supply water to the Adapang and Du'tak field sections (see Map 8) which comprise approximately four hectares of riceland. When this canal was constructed, the area between the source at Talekbed and the fields at Adapang was undeveloped. Soon after the canal was opened, however, coffee plantations and vegetable plots were planted in suitable undeveloped areas in approximately three hectares of land surrounding the canal (see field sections Talekbed and CotCot in Map 8). This development did not immediately

⁵¹In trying to track these water rights down, the researchers made several visits to government offices in La Trinidad and Baguio. An official in the Public Works Department denied that such water rights had ever been pursued by "mountain people" in the past. He said that the mountain people were only beginning now to realize the need to protect their water sources because of the National Irrigation Authorities assisting them in organizing their irrigation. He categorically denied that any water rights could have been obtained during the time that the Kabayan water rights were supposedly granted.

threaten water supplies in the downstream Adapang and Du'tac areas. After a short period of working such lands, however, clearing them of rocks and building terraces, the owners of these new fields inevitably began to plant rice. To do this they had to channel ever increasing amounts of water from the main canal, thus depriving the original landowners below of their supply.

The original landowners attempted to resolve this situation by forcing a verbal agreement on people opening new paddies above their fields. Under this agreement, water would only be drawn from the canal for new fields during times of water abundance (ie. the rainy season, as with the mine canal). However, as the population and the rice paddies increased, water-related conflicts, water theft and the deliberate destruction of *tar'oy*, terrace walls and rice plants became problems. Many informants recalled being forced to sleep in their fields at night in order to prevent such destruction. Violence between the two groups of landowners was not uncommon. According to one informant, sometime around 1936 the situation had reached an impasse²². The original landowners could not prevent the new landowners from taking water since the new fields lay between the source and the original fields. The water right holders finally threatened to go to court to deprive all other users of water unless some agreement could be enforced. They succeeded in forcing a meeting of all the concerned farmers.

At this meeting, it was agreed that a water rotation schedule would be used to maximize the available water. Under this original schedule, the new field sections of CotCot and Talekbed (see Map 7) received three hours of water per day, while the rest of the day, water was allowed to pass to the lower, original fields. To enforce this decision, it was agreed sometime later, that during dry periods when rotation was necessary, a *man'dapis* would be hired to distribute the water. This idea proved so successful, that a few other major canals within Kabayan were persuaded to adopt *man'dapis* during the dry season. A precedent had been established, however, a tenure

²²It should be noted here that the informants memory here was called into question by other informants who placed this development sometime after the war. During the post-war years, many undeveloped lands were opened to the public to alleviate famine caused by the upheaval of the Japanese retreat through these areas. It was this development and the resulting upswing in paddy building and water demands that caused problems on both the CotCot and Salat canal systems.

over water which had been granted by an external agency had been used against landowners within the community by their field neighbors. While this had occurred before in relation to land, this is the first example of it in relation to water that informants could recall.

Meanwhile, across the Pangtal Creek, another canal was experiencing difficulty. Originally built to supply fields totalling approximately one hectare in the Salat area, this canal had been tapped to supply water to new fields totalling close to two hectares in Ebongao and Obil (see Map 7 and 8)³³. The spring which supplied the Salat canal with water, however, was insufficient to meet the requirements of these three field sections during the drier years. As a result, the farmers of that area began to draw water from the Talekbed spring, upstream from their original diversion weir. At first this was a stop-gap measure, but the expanding needs of the area and perhaps the dwindling water supply (due to erosion and destruction of the watershed) caused it to occur more and more often. The water right holders from Adapang and Du'tac, now at the tail end of a large number of users, were forced to threaten the use of their state water right for the third time. Again, a meeting of all concerned farmers was called and the water rotation schedule and duties of the *man'dapis* were extended to cover both sides of Pangtal Creek during the height of the dry season. This procedure is still followed today, uniting the field owners of the CotCot-Salat canals into one irrigation system.

The farmers on Asapa Creek were also experiencing some difficulties which arose from the same tendency of farmers to open small fields in the waste areas between the source of a canal and the fields for which the canal was originally intended (see Map 6). This dispute involved fewer people and many hard feelings still exist between the original water right holders and the individuals who opened new fields. The situation resulted in a meeting of the *na'ama* being called. Their ruling, based on traditional jural concepts, recognized the economic need of the new rice paddy owners but again argued that they should only take water from the canal during the wet season. The disputants, however, have never fully resolved the issue of when there is sufficient water for the new field owners to raise a crop.

³³Since the time of rapid expansion referred to here, fields were subsequently lost in Obil, and in Dutak as a result of a large landslide during a typhoon. This reduced the water requirements on both major canals (see Map 7).

One farmer in the area has a different complaint. This man and his wife have property on which a perennial spring rises; in the past, this spring was used to irrigate their fields. Community officials, however, persuaded them to give up their water rights in this spring so that it could be used as the major source of domestic water for sections of the community. In return, they and their descendants were promised a right in the water from the Asapa Creek irrigation canal. Unfortunately, this couple exchanged a reliable and trouble-free source of water for a water right in a source which is unreliable and which has to be shared with many fractious neighbors.

New threats to the water supplies available to longstanding canals continue to arise; the following example of irrigation conflict began in the mid-1970's when officials of Kabayan managed to gain provincial funds to expand irrigation facilities within Poblacion boundaries. The money was used to open construction on two new canals; one canal would tap water from Pangtal Creek upstream from Talekbed, and the other would draw water from Asapa Creek. Feelings ran high over these projects. The landowners of the areas which these canals would water were excited at the prospect of being able to open new paddy lands. The residents of the sitios located below the proposed new Asapa canal, however, expressed concern that the rock blasting required to open the canal would cause landslides. Many people refused to grant the right-of-way required to open the canal across their lands; normally such right-of-way is granted as a matter of course, without expectation of remuneration. The largest problem, however, resulted from the belief that there was insufficient water in both of these creeks to support two new major canals; this belief appears to be well-founded.

Riceland owners from the community collected signatures for a petition to have construction stopped and this was presented to the provincial fiscal in the capital⁵⁴. The case was given a hearing before the Provincial Board (Sangunian Panlalawigan) which argued that a traditional agreement restricting new canals to water only in the wet season should solve the problem. The landowners, however, mindful of the CotCot canal experience with such agreements, continued to press their claims to the water, citing their state water right document. According to local farmers, the Provincial Board

⁵⁴According to local informants, this is a provincial judiciary official who previews disputes before they are brought to the courts. This official attempts to achieve an informal resolution in order to save the court expenses and time.

upheld the water right and agreed to protect the upcoming generations of landowners along the original canals by guaranteeing in writing their right to sufficient dry season water. However, the problem was only resolved when the funds provided proved insufficient to complete the new canals. They never became operational.

Recently, some of the landowners in Kabayan were notified that to maintain their water rights, they would have to reapply under new government regulations to gain a state water permit. New requirements had been added (see Appendix), including an assessment of the litre-per-second consumption of water from the source. This would require the services of an engineer to provide the proper documentation. Other expenses and fees were also involved. Many farmers no longer saw the need to maintain a water right since they felt that this resource was now "communal" and not privately owned. Needless to say, many of these farmers held land in the new field section areas. As a result of the successful prevention of most threats to their water supply, few people in Kabayan saw the need to protect their sources of water further. Those who did see such a need, felt that the old water rights would continue to be honored by the courts⁵⁵. As a result, nothing was ever done to secure the new requirements.

One elder, who was one of the landowners listed on the CotCot water right, made the following statement when asked who really owned the water there: The water belongs to those people who have the water right. The government asked us to renew that water right, but we said: "Why?". Really, the only reason we wanted that water right was for fear of the mines. But we have kept the old water right just to show who really owns the water. Most people here now do not recognize that water right. They say the water belongs to everyone here - all the ricefield owners. The water right now is only used to achieve compromise between the newer rice field owners and the older rice field owners. They had to use it because, before, people were always stealing our water! You cannot hurt them, they are your neighbors.

However, this informant went on to temper this statement by adding: You must realize, here we share everything together. Even the owners of the ricefields really, all their ownership means is that they have the right to sell that land. But we all work the rice fields together one man cannot horde rice from the others - we have e'so here a 50/50 sharing of the yield.

These conflicting principles of individual tenure and public benefit have created problems in Ibaloi property relations over time.

Although no documentation of the above water rights could be obtained in the community or in the provincial capital, knowledge of the right was widespread among

⁵⁵There is some basis to this belief since the current National Irrigation Authority practise is to give first priority in the granting of water permits to former water right holders.

the farmers interviewed in the irrigation survey. When asked if there was any water right for the source of their irrigation water, 69 percent said that there was such a right. A further 26 percent said that there had been such a right but it had expired. One farmer said that there was no such right, and one replied that he did not know if such a right existed. Questioned further, 45 percent of those interviewed were able to name the landowner who organized the application for this water right and many could also name other original members of the group. A further 19 percent named the son of the original organizer and several other farmers as the legitimate inheritors of this water right.

When questioned about who had the right to take water from the canals, since such a legal water right existed, informants responded in several different ways which basically fell into the two conflicting values mentioned above. For example, many farmers pointed out that this old water right made no difference now since "it is no longer followed". They felt that all landowners along the canal had a right to the water. Others admitted, however, that this was due to the generosity of the owners of the original irrigation sections. A few of the comments made by the informants will show the variety of principles competing for supremacy in the allocation of water.

For example, there is the "communal principle":
We know we are all entitled to the water!

This is communal irrigation, that is why all people who have ricefields are entitled to use the water.

There is nobody who personally owns the water right; everybody has the right. You are just expected to contribute to the activities and obligations.

Some informants expressed the opinion that tenure in the land determined a right to the water:

So long as it is ricefields; the rice fields have always the right to use water near that irrigation.

A variation of this principle is that the right to water is "inherited" just like the tenure in land:

So long as the rice field was constructed with the irrigation before, then too now, it is entitled to the water.

They follow what was set down about the water right in the earlier years. People who own rice paddies has rights for the water from the irrigation because that irrigation is the work of those early people [from] whom we acquired the rice fields.

Some informants felt that a right to the water, was gained by the permission of those who will be most affected by such a decision:
 We gain the right to use the water by considerations from the owners affected.

There are these problems between the older and newly constructed rice paddies; but we in the older sections are patient enough to understand them; so the water is for all.

For the newly constructed rice paddies, it is on how he will talk with the general owners.

Owners and leaders contribute to the agreement for those newly constructed rice field's irrigation and deal about water.

One elderly informant, when asked about water rights, summed it all up by saying that a right to water was "...easy to have now. Not like before!"

What is clear from all of these comments and from other interviews done in the community, is that various, sometimes contradictory principles are at work regarding this issue. There is no doubt that the sources of these principles are varied: traditional jural concepts, common sense, national law, and the need to live together in peace. As with land, the principles of ownership and use rights are undergoing change. An elderly informant who had been mayor during and just after the turbulent war years, pointed out that these changes were very much a result of outside forces. The war itself caused many changes. Information provided by this informant and others, indicates the pattern of the historic development of property relations in Kabayan. These are issues which will be discussed further in the analysis chapter.

Irrigation and Commercial Production

One concern of this research was to provide some assessment of the effects which commercial production would have on traditional community organization such as "communal" irrigation systems. The CSC, PESAM research in Loo Valley, discussed earlier, had led to some speculation that wider involvement in competitive commercial production could have a deleterious effect on cooperative groups such as irrigation systems, by undermining the assumed homogeneity of interests in their membership. Preliminary research in Kabayan did not seem to support this assumption. Vegetable plots were clearly visible, widely scattered throughout the terraced hillsides, in amongst

the rice paddies. All the farmers interviewed felt that the vegetable industry was having a beneficial effect on their community, even though they complained at the same time of their treatment by vegetable middlemen and dealers and of the low prices in the market. It was then assumed that perhaps there was a "threshold effect", and that levels of involvement in commercial farming in the community had not yet reached the point where disruption was being experienced.

In support of this "threshold effect" theory, the CSC research in Loo Valley had found that, in that community commercial farmers were less likely to be involved in communal irrigation. While there was a gravity system within the lower valley area of the Loo community, many farmers had installed private pump and pipe systems which tapped the water reservoir directly through wells drilled down into the water table. Members of the natural science team from PESAM had some concerns about this trend, since the numbers of wells being used could seriously deplete available supplies of water throughout the valley. In Kabayan, however, few people could afford such a level of mechanization and no private pumps were in use. Further, the farmers of Kabayan have remained preoccupied with the production of rice. With further interviews and through the irrigation survey, the particular concerns of and methods available to Kabayan vegetable farmers and their rice farming field neighbors began to emerge, as did the fact that the system was not entirely homogenous and communal to begin with.

If a farmer in Kabayan wishes to plant commercial vegetables, he has two avenues open to him. He may wait until the start of the rainy season and plant vegetables in the *uma*; or he may choose to plant in an irrigated paddy and thus have wider options in his planting schedule. The problem with planting in the *uma* is that this is the common practise in the majority of mountain vegetable production areas. This results in a glut on the market and lower prices when all the producers try to market their produce at the same time. The problem with planting in the paddies, on the other hand, results from the physical properties of paddy soils (see DeDatta 1981:43-88). Especially in the high clay content areas, puddling and then drying, as in a rice-based crop rotation system, can be extremely difficult (Ibid:334). When completely dry, puddled soils form a hard, cracked, baked-clay like surface which is difficult to work. Once broken up and lightly watered, it forms clumps and becomes extremely porous, allowing additional water to quickly drain

away between the clumps. This creates problems when farmers plant vegetables in the midst of a rice paddy landscape.

Farmers normally water vegetable plants by flooding the plot until the ditches between the plant rows become saturated. The flooding method has recently replaced the direct application of water to the root zone area of individual plants with a watering can. The flooding method is less labor-intensive and the field may be watered only once or twice a week. This method, however, may create problems for other fields in surrounding terraced areas. In the irrigation survey, 62 percent of the household heads felt that vegetable plots could or did cause problems for the rice producer; the other 38 percent felt that the commercial production did not affect rice farmers in a negative way, although they admitted that vegetable production did require different irrigation needs. Vegetables use more water than rice according to 52 percent of the respondents. In their opinion, this is because the soil dries and cracks between application and the amount of water needed to resoak the field results in disruptions to water delivery to other fields. On the other hand, according to 40 percent of the respondents, vegetables take the same or lesser amounts of water than rice. This group pointed out that the flow of water to the rice is continuous and that vegetables are watered less frequently. All respondents said that if the vegetable gardener showed good judgement, explained his needs to the *man'dapis* in advance, and respected the water distribution rules, then no problems need arise in vegetable gardening.

Many farmers said that they would prefer it if vegetable gardeners watered their plants by the watering can method. But so long as they follow the agreements made by the majority of farmers, and did their share of the irrigation labor, then the allocation of even large amounts of water to them once or twice a week was only fair. Some vegetable gardeners said that their garden watering practises could disrupt the flow of water to the rice paddies, since flooding the dry gardens often took the "whole of the water from the canal". However, they claimed that they compensated for this fact by paying the *man'dapis* up to one hundred pesos per crop so that his additional work in rescheduling the flow after a garden watering would be covered. This cannot be considered a bribe, they pointed out, since gardeners have no palay yields from their vegetable plots with which to pay the *man'dapis* in the normal fashion.

Water scheduling problems were not the only water distribution problems created by vegetable gardening. In the terraced landscape, many rice paddies receive their irrigation water through direct overflow or water seepage from the paddies above them. When neighboring paddies are transformed into gardens, the excessive amounts of water which would be required for rice but which would drown vegetable plants, must be shunted aside through drainage canals. This channelling of excess water away from gardens can cause erosion in neighboring fields which receive the overflow, or water deprivation in the paddies below the garden. Both of these result in more work for the neighboring farmer, who must build drainage ditches within the field, or install a *tar'oy* in order to receive the needed amounts of water directly from a canal. Some informants felt that the vegetable farmer should assist inconvenienced neighbors while others felt that there was no obligation to do so. After all, the latter group pointed out, *tar'oy* were required in the past when neighboring farmers refused to allow paddy-overflow water delivery. In such cases, the farmers below were required to build a *tar'oy* in order to receive the water denied them. They did not expect assistance in such cases, why should they expect it when gardening was at fault? Finally, many farmers complained that the long sticks which were used to support the beans often grown in vegetable gardens, became convenient resting places for the rice birds which attacked the ripening grain in the paddies. They admitted, however, that nothing could be done about this.

At the time of the research in Kabayan, cooperation within the irrigation system appeared to be very good, especially at the canal level. The problems which did occur probably had little to do with vegetable farming. Rather, they relate to various difficulties experienced in the Kabayan property system as a result of changes in property relations over time. These will be examined in the next chapter.

V. AN ANALYSIS OF THE PROPERTY RELATIONS IN KABAYAN

Appell (1974:4) divides property systems into three component parts: (1) a scarce good or service; and (2) the constellation of jural interests, along with their supporting sanctions, with respect to this scarce good that are held by (3) a social entity...

The social entity which is concerned with property may be a single individual, or a group of individuals. If more than one individual comprises the property-holding social entity, then rights in the property may be divided among the members of the group in two basic ways. Property rights may be held in severalty; that is, each member of the group holds rights to the property as an individual - the unifying bond being the fact that all these individual rights are held in the same piece of property. On the other hand, property rights may be held by members of the group "as if they were one" - that is, in common. Appell (1974) holds that depending on whether or not such property-holding groups are recognized by the jural system, they will take very different forms and should be distinguished from each other.

In the analysis of Kabayan property relations, the two criteria raised by Appell, the locus of ownership and the jural recognition of the property-holding unit were given special attention. However, other characteristics of group organization were also examined; these included the principles employed in recruiting or restricting membership in the group, the organization within the group such that common goals could be achieved and the method for transferring property rights within or between groups. In this chapter, the various social entities which came to light during the investigation of property rights in Kabayan will be described and certain problems with Appell's methodology will become obvious. In the first part of the chapter, we will begin with the largest property-holding units (the community) and then work our way to the smaller property-holding units. The problems encountered using Appell's methodology will then be explored in more detail in the next chapter.

A. Communal Resources

When members of the community of Kabayan were questioned about resources which everyone in the community had an equal right to use, they identified several which they spoke of as "communal". However, only one elderly informant could remember an Ibaloi term for this concept, which he identified as *bodusan*. Another informant said: "Muyong", that is the term used in Buguias⁵⁶ to refer to what we now call "communal" [as in communal forest]. We never had that word here. That "muyong" means that everyone can own it as one - they are entitled to use it as one. In Kabayan we only use that borrowed term "communal":

Within the community of Kabayan, communally-held resources which are exploited in an individual, opportunistic manner, include wild animals and plants, fish in streams and rivers, forest products, wild grasses which are cut to feed domestic animals or for roof thatch, gold found through panning in streams and distant mountainside fields which can be developed into swidden fields for a season or two. Once labor is invested to make such resources productive, however, the yield is privately owned. Resources which require more of a cooperative effort in exploitation include water resources for irrigation, gold deposit areas requiring tunnelling and perhaps grazing areas which might require fencing. Investment in such resources usually results in some form of smaller group ownership.

Communal Forest

The forest areas surrounding Kabayan are an important resource for members of the community, providing building materials and fuel as well as other vital products mentioned above. Every community member has an equal right to gather forest products as required for domestic purposes from anywhere within the well-known boundaries of this Ibaloi community. However, Ibaloi elders define membership in the community not on residence alone, or even paying municipal taxes, owning land or opening a business within the community. According to Ibaloi custom, membership within the community (which confers rights in community resources) depends on birth right, genealogical connections with past or present members of the community, or alliance through marriage. The *na'ama* are responsible for enforcing the customary rules for exploitation of forest products. The current practise in Kabayan is to allow community members to

⁵⁶Buguias is a Kankanaey ethnic community to the north of Kabayan.

take forest resources as needed, from anywhere within the community boundaries as defined in the oral tradition.

Thus, according to Appell's definition, we have a social entity (the community) which is a right and duty bearing unit as defined in customary law, the members of which have an equal right to benefit from a resource held by the group in common (forest stands)³⁷. There are three problems with the above description. First, the Philippine state does not recognize the ancient customary boundaries of the community of Kabayan, since it has recently arbitrarily assigned boundaries to that community for bureaucratic purposes. The customary boundaries encompass the present-day community of Kabayan as well as a neighboring barangay. As one elder put it:

Before the government came, there were no boundaries between Daclan and Poblacion - they were all the same /baloi. Anyone could cut [trees] here. But these boundaries were made for money - for allocating barangay money.

Second, membership in any Philippine community is determined for the state by residence, for purposes of taxation and voters registration - not on ethnic boundaries and kinship connections. Third, according to state laws, the land encompassed within Kabayan boundaries is of two types - land held by private owners as defined by state tenure laws, and "public" lands belonging to the Philippine state and administered by the Bureau of Forest Development. In the case of Kabayan, the state has granted a portion of the forest lands within Kabayan's boundaries to the community to be used as a communal forest reserve. Any person who is legally a resident of Kabayan (according to state law) has a right to collect forest products for private use from that forest reserve. Commercial exploitation of resources within the reserve is not allowed. Further, branches and deadfall may be freely collected, however, residents must gain a permit from the Bureau of Forest Development to cut down a living tree. The state view of the scarce good, the social entity connected to it and the rights members of that social entity have in the scarce good are all very different from the customary jural concepts.

Further, since the state does not recognize any communal tenure in lands falling within Kabayan boundaries, they deny the community's right to control access to resources on these lands to non-community members. This has created a number of problems for the people of Kabayan - first, in their ability to protect their customary rights from outsiders and second, in the free expression of their rights in areas not

³⁷In Appell's terminology, this entity would be called a jural isolate.

covered by the state-granted forest reserve. The first problem has proven more damaging than the second problem in terms of community cohesion and productivity; however, both problems are damaging to Kabayan autonomy. For example, the Philippine government has granted vast tracts of land in the Kabayan region to a commercial lumbering company and this company has logged the slopes above Kabayan Poblacion extensively in the last several decades. One of the company's first priorities in the region was to protect their lumber concession areas from native exploitation. As one informant explained, this was a difficult task since the people of Kabayan have never completely accepted the state's right to limit their access to community resources:

I think it was 1970 when Bobok opened their logging around here. They asked for somebody who is respected in the town to be their forest guard. There were discussions between the forestry personnel and me because I have to speak for the people. I said: "The trees belong to the people - so they can cut only what they will use for fuel and what they need for their homes. Do not prohibit them!" They told me that the people should just take the branches - but they must not take all [the tree]. I told them: "Alright. But what about the houses?" They advised me to ask the people to get a permit [to cut house timbers]. Of course, I said yes, but wherever I wasn't, the people would just cut and cut. It was hard for me [to enforce the company policy].

Aside from logging operations, other uses are made of "public" lands within Kabayan boundaries. Improvements made to "public" lands by non-community members allow them to register such lands for a tax declaration. Squatters from lowland and other mountain regions use this provision to create kaingin and settle within Kabayan community boundaries. Such people are not tied into the community through common kinship, religious beliefs or customary law. There are no effective sanctions to control their behavior or their inappropriate exploitation of community resources.

The difficulties created by the difference between state and customary property concepts have ramified throughout the Kabayan property system as can be demonstrated by examining other property-holding groups found within Kabayan. Unlike forest products which are exploited by individuals or domestic family units, the resources of gold and water (among others) have involved the formation of smaller groups within the community - the members of which cooperate to make productive irrigation systems and gold mines. The effect of the divergence of customary and state law has also been felt over time by these groups.

B. Kola-kol: The Irrigation System

Another productive resource which the elders of Kabayan often identified as "communal" involves the irrigation system(s). The mayor expressed the opinion that: We have communal irrigation here. The government has never touched it. It is our life's blood and a crier only has to shout from the mountain top that there would be irrigation damage and people from all around this place would rush to assist.

However, upon closer examination it was found that irrigation in Kabayan actually represents one of the most complex cases of joint or group ownership. The membership requirements, rules of use and rights in the system and in the water can be discussed for at least two distinct levels - one the community-wide level concerned with water in general, and the other, the individual irrigation canals and their infrastructure, rice paddies and water supplies. We will examine the community-wide level first.

Water as a Community Resource

As was discussed in the irrigation chapter, there is some support for viewing the irrigation system as a community resource; since most households within the community gain economic benefit from irrigation, there might be said to be a "community of interest" in the protection of resources which make irrigation possible. It should be noted here, however, that non-barangay residents are also members of the irrigation system whenever they own land which falls within an irrigation system of Kabayan. Examined closely, therefore, it is clear that the community interest in the irrigation system(s) is more likely concerned with water than with the irrigation infrastructure. Indeed, it is water which is viewed as a community resource according to various informants, and there is not always total community agreement on the best use to which the limited community resources of water should be put. Some community members clearly view the employment of community water for gold washing purposes as a higher priority. These people are in the minority; nevertheless, they indicate a growing trend.

The rights of members of the community to share in the use of water resources can be demonstrated from several consistent factors appearing in the conflict cases discussed in the proceeding chapter. First, members of the community were willing to break a longstanding agreement - arranged by their ancestors and made binding by the act of the sacrifice of animals and feasting - with another community when this

agreement meant that members of their own community were going without needed water supplies. Second, during severe water shortage in the dry season, land-preparation period, all water users within Kabayan agree to rotate the available agricultural water supplies between the various canals and field sections so that there will be sufficient water for land preparation in turn among them. Third, in all of the conflicts discussed, where water allocation priorities were under dispute, the elders were always reluctant to totally deny water to any potential agricultural water users; during the dry season, rights of first appropriation are always upheld - although the consideration of free use of "excess" water will sometimes be employed in such a way that all will receive water. The normal solution offered is that newer fields should only draw water from established irrigation sources in the rainy season when water supplies are abundant.

From the point of view of the elders, therefore, the water resources of Kabayan, but not the irrigation system(s) itself, is a communal resource held by all community members as a unit⁵¹. Elders stressed the ruling that if a water source affected many landowners, no one would be allowed to establish an individual tenure in it. Each farmer is viewed as having the right to as much water as is necessary for economic survival without impinging on the rights of other farmers to similar amounts. In many of the dispute cases discussed with members of the respected elders, this was the principle which was responsible for the ruling that more recent water users should at least be permitted to draw water in the rainy season. This would allow them to plant a crop of *talon* and would still protect the dry season water rights of users with prior claim.

However, many elders recognized that according to the state jural system, no formal water right protects Kabayan water sources from external threats at the present time⁵². The present government practice is to grant water permits rather than a

⁵¹Thus, the community forms what George Appell would call a jural isolate in relation to water.

⁵²At most, the state might recognize the existence of what Appell would term a jural aggregate in regards to water sources in Kabayan. That is, while the government recognizes that individual farmers in Kabayan have some rights in various water sources in the community based on prior appropriation, the state requires a formally chartered organization of irrigators with a state-granted water permit in order to recognize legally-binding rights in water.

permanent water right. Government permits to protect an individual's or association's right to water are only granted when several formal procedures have been followed, including hiring an engineer to estimate the litre-per-second requirement to be covered under the permit. This new national water code (Presidential Decree No. 1067, 1976) supercedes all former water rights and permits granted under the old laws. The only advantage which old water right holders have, is that the government may give their application for a water permit priority in case of a dispute, as a result of the prior appropriation of the water. There is no registered irrigation association in Kabayan; there is no state recognized water permit for Kabayan water sources. As a result, the state jural system would not recognize a community tenure, or irrigation group tenure, in the irrigation waters of Kabayan.

One elder, when questioned about the methods the community could use to protect their water sources, made the following comments:

[What if] somebody would like to own the water source? The people would not permit any person to go there and stop or dirty the water. If it were the government well, that would be protested by the people! I think it depends on how the highest official in that land would protest it; fight for it. If he gave in, or if he were influenced - well, then (shrug). But, of course, if it is the government and a big company, wherein the country could make money out of it - more than the people here, well then, [the government] would insist on it going through. It could not happen here - the people would protest it.

The people in Kabayan in general, appeared confident that their long agricultural use of their water sources would provide the necessary legal basis for protecting these sources, even under the state jural system. Perhaps they are justified in this position since the state jural system has, in the past, recognized the right of some among them to present a case for all the agricultural water users as opposed to the local amateur gold miners. When we examine conflicts which are internal to the agricultural water users, however, we find that both the state and customary jural levels have also granted recognition to smaller units involved in the group control of irrigation resources.

The Major Canal (Kola-kol) Level

The division of the Kabayan irrigation system into major sections depending on individual water sources is not apparent at first to the casual observer. When questioned about the antiquity of the various parts of the system, informants maintained that the

entire system was built many generations ago and that no part was any older than any other part. It was only through the investigation of the several cases of irrigation conflict discussed in the proceeding chapter, that the picture of several discrete irrigation units began to emerge. The first dispute discussed came up in reference to queries about formal state-granted tenure in the water. It was clear from subsequent discussions regarding the opening of the commercial mine site in the mid-1930's, that the response of the farmers to this threat to their agricultural water supply was not a unified community response. One individual organized the farmers from two separate sources and solicited water rights from the state for two separate groups of individuals. At this point, it was easy to see that different canals represented different cases as a result of their historic development and as a result of whether or not the state, or the community elders granted a separate jural existence for the group of irrigators concerned with such canals. Let us examine customary irrigation law first.

In deciding who has a right to draw agricultural water from a community water source, the elders rely heavily on historical facts of precedence and on customary rules of water tenure. From their point of view, the clearest case would involve a single individual, who uses a spring which rises on land which he/she has established some claim to, in order to water rice terraces constructed with that water. The spring, the irrigation canals and the rice paddies all become individually-held property, subject to the normal customary laws of devolution. Any excess water which flows away from the developed lands, however, remains open for use by other community members. Only a few irrigation canals in Kabayan were developed from isolated springs, and fewer still are developed and owned by a single individual. One case, however, regarding the mine canal, was discussed in the previous section. The in-marrying male was free to purchase the canal from the man who originally built it; however, the elders have never allowed him to draw water into the canal from the source since there are pre-existing claims on the water.

This brings us to riparian water rights and customary law. The normal pattern for irrigation development in Kabayan is to draw water from a stream through a diversion weir - although as has already been mentioned, the diversion weir for each canal is usually located where a spring wells up in the streambed to create a sufficient

headwater for the diversion process. In the past, as each irrigation canal was developed, the land developers who hoped to benefit from the canal would contribute towards its construction. However, the contributions were not always equal; those members of the group who wished to open wider rice paddies had to contribute more construction materials, more animals to feed the workers and, in the past, more slave labor towards the canal construction. The *kadangyan* families, therefore, provided the bulk of the expense in canal development. Consequently, water allocation once the system was constructed was proportionate to the size of the field to be irrigated. Since wealthier members of the cooperative group contributed more to the construction costs, they received the right to more water - which in turn, enabled them to open and develop more paddy lands. Subsequently, the proportionate division of the water has remained a stable principle in these irrigation groups. The lands developed into paddies were developed as individual holdings, but the irrigation infrastructure remained as an unpartable, group-held unit. As such, the canal is devolved to those who inherit the land of the original constructing group. This canal is held as a common resource among the membership, while the land (and the water rights bundled with the land) has been divided and redivided over time, thus increasing the number of members in the canal-owning group.

The canal-owning group holds the right to as much water from the canal's source as is necessary to water the combined fields within the system during the dry season. This right is based on prior appropriation. The group of landowners along one canal are recognized as a property-holding unit under customary law, and one among them will represent their interests in any conflict involving another canal group - or other potential users of their water. The group as a whole is responsible for maintaining the infrastructure with cooperative labor. In addition, the individual members of the group are subject to the majority decisions reached by the group in relation to structure maintenance, conflict resolution and water distribution (although, as has been mentioned before, the owners of wider lands within the system carry more weight in decision-making discussions). Conflicts arising among the members of a canal-based group will be mediated by and resolved with the help of the eldest members of the group. Recently, canal-based groups have also begun to inform barangay officials of

group decisions (see Appendix 3, for example) so that the elders and officials of the wider community will enforce these decisions in the event of a dispute. These community elders consider the historically prior use, the amount of water required for the number of rice paddies contained within the section, and the possible compromises which will allow economic survival for all, in the dispute resolution process.

Under customary law, therefore, membership within the canal-based group operates along what Glick (1970:230-1) has called the "Syrian" lines - that is, water rights are tied to land rights, and the amount of water which any individual landowner receives is proportionate to his field size. If, for some reason, the farmer decides not to use his share of the water during a productive season, the right to that water reverts back to the group as a whole; available water from the source is always divided proportionately among all the productive fields within the system. Excess water which flows away from the tail-end paddies of the system is free for development by other farmers. However, if shortages occur in the future, older rice paddies have first priority in the allocation of water from the source.

Of course, under customary practices, conflict could and often did arise especially when a single resource was tapped for more than one canal-based group, or where the boundaries between the original paddies and more recently constructed paddies were no longer clearly recalled. However in the indigenous setting, the ritual and land tenure practices as well as the realities of social stratification, power and prestige, meant that land holdings were usually consolidated in the hands of the few upper class families. Membership within canal-based groups was smaller, various social mechanisms allowed the owners of irrigated lands to restrict the opening of new fields near older systems. Canal-based irrigation groups owned the infrastructure as a common resource while dividing the water in severalty among them. Acknowledged and supported by the elders of the community, these groups were a well-recognized social entity with clear rights in a group-held resource⁶⁰.

Of course, as with forest lands, the Philippine state has a different definition for legally recognized irrigation groups. First, the members of the irrigating group must form an association formerly chartered under state law. Second, under the present

⁶⁰Appell would term such canal-based groups a jural collectivity.

(post-1976) legislation, all water resources within the country belong to the state and are administered by the National Water Resources Council. In order that rights of appropriation be enforceable under state law, a water permit must be obtained, whether or not the water rises on private property. This permit may be granted to individual legal citizens, or to "juridical persons who are duly qualified by law to exploit and develop water" (ie. state-recognized irrigator's associations in the case of agricultural use)(Philippines Today:43). Therefore, the fact that no irrigation associations exist in Kabayan, and that no water permits have been obtained, means that no state-recognized property-holding group concerned with water exists in Kabayan, according to state law⁶¹.

To complicate matters, however, it should be recalled that at least two canal-based groups did seek and (perhaps) received state-recognized water tenure in the past. Prior to 1976, the state recognized two kinds of water ownership - public dominion and private ownership. Privately-owned waters were those which fell on, rose within, were contained by or found under privately tenured lands - so long as the water remained on that land (Ibid:38). It is doubtful that the water title granted to the two Kabayan groups fell under this type of tenure. Waters which were found in areas of public domain were likewise, part of the public domain. Claims to water from public domain sources were granted in the forms of concessions which were usually awarded by prescription for ten years. Both private and concession water tenure was "without prejudice to third persons" (Ibid:39); that is, one person or group could not use the water to the detriment of others downstream who also benefitted from the water. From this, it would appear that the Kabayan canal-based groups could only have received a water concession - however, this concession has been upheld in the state court system at least once in the last ten years - probably fifty years after it was first granted.

According to informants, the state title to water, granted to the canal-based groups, was restricted to those people who were members of the canals groups at the time, and their subsequent heirs. When the state title was granted, it was given to the same group who was recognized by community elders under customary law as having a right to the water. However, the water rights of these irrigators were protected in a

⁶¹Which would make the canal-based group a jural aggregate in Appell's terminology.

wider sphere (the nation as a whole) and the rights themselves were described and enforceable by the state jural system - even against other community members who wished to use the "excess" water found within the canal system. This meant that the canal-based groups which had obtained state title could deny water to other irrigators who subsequently developed paddies between the water source and the original paddy fields. It also meant that the community elders and the customary law were not the only mediators of water disputes in those canals. Apparently, however, the "without prejudice" clause in the state water title could have prevented too many abuses by canal-based group members against subsequent land developers.

The remaining members of these canal-based groups, and the heirs of those members who have died, are aware that the state tenure has now lapsed under new laws. However, some who were interviewed about this development, felt that there was no need to get a new water permit. They felt that the old water right would prove first appropriation and prior right to the water, even under the new laws. Officials in the National Irrigation Authority offices agreed - proof of former first appropriation would provide some protection against challenges even under the new state water code - although this would be at the discretion of the state officials involved in hearing any dispute over the water. No legal right exists in this water at the present time⁴².

Therefore, as with forest stands, the water users in Kabayan have some state recognition of their property rights, but these rights would not encompass the same membership as those granted under the customary law of the Ibaloi. Nor would rules for incorporating new members or for devolving the property over time, be the same according to the two jural systems. As we turn to the gold resources of Kabayan Poblacion, we will find our final example of the effect of the same disparate views of the dual jural systems affecting Kabayan property relations. We will also find a final example of the unique way in which the Ibaloi have tried to balance traditional views of the rights of community members to access in productive resources, with the rights of individuals or groups who invest labor to develop these resources.

⁴² According to Appell, such a group, with less than full recognition, might be termed a jural aggregate to distinguish it from those with full legal recognition such as a jural collectivity. However, it should now be obvious, that depending on what jural system is used to define the property rights, Appell's terms could variously be applied to the same property-holding group.

C. Baley-tok: Gold Resources

The final resource which residents of Kabayan identified as "communal", include the various gold deposit sites situated on the upper slopes of Mount Al-Al and the alluvial deposits of gold found in Kabayan's rivers and streams. The current gold mining site area has been extensively tunnelled by local residents over the years and panning for gold during the wet season is also a longstanding practice. The knowledge and exploitation of gold deposits in Kabayan may be as old as the community itself. The yield from these various sources of gold is very tiny - and the area proved incapable of supporting commercial gold production. Nevertheless, this resource is an important one - especially for the landless and underemployed people of the community.

Informants said that the gold deposit areas are a "communal" resource since every community member has a right to work in undeveloped areas of these sites to extract *nava* for their own benefit. At the resource-wide level, then, the current mine site, for example, like the communal forest and like the community sources of water, is held by a well-recognized group, recognized by the customary jural system and protected from use by all non-members⁴³. However, the current gold mining site is a very different resource from the forests and waters of Kabayan Poblacion; gold is a commercial commodity which is only of use to the people of Kabayan when it is sold and thus converted to cash. Therefore, unlike the forests, it would not be viable to make a ruling preventing individual commercial exploitation of the gold resources, as has been done with forest products.

In some ways the gold deposit area does resemble water resources, however, in terms of the attendant property regulations found connected with them. Like irrigation, the current mine site, for example, also has at least two distinct levels which are treated separately under customary law and which have different groups with distinct membership rules and property rights connected with them. As with water, there is a community-wide interest in the resources of the gold-deposit areas - everyone who is a member of the community (according to customary membership rules) has a right to work undeveloped areas within these sites if they wish - or to pan in adjacent streambeds in the rainy season. However, like the irrigation system (and indeed, like the

⁴³The community would therefore appear to be a jural isolate in respect to the gold deposit areas according to Appell's terminology.

land holding system) lbaloi customary law allows for the perfection of individual title to a portion of the communal gold deposit areas, through the investment of labor to make a specific area productive. This labor and the productive improvements which follow from it, lift the improved site out of the communal realm of tenure and restrict access to and exploitation of the improved area to the first person(s) to develop it.

Therefore, the individual tunnels at several gold deposit areas are held by smaller groups, the members of which are drawn from the community. The first workers on a tunnel may be a single individual, a man and wife, a group of siblings or of friends and/or relatives⁶⁴. Control over the tunnel and over the yield from it is always retained by the founding members and may be devolved as are other types of individually-held property. Rights in tunnels are not lost if work in the tunnel should stop⁶⁵. Each tunnel-owning group is recognized in customary law as a property-holding unit, the members of which hold the tunnel in common. The eldest member of the group is the representative of the group and will be held responsible by community elders for the good conduct of the co-owners in respect to that tunnel.

Tunnel owners rely on a small pool of family members and occasionally of friends to extract the *nava* from their mines. Usually a small shift of three to four men will work the mine face at any one time. All the *nava* that is extracted on any one shift is equally divided among the workers on that shift. Whatever gold is found in their share of the *nava* constitutes the miner's reward - whether it be a great deal or nothing at all. Yes, we divide the *nava* by sacks - the *nava* extracted from the tunnel. So - if one is luckier than the others, he keeps on laughing and drinks more beers than the others!

The owners of the tunnels only receive a share of the *nava* on the shifts on which they personally work - however, they receive the benefits of a larger labor pool for cutting timber for supports, extending tunnels and reinforcing them. They also retain the right to deny access to their tunnel to other members of the community if they so choose. From

⁶⁴In the past, it appears that these gold tunnels were developed by a single family with the assistance of slave laborers (see Scott 1974: 151 and 184). In the present day, the lack of slave labor has meant that tunnel-owning groups may be composed of a wider variety of members and of temporary workers.

⁶⁵In late May 1984, approximately 20 tunnels were said to exist at the gold mining site, but only three of these tunnels were productive and actively being worked. During our visits to the site we saw old tunnels which were closed off with locked gates so that no one could enter them without the permission of their owners. However, this may have been for safety reasons, as much as for restricting access.

the perspective of customary law, therefore, a property-owning group exists for each tunnel at the gold mining site. Once again, state law does not take this view.

According to informants, including the eldest miner at the mine site, there is no state-recognized title to the mine site vested in the community, or in any of the individual tunnel-owning groups:

...this is not a registered mine. We are here as what they call "hide leaders" because [the mines] are against the Philippine Government [law]. This is not a registered mine so we are very silent about this.

One of the difficulties in registering any mining claim in that particular tunnel area is that a pre-existing state title exists for the land and minerals there - a result of the same mining boom in the 1930's which caused Kabayan irrigators to document their water rights. The prominent *baknang* of that time who filed a mineral claim for the gold site, gained a Torrens title to the land. None of the present-day elders feel that this man had a right to the gold site under customary law, and therefore, they argue that his state title is not valid in the community. Once this man found that the site was not commercially productive, he sold it to a lowlander - who apparently sold it in turn to another lowlander. The second buyer has never managed to exercise his state-recognized tenure in the area due to protests by local people - however, the state view is that there is a single legally-recognized owner for the mine site.

A further complication in the property relations at the mine site has resulted from the organization of a shallow miners' association among the regular miners at the site. The association has recruited several members who have commercial mining experience and it provides mining expertise for the operation of deep or dangerous tunnels in exchange for which the association members are allowed to take turns working shifts in these tunnels. The members of the association pay a small regular membership fee which contributes towards accident benefits in case of injury, and legal fees in case of litigation against illegal mining. This association has a president, a vice-president and a treasurer who are elected from the general membership. Nevertheless, most leadership is provided by the eldest members of the group. The members in the association include many tunnel owners, as well as young men from the community who do not have an interest in any one tunnel but who rely on association membership to gain them entrance to working shifts.

Because this miners' association presents a united front in the protection of miners' interests in the site, the eldest members of this miners' association have been recognized by the elders of the community as representatives of all miners in disputes involving irrigation water, possible land slides and mine safety⁶⁶. These mining elders have been made responsible for making sure that irrigation water is not diverted for gold washing in the dry season, that tunnels are not started on unstable slopes which could result in slides, that young men do not work in tunnels without proper timber supports, and that live trees are not cut for timber props. Similarly, whenever possible, the leaders of the Kabayan miners' association and others like it have made representation to the Provincial Attorney's office on the miners' behalf to gain state recognition for native mining activities. As the following quote indicates, they have had some success in this endeavor:

Gold Panning and Illegal Miners: your Provincial Attorney continues to represent the Ucab Miner's Association, the Tuding-Loakan Miner's Association, Lower Banget Miner's Association, Kalabkaban-Toomo Mining Association, Upper Reno Bakong, upper Tackong Mining Association and Valdez-Big Wedge Mining Association. We have always taken the position that these groups be allowed to share in nature's bounty. (Sadiay E Dinteg Ja Mansia 1984:13).

Nevertheless, native miners are wary of providing information on their small mines or mining locations. They are well aware that under state law they have no right to benefit from these resources, whether or not the gold deposits are found within community boundaries and fall under community control according to customary law.

As with the irrigation groups discussed previously, membership in the gold miners' association is based on one of two criteria. The miners' association is comprised of both some owners of individual tunnels, and of miners who can make no legitimate claim under customary law to tunnel resources - but who, nevertheless, belong to the association by virtue of their labor and an expressed solidarity with native mining interests. Similarly, many canals in Kabayan irrigate the fields of two kinds of "members" - first, the descendants and heirs of the original canal constructors, who have tenure in the water and the infrastructure based on prior appropriation and devolution; and second, the more recent landowners who validate their membership through contributory labor and the use of the water for economic survival. In both

⁶⁶This would make the association a jural collectivity according to Appell's terminology.

cases, the less legitimate members validate their rights with the "communal" principle (the indigenous laws and the validity of this claim will be discussed in the next chapter). In diachronic terms, however, changes to or threats against customary tenure laws affecting water and gold deposits have resulted in boundary maintenance problems for groups concerned with these resources. The tendency to restrict access to productive resources to the individual who can gain state title to these resources has not been followed in Kabayan. Indeed, the community has responded by emphasizing (in some respects) the rights of other community members over legitimate economic innovators who would have had more support for their individual rights under indigenous tenure laws; thus the emphasis on "communal" resources which several community elders stressed over and over in their discussion of these resources with me⁶⁷. However, in at least one area, the state system of tenure and property relations has made significant inroads in Kabayan; land has become a resource which depends almost entirely on the state system of land tenure with its emphasis on individual control over productive resources.

D. Payaw, Uma: Landholdings in Kabayan

Under customary Ibaloi land tenure laws, only one type of land was customarily held by a single individual and devolved over time and that was the highly valued rice paddies. Even though the basic economic unit of production and consumption is the household comprised of a married couple and their offspring, residents of Kabayan still prefer to keep the inherited rice fields of the wife under separate tax registration from those of the husband - although this too, is undergoing change. Such inherited lands are held in trust for the next generation and are heavily restricted in terms of devolution and sale laws as was discussed before. For this reason, there is little difference between state title in rice paddy land and customary tenure in terms of the type of social entity found connected with the property, although there are differences in which rights in the

⁶⁷This also accounts for the consistent argument that no part of the Kabayan irrigation system(s) was developed before any other part - members of the community were obviously reluctant to admit to the advantage of prior appropriation for any one canal or field section since this would be to acknowledge the ongoing political struggle between proponents of the old tenure laws, and supporters of the new "communal" approach to community resource exploitation.

property are conferred on the individual. There are also differences in terms of the rules of devolution - and the members of Kabayan are very aware of the differences between customary law and state law in this regard.

For one thing, state law holds that all individual property must be devolved equally to all legitimate heirs. Customary law allows for all heirs to inherit - but not all heirs will inherit equally. In the traditional context of the elaborate rituals surrounding the death of a property-holder, legitimate heirs of the deceased could compete for the majority of the productive property - those who could supply the bulk of the funerary requirements, received the bulk of the estate⁴. Many informants agreed that in more isolated Igorot communities, this practise is still followed. Further, even in Kabayan there is a strong sense in which inherited lands are still only given in usufruct trust to a single owner in any one generation. Past and future generations of the *bunak* are still held to have a continuing interest in the land; to lose land entirely outside of the *bunak* membership is considered calamitous - the bad caretaker who made such an event possible is made a "notorious person" by the transaction.

Further, under customary law, there is strong reason to believe that the *bunak* may have operated as an active property-holding entity in Kabayan's past. Informants from the community noted that the *uma* or dry lands were not held under individual tenure. Only under the influence of increasing population pressure and state requirements for property tenure, have individuals begun to register *uma*, pasture and even forested areas. On the other hand, among the Bontok, *uma* and other forms of productive lands are inherited by all the descendants of the couple who first opened them to production. Access to such lands depends on membership in the descent group (June Prill-Brett, pers. comm.). One explanation for the "block titles" so common in Ibaloi areas, may be that the members of the *bunak* were trying to accommodate customary tenure with the new requirements for title under the name of one individual. Another pattern which may support this argument is the fact that in situations where a couple have very little rice land to devolve to their children, there is a tendency to let all the offspring inherit the small amount of land as a unit - with use to be rotated among them or the proceeds from production to be divided among them.

⁴See, for comparison, M. Rodman's (1984) material on the Vanuatu land tenure system which allows for similar types of competition over land.

In cases of land dispute which are heard by the *na'ama*, the rights of the *bunak* will always be respected, as will the wishes of the deceased if the legitimate heirs agree to follow them. However, the state actively intervenes to prevent these sorts of accommodation to customary laws. For example, the tax assessor in Kabayan discourages any group tenure in land - and for very practical purposes. He is constantly required to mediate disputes created by the old block titles of the past. Frequently, several generations after the title is listed under the name of one individual, the descendants of that individual will refuse to recognize the rights of other individuals whose land was lumped together under the original state title. Consequently, state tax assessors who are registering land for tax documentation will always insist on some division of the property among heirs. In many situations, this results in disputes among the heirs; however, tax assessors argue that this is preferable to the consequences should the property-holding unit not agree on resource distribution in subsequent years.

The effect of the registration of lands for state title is to limit the rights of the *bunak*, while strengthening the rights of the present incumbent - even over the rights of his/her children. This is the result of the effect of the Torrens system of land tenure, wherein:

...the ultimate proof as to the ownership and description of the land is immediately revealed on the certificate, precluding any other unknown or undeclared claim (Aranal-Sereno et. al. 1983:432).

Further, this certificate is guaranteed by the state; the point of the Torrens system is to facilitate the transfer of property between owners. This has the effect of commoditizing land (Ibid:432); the owner of the land can treat it as a commodity - his/her rights in the land do not depend on use or occupation, but only on what the paper supports. The paper title can easily be transferred without the owners ever actually setting foot on the property therein described.

In the Ibaloi situation, land grabbing was the logical consequence of the introduction of this concept:

The Torrens system has been continuously used as a device to guarantee untrammelled exercise of the rights of the individual owners. It has also been used as a system to convert communal ancestral lands into individually titled 'parcels' of land (Ibid: 433).

Here again, the social entity (the right and duty bearing unit in respect to property) is defined differently by customary and by state jural systems; and once again, this is a situation which creates disputes and confusion in Ibaloi property relations.

One major source of this confusion is the fact that the Torrens system was imposed in Benguet Province without any of the necessary bureaucratic and administrative apparatus needed to make it effective. The tax assessor in Kabayan, for example, frankly despaired of ever solving the problems created by the state titling system. There are no land surveys for the bulk of the Cordillera region; recent attempts to provide adequate surveys have been underfunded and hampered by bureaucratic incompetence. A piece of property can easily be listed in more than one tax declaration or property title and the only way to prevent this is to go and physically "eye-ball" the property which is to be listed or which is changing hands. Of course, this is impossible in most situations. This would not present a problem, however, were it not for the increasing treatment of land as a commodity. As the tax assessor pointed out:

One reason there are lots of land cases now is because of loans. Previously, when the banks did not give any loans or when they did not use land as collateral, there were less land disputes. More borrowing - more disputes. And the lupon is not allowed to settle these disputes [according to customary law]. If there are problems, it has to go to the higher court. The lupon will probably not be able to solve it. If the bank forecloses on a certain piece of property, the bank will place it in the hands of a lawyer, to order the foreclosure. It has to go through a certain [state] court.

In this way, the land and the jural rights associated with it become subject to state jural concepts, not customary law. In such situations, the state tenure of individuals is always given supremacy over the interests of the domestic or wider kinship circle.

With land, as with other types of property discussed, some group tenure (defined by customary tenure practices) is still found in Kabayan despite state attempts to define and limit their occurrence. Depending on the level of jural system employed, and the level of organization of the group concerned with this tenure - the same property can be viewed as being held by several different types of groups under Appell's terminology. Nevertheless, the methodology developed by Appell allowed for a better grasp of the property, social entities tied to property, and the types of problems which can give rise to dispute and conflict over rights in property in Kabayan. This alone can be a valuable tool in situations where property interests are being affected by external decision-making agencies - whether for state purposes of exploitation for state interests, or whether for benevolent purposes of local development initiatives. The various issues raised by this research can now be discussed more fully and a better understanding of the factors affecting property relations over time can be achieved.

VI. CONCLUSIONS: ISSUES IN THE ANALYSIS OF PROPERTY RELATIONS

The examination of the various resources and property-holding entities of the Ibaloi of Kabayan have raised several issues which must be addressed before I can discuss the relevance of corporate models of resource control in the cognatic society. The first, and most important issue raised by the Ibaloi data is the importance of multiple levels of jural activity in many societies, and the effects of these levels on property relations. The second, and related issue is the importance of a thorough understanding of the rules for recruiting members, boundary maintenance and the principles of distribution or allocation of resources within property-holding groups and how these change over time. These questions can only be adequately addressed through a diachronic analysis of the property relations in any one cultural context. For the Ibaloi, the diachronic approach has required three main methods; the careful examination of historical documentation of the early contact period; interviews with elders of the community to gain a folk history perspective; and finally, a comparative analysis of neighboring ethnic groups in order to evaluate similarities and differences in the Ibaloi experience which might point to significant changes. This analysis has suggested the broad changes over time which have affected the Ibaloi property system - changes brought about by social, economic and juro-political forces which will be discussed in the second section of this chapter, following a discussion of the significance of a plural jural system to property relations.

A. Multiple Jural Levels

Recently, D.E. Brown (1984:814) criticized Appell's approach to corporate theory with the point that: "There is often a plurality of legal systems in society.", to which Appell (1984:815-817) responded:

...I do not see what analytical advantage is gained by referring to the universal processes of order and dispute resolution found in every social grouping as law.

I do not believe that Appell has adequately responded to the legitimate problem raised by Brown. In the Philippine uplands of the Cordillera Central, the indigenous ethnic communities of the Bontok, Ifugao and others are well aware that bureaucratic pressure

is undermining their indigenous jural systems and eroding community autonomy. These indigenous jural systems provide rulings on descent, inheritance, marriage, property ownership, crimes and finally, "dispute resolution". The Ibaloi, on the other hand, represent one example of an ethnic group trying deal with the reality of the successful intrusion of the state political-jural system into the indigenous juro-political system and property relations. I hold that the Ibaloi, as well as other ethnic groups of the region, have fully developed jural systems, and in the Ibaloi case, these are applied instead of, along side of or combined with the state jural system whenever possible.

It is necessary to recognize a plurality of legal systems at work in Kabayan in order to make sense of the tangled property relations which correspond to crucial resources including land and water. The relevance of jural issues to property relations cannot be overstressed. As Sonius (1963:23) has pointed out:

...the word ownership alone tells us nothing about the owner's actual powers; only the statutes and regulations of each nation or state can show us how far these powers reach.

Barnes (1969) has asked what happens in a polity if there are two or more centers of authority - or at least of power, which do not form part of an integrated system - and especially if one power is trying to exert control over the other? Invariably, the answer includes some aspect of a disruption of the property relations. For example, when the regulations concerning property use and transfers within a minority culture are ignored or superceded by the jural authority of a colonial administration, a great deal of social disruption has always followed (Bentzon and Bronsted 1983, Lam 1983, Woodman 1983). This problem is not new to social anthropologists; however, as economic development schemes reach deeper into isolated and undeveloped regions of modern nation states, this juro-political issue is constantly being reencountered; for example, in the native land claims of the aboriginal peoples of Canada (see Morse 1984), the United States, Australia (Bell 1983, Dagmar 1983, Tonkinson 1983) and other nations. In some situations, the only recourse to the minority population has been a stubborn, armed resistance - such as has occurred in the Philippines in relation to the Chico River hydro-electric development project and the Cellophil Corporation concession (see Aranal-Sereno et. al. 1983:445 and Prill-Brett 1985:16-17).

The problems created by plural jural systems within a single nation have received some attention from ethnographers; in fact, Rodman (1982:75) writes:

Today most anthropologists accept the notion that multiple levels of law exist within each society.

Especially in the peasant or colonial setting, the problems of jurisprudence and legal legitimacy raised by the existence of a plurality of legal systems has received some attention⁹. Many of these studies link political authority and the struggle for power to the operation of competing judicial systems (see especially Barnes 1969:101); however, there have been few explicit attempts to link the question of property relations to the problem of multiple jural levels (for an exception see Benda-Beckmann 1979:362-5).

This lack has resulted in significant problems in understanding the evolution of property systems in peasant and colonial situations; one of the most significant of these problems has been the perception of indigenous jural systems as free from political considerations in the definition of property relations. That is to say, property relations are seen as defined by law - whether the formal law of written statutes and courts, or the so-called informal law of custom administered by a council of elders or a chieftain and his court. In either case, the polity, whether a community or a nation state, is viewed as using a political process to decide which rights are to be granted in property to the individual, and which rights are to be retained by the polity as a whole. Once this division of powers over property are codified and regularized into oral or written law, the jural apparatus is viewed as operating to protect the rights of the property holders against all other competing social entities. Once established, the law is viewed as free of political considerations; that is, the poor and powerless are supposed to have the same fair hearing in the judicial process as the wealthy and the powerful. Furthermore, the property rights are viewed as being protected in perpetuity - or at least until the members of the polity use the political process to renegotiate changes to the property relations and to thus effect changes in the jural system.

Perhaps it is this implicit belief in the supposed sanctity of the law which has led George Appell (1976) to suggest that in order to determine if a social group is a valid right and duty-bearing unit in respect to property, it must have a jural identity. It must be a legally recognized property-holding unit; this is necessary to determine that the social entity is an empirically determined construct and not an invention on the part of the

⁹ See, for example, Barnes 1969, Nader and Metzger 1963, Pospisil 1958, Roberts 1985, Rodman 1982, 1985, Santos 1982, von Benda Beckmann 1979 and the proceeds of the Symposium on Folk Law and Legal Pluralism 1983.

researcher. Further, according to Appell, if the social entity is comprised of more than one member, their rights in common over the property are usually a recognized attribute of their jural personality. The members of the social group are recognized under the law as standing in a special legal relationship one to the other. According to this perspective, it would appear that Appell believes that it would make no difference to the free expression of property rights if the social entity concerned with them is large or small, powerful or powerless - since their rights are defined and protected by law and not by political process. However, I do not believe (even in a situation where no plurality of jural systems exists) that the sanctity of the law can be taken for granted. Political considerations will always affect the jural system - and by extension, the property system as well.

To return to Barnes (1969), having accepted the existence of plural jural systems, Barnes argues that we must drop the notion that legality depends on a political consensus of opinion. He states

...within a plural society, the norms of one segment may conflict with those of another...rival courts are instrumentalities used in the wider struggle for powers of all kinds.

Pospisil (1971:274) adds:

In any society the legal rules concerned with land tenure are the most important, after laws of inheritance, with respect to social structure.

Thus, the courts are often the instrumentalities employed in the struggle to control productive property and further, to complicate the issue, we often find that in the pluralistic society, interest groups arise which may find it politically and/or economically advantageous to employ the discrepancy between two or more competing jural systems. In such situations, as von Benda-Beckmann (1983) has pointed out, jural pluralism may actually be continually reconstructed to meet the purposes of these interest groups within the pluralistic society. Legal pluralism results in what von Benda Beckmann has called the "jural jungle" where people are influenced in complex ways by different legal conceptions and in which they use these conceptions in various purposive strategies. In this concluding chapter, I shall show that a single unified jural system would not have benefitted a significant portion of Ibaloi society who have used customary law to establish certain kinds of rights in property (or at least what they purport to be customary legal concepts) and state law to consolidate those rights and to deny other social entities who may have the same rights under the customary jural system. As the

diachronic analysis of property relations in Kabayan is discussed in more detail, it will become clear that (as von Benda-Beckmann 1983 has argued) the law is a tool in the hands of social actors. The study of the use and abuse of this tool by individual social actors may tell us a great deal - especially in relation to Appell's goal of understanding "emergent" structures in society.

B. Sources of Jural Authority in Kabayan

In many Southeast Asian indigenous communities, a formal body of law exists which, although usually unwritten, is nevertheless understood and administered by various types of jural bodies, mostly of the community council-of-elders variety (for a discussion of types of jural bodies see Newman 1983:53). Furthermore, while varying in specific laws and sanctions, this customary or "adat" law is remarkably similar throughout Southeast Asia. In respect to land tenure, for example, Sonius (1963:28) wrote of Indonesia:

...unlike Roman Law, where the individual element predominates the interests of the community is centered on the use to which the individual's property is put.

The "right of disposal", which is the "superior right in respect to land" is held by the community and while an individual has the right to "enjoy" the land, he cannot alienate or pledge it in any way which denies the community's superior claim (ibid:29-30).

Regulations concerning the creation, holding and devolution of property rights comprise a large part of such customary law, with family law and dispute settlement making up the remainder. Ethnographers in the Cordillera Central during the American regime, documented the complex jural systems of the Ibaloi (Moss 1922), Kalinga (Barton 1949) and Bontok (Jenks 1905). However, only one Provincial Governor of that time (Governor Early in 1929), went so far as to argue that these ethnic jural codes should be respected and where applicable, be employed in the state court system (Fry 1983:137). It would appear that in the rush to benefit from the gold boom in the 1930's. (resulting in legislation against native mining and panning operations - Tapang 1985:31), and as a result of "benevolent" interference with native land tenure practices, slavery and usury, the American administration declined to take Governor Early's advice. In Benguet, as in other colonial areas of the world, customary law - if considered at all - was often dismissed as barbaric, static and reactionary - uncondusive to social,

economic and political "progress"⁷⁰.

And yet, ethnographic data from that period provides plenty of documentation of the changing, adaptive nature of customary law in the Cordillera uplands. Moss (1922:237), for example, saw community-wide jurisprudence meetings in Ibaloi villages where new laws were formulated or old ones were given new sanctions⁷¹. Community consensus was required before these changes could be ratified by the elders (called the *ma'ngi'din'teg* or "lawmakers" in this setting); these meetings were called *olnong* - as opposed to the normal judicial process called the *tongtong* where disputes were heard and settled. Moss (ibid:237) also noted that the effect of the policy of the American administration was to place judicial proceedings within Ibaloi communities under the authority of a few influential men (the *baknang*) in each village presumably because they understood the desired American legal changes. This had the effect of attenuating the indigenous jural process - which may explain why the *olnong* was not documented in present-day Kabayan⁷². Such meetings of jurisprudence do continue in many Bontok communities, on the other hand⁷³.

It is obvious, however, that the new colonial authorities of the Spanish, and later of the American regime, could gain little benefit from their conquest without superceding the native claims to the lands and the benefits thereof in the colonial state. Therefore, one of the first actions of the Spanish government in the sixteenth century was to promulgate the Regalian Doctrine whereby the sovereignty of native peoples in Spanish colonies was extinguished and replaced by that of the Spanish crown (see Aranal-Sereno et. al. 1983 for a discussion of this doctrine). One of the second acts of the Spanish colonial government in any colony was to demand tribute or taxation to support the "beneficial" developments being brought from Spain to the people of the

⁷⁰ See, for example, Keesing and Keesing's (1934:166-170) comments on Ibaloi burial practises, slavery and usury.

⁷¹The Ibaloi term for law is *din'teg* or "to make something straight" (Scheerer 1905:170).

⁷²There were regular meetings of the community elders, however, in the form of the council meetings of the Sangguniang Barangays or barangay councillors which may now serve the same function as the *olnong*.

⁷³ Prill-Brett (pers. comm.) has witnessed village moots in operation in Bontok villages; these meetings often reach a consensus of opinion on a viable change to specific laws (see also Prill-Brett 1983:26); changes which are required to meet new conditions within their society.

colonial world. Thus, in one fell swoop, Spain (and other European colonial powers) extinguished the primary or territorial right of political sovereignty of indigenous peoples, (which in turn supports the secondary or usufruct right of individuals in property). However, they were often willing to create some rights for indigenous populations in property - under new property codes designed by the colonial government for the benefit of the colonial state. In this way, a new jural system - along with a new political system - was introduced into the upland regions of the Cordillera Central, but not without a long and protracted military struggle (see Scott 1974).

In most colonial regions of the world, the imposition of new jural systems, property systems, religions and social organizations was not accomplished overnight. Indeed, many indigenous populations were able to avoid complying with colonial forces because of physical isolation, insufficient bureaucratic and support structures in the colonial setting or insufficient will among the colonizing peoples to impose their way on the indigenous populations. Nevertheless, indigenous peoples have always been profoundly affected by new political, social and economic conditions introduced by the invading forces. As a result, they have had to respond with changes in their customary political, economic and jural systems. Therefore, in the Ibaloi communities of the Cordillera Central, the customary political and judicial systems have managed to survive to some extent, underneath the superimposed colonial or state bureaucratic systems. For this reason, two jural systems are in operation in Ibaloi villages - the first, based on customary law and procedure, and the second, drawn largely from western jural concepts and imposed by the state. Customary law is administered (especially in more isolated communities) by the traditional *na'ama* with the assistance of native community officials. State law is administered in the centrally located municipal and provincial court system. In practice, customary judicial processes are usually the first court of appeal, followed by the state system if a resolution at the customary level cannot be achieved.

However, as Kladze (1983:75) has noted, customary law and state law very often have very distinct differences. Customary law tends to emphasize reconciliation and flexibility (see also von Benda Beckmann 1979:117 and 138). Each case is treated as a separate entity to the extent that, within the flexible boundaries of traditional law, a solution will be sought which will satisfy all concerned. Only if one of the disputants

clearly contravenes some customary law, will a judgment be made against one in favor of the other litigant. Even in such cases, however, restitution to the wronged party is considered more important than punishment of the offender. On the other hand, state law tends to be more clear cut and predictable - operating as a function on the procedures of evidence and precedence, both of which suppress concern for and continued social harmony as end goals (von Benda Beckmann 1979:138). This is an aspect of state law which Ibaloi elders are quick to condemn - pointing out that the confrontational approach to conflict resolution - with one right litigant and one wrong one - means that litigants come away from a court case: "enemies, unable to act amicably together in the future". Nevertheless, state law tends to be more clear cut and predictable, attributes which Kladze (1983:75) argues may make some litigants prefer to have their case heard in the state courts.

Similarly, the customary jural system reflects the extant property systems and productive relations found in upland communities. The state courts often have a difficult time interpreting the rights and wrongs of cases which are embedded in their cultural milieu. For these reasons, it has been necessary in the Philippine case, as in other colonial or peasant situations, to establish some mechanism to provide for mediation between state and customary jural concepts (see Rodman 1982). Thus, the President of the Philippines installed such a mediating level of jural operation called the lupong tagapayapa or barangay court. Perhaps installed in order to ease the case load on the national court system and speed up the settlement of disputes in rural areas, the barangay court system has often preserved traditional community law alongside of the national legal system. According to the hierarchy of the state court system, the barangay courts are the first court of appeal and unless the case is of a certain character, it must be heard by the barangay court before appeals to a higher court will be heard. However, in actual practice, in many communities, the barangay court is the last court of appeal, following after the traditional process of calling a council of elders to help settle a dispute. Only if one or more of the disputants fail to abide by the decision reached in a *tongtong* of the *na'ama*, will municipal authorities be approached to hear the case. If the barangay councillors along with the Barangay Captain cannot settle the dispute, sometimes the mayor may be asked to step in. At this point, the local constabulary,

the Barangay Captain and/or the mayor may ask a conciliation panel of the barangay court to hear the case. If the decision of the court, once reached, is forwarded to the state court system, the way is open for the litigants, if they so choose, to take the case to one of several higher courts for a decision based purely on the state jural code. Thus, the last court of appeal of the customary legal system is also the mediating mechanism to allow cases to proceed to state courts where desired. In the barangay court, for the first time, cases may be formally reviewed for their applicability under the state jural code.

Since the *na'ama*, community officials and barangay court usually draw upon traditional law and custom in reaching a decision, only using state law in those cases where no traditional rule applies or where the state insists that it must apply, I hold that two clear levels of jural authority exist in Kabayan. The major difficulty which the Ibaloi community leaders experience from this plural system, is that the customary judiciary process has had the enforcement aspect of law taken out of village hands (see also Kladze 1983:76). Only certain sanctions are available to the Kabayan elders, including scolding, public condemnation of certain actions, fines in the form of food or alcohol for council members or as restitution for damages and of course, ostracization and loss of economic or emotional support in some cases. More severe sanctions are reserved for use by the state court system. This creates a particular problem in cases where one of the litigants is non-Ibaloi, and thus not susceptible to culturally specific methods of peer pressure such as losing the respect of related elders who are potential landlords or who may deny an inheritance. Such cases increase in frequency as in-migration to the region from lowland areas increases.

One effect of the plurality of jural systems in Kabayan which is related to the above issue, has been the emergence of more alternatives for the wealthy and less for the poor in terms of access to jural levels. That is to say, the poor are often forced to rely on the decisions of the traditional system, even when one or more of the litigants knows they would be the one to benefit from a state court decision. Since the poor cannot afford the legal fees and protracted delays involved in state court decisions, they are often forced to accept whatever resolution is offered at the traditional level. The wealthier litigants (especially if they reside outside of the community), however, may

choose to force an appeal of a barangay court decision, knowing that a state court decision may go in their favor. Further, in cases where one litigant is wealthy and the other(s) are not, the advantages of forcing the case to go to a higher court are obvious. Most poor people will default to their wealthier opponent rather than face the expenses of a protracted legal battle.

Property issues are especially affected by differences in access to alternate jural levels. One problem which the poorer people in Ibaloi communities face, for example, includes perfection of property title under state law. In Kabayan, many people cannot afford the surveying and legal fees which would be required to bring antiquated land titles up to date. Divisions occurring over the years have never been properly notarized and the local tax assessor pointed out that the fees involved in properly registering subsequent transfers would usually exceed the current value of the parcels of land involved. Therefore, even in situations where families once obtained state title to their land (before the Ambuklao dam watershed provision), that title is not perfected since the current registration only lists "Heirs of Paulo" or "Heirs of Aurelio Behan", while the individual plots covered by the title are now held under usufruct tax declarations. Wealthier families have been able to notarize divisions and protect their titles as the generations have passed. Further, they were able to monopolize community resources in the past and pass them on as inherited properties. The tax assessor noted, for example: In the early days, you could pinpoint those few people who had animals here - the affluent families. It may be that the pastures were communal, but if a person owned most of the cattles there, it would seem that he was really the owner [of the land]. His children later would stick to it that it was really theirs. Maybe you will be allowed to put your animals there but you should not consider that you own a part [of the former communal pastures].

For this reason, Kladze (1983:77) offers too simple a solution when he writes: It is submitted that the sole criterion for the validity of a rule of customary law must be the demonstrated or demonstrable acceptance or assent of the community or ethnic group in which it is applicable.

This would not work so long as there are special interest groups within the community for whom the advantages of state law are greater than those of traditional law. In discussing the property system of the Ibaloi, therefore, I have attempted to clearly separate the jural concepts based on folk law from those based on state law. This has not always been easy, since the two have interacted over the years enough to create some confusion as to where each ruling is rooted. However, in comparing present-day Kabayan with folkloric and historical documentation of the Ibaloi communities of the

past, as well as with more isolated ethnic communities of the present, the outline of traditional law has been approximated in terms of property relations to see where it sharply diverges from present practice. Other than this historical and comparative method, I have only the opinions of members of the present-day *na'ama* to go on. The result has been interesting, if somewhat difficult to reconcile with Appell's property relations concepts.

C. The Ibaloi Property System - A Diachronic Perspective

The multiple jural levels existing in present-day Ibaloi society have been explored as an important factor to consider in the property relations found in individual Ibaloi communities. Conflict over the holding and development of productive resources is more widespread in Ibaloi communities as a result of these multiple jural levels - perhaps because where an interest group may not receive adequate support for their claims from one jural system, they can always appeal to the other for legal recognition. Further, there is evidence to suggest that these interest groups with conflicting interests are the reason that Ibaloi communities have not remained closed to external pressures the way that Bontok, and until recently, Kalinga villages have in neighboring areas of the Cordillera Central. Several questions are raised by comparing these neighboring groups with the Ibaloi: for example, how did such interest groups develop in Ibaloi society and what is the nature of the ties between their members? Also, what is the social criteria for recruitment to them and how are they organized? Finally, what sorts of property are they concerned with? To answer these questions, I must examine the Ibaloi property relations over time.

Historical Evidence: the Role of Resource Base in Community Development and Social Stratification in Property Relations

Scott (1974:48) has suggested that the historic descriptions of the Cordillera Central Igorot, differ very little from earlier descriptions of the pre-Spanish lowland Filipino culture. This culture was based on politically and economically independent communities lead by wealthy war chiefs or "datu", practising ancestor worship and headhunting. Certainly all ethnic groups within the Cordillera Central had their

independent villages with an upper social strata based on wealth and military valor (although how the two were connected has never been made clear). The ethnographic evidence suggests that leadership in these communities was at first achieved through success in internecine warfare and raiding but later became an ascribed status claimed by the heads of the wealthiest families within the community⁷⁴. However, the Ibaloi appear to have taken this development further than any other ethnic group in the Cordillera Central.

It would be difficult to establish at this point whether the upper class in Ibaloi society developed as a result of the longstanding gold trade in the Benguet region, or whether they pre-existed that trade and were merely in the best position to gain the most benefit from it. The Keesings (1934:57) have suggested that the powerful *baknang* families in Ibaloi society were directly associated with irrigated rice culture and that "a keen sense of individual ownership of natural resources" flourished in regions with irrigated agriculture (Ibid:161). Certainly in many other Cordillera ethnic communities, wealth is held primarily in the form of irrigated rice fields; however, the Keesings (Ibid:189) also pointed out that the majority of Ibaloi people practise shifting horticulture (see also Keesing 1962:65 and Burnett 1967). Further, the first Spanish expeditions into the Cordillera Central in the sixteenth century did not document paddies, although the "aristocracy" of the gold trading Igorots was documented (see Blair and Robertson Volume 20:270; Scott 1974:199)⁷⁵.

Rice production was well underway in some Ibaloi and Ifugao regions by the mid-eighteenth century; communities where wet rice was grown were larger, some reaching the size of 600 houses (Ibid:174). On the other hand, the mining settlements in Ibaloi areas were small, with scattered housing and probably with a less cohesive social structure⁷⁶. Swidden communities and gold trade centers were different again. From the historic record, it appears, therefore, that there were several distinct types of Ibaloi communities - each with a different resource base, social organization and political

⁷⁴See Eggan's (1963:252-255) discussion of changes in the southern Kalinga villages after the adoption of wet-rice technology, see also Lawless (1978).

⁷⁵Rice granaries were destroyed in Spanish raids of the mid-eighteenth century (Scott 1974:127) and the first reports of the rice cultivation in Kabayan were carried to Fray Antolin by his informants in 1788 (Ibid:149).

⁷⁶Remember that mine-owning families were said to build their houses at the mouth of their tunnels to prevent other people gaining access to

structure.

The gold mining community was based in an ore-load area where individually-held gold tunnels were exploited by families and their retainers - and a "keen sense of individual ownership" appears to have obtained in these small settlements as well as in the larger rice-based communities. The important productive resources in such villages included the gold mines, the slaves to work the mines, and surrounding forested areas to provide timber for mine tunnels. Chiefly leaders existed in these communities (Scott 1974:151), however, it is not known whether their leadership depended on wealth and prestige as the most successful gold producer and trader or whether they were *main'gel* (Scott 1974:220) men who through military valor in defense of their region and its resources, attracted a large personal following.

Another type of community which relied heavily on gold, was found in certain areas where gold trade middlemen such as Amkidit's descendants of the Tonglo mission area, placed their settlements along strategic trade routes the better to control the flow of traffic to the lowlands. These towns could reach a very large size (Tonglo had over 300 residents in 1755 according to missionary reports). It was probably communities such as this that the Spanish had the most contact with and which framed their early perceptions of the Benguet Igorot as so rich in gold that they did not have to grow their own food (Blair and Robertson Vol.14:383). Leadership in these trade centers relied on astute political alliances, peace pacts and intermarriage into surrounding Ibaloi areas (see Scott 1974:117). The successful leaders of these alliances were extremely wealthy with large political followings which resembled military cadres (Ibid:187) and which were supported with the profits of the gold trade and used to police the tax demanded on all other trade to the lowlands (Ibid:184). The amount of silver money, as well as gold currency circulating in such towns surprised the priests of the Tonglo mission, who also documented usury, debt peonage and slavery there (Ibid:115-120).

A third type of Ibaloi community relied exclusively on shifting swidden cultivation of root crops within a well-defined territorial area. The earliest Spanish record of this region report that the mountain slopes in the Benguet area were denuded of all but a few scattered pine trees (Blair and Robertson Vol.20:268) - probably the work of swiddeners who lived in small villages with their houses scattered on the mountain peaks

for defensive purposes or among their fields (Ibid:268). The leaders of these small communities were "the head of their kinfolk" (comprising ten to twelve households) (Ibid:270) and were head-takers known and feared by the people of surrounding areas (Ibid:273) and "whose lands the common people cultivate" (Ibid:303). And finally, a fourth type of Ibaloi community was found in suitable, well-watered areas of the upper reaches of the Agno River valley. These riverine settlements appear to have combined elements of all the preceding types of communities; they grew wet rice in irrigated paddies to supplement dryland production of root crops, produced high quality gold ore for a trade commodity (Scott 1974:184), slave raided into other ethnic communities to the north of them and entered into peace pacts with Amkidit's gold middlemen families (Ibid: 118).

While some of these four community types obviously predated others in the Ibaloi region, by the mid-nineteenth century they coexisted - a fact which seems to have created some ethnographic confusion for visitors to the region. The role of property and the development of social stratification appears to have differed slightly between them - especially in the degree to which the upper class came to have an economic monopoly in the productive resources of the community. The Ibaloi region in general is anomalous for the Cordillera Central in the extent to which rigid social stratification occurred; especially in the gold middlemen trade communities around Baguio. The monetization of the Ibaloi economy resulting from the gold trade has been blamed for the social stratification of Ibaloi society as has the Spanish influence (see Scott 1974:184 and Tapang 1985); however, the mere proliferation of excess production and development of a steady exchange medium so that trade did not depend on "coincident needs" (Guy 1958:62) may not have been sufficient cause for the development of such extreme stratification. However, when we examine the dynamics of trade and interaction with a rapidly Hispanized lowland market, the process of stratification becomes more clear.

In a recent article, Lawless (1978:147) argues that in the context of an environment such as the Cordillera Central, when a people trade across contrasting environmental regions, wealth tends to be created through "price-difference trading". A large part of this wealth is redistributed into the community at large since the resources making such trade possible are available to all residents. However, if impinging forces

disrupt the flow of this trade, "the form of obtaining wealth is not changed...merely the context changes" (Ibid:147). Traders who can no longer gain wealth from trading outside their community or region, essentially engage in price-difference trading within their own community, through a monopolization of productive resources. Lawless argues that usury, manipulation of societal norms and monopoly on scarce goods followed in Kalinga society when such a disruption in normal trade relations took place in the early twentieth century. Rigid social stratification developed and "trading up" or improving one's status through trade-based wealth, was no longer possible (Ibid:147). All of this also occurred in Ibaloi society as early as the seventeenth century.

We can assume this from the historical evidence. When the Spanish arrived in northern Luzon, the Benguet area natives had a long history of trading their gold for Chinese pottery, trade beads, cloth, iron and animals. The rainy season was devoted to gold panning and certain well-known alluvial deposits were open to exploitation by anyone (Scott 1974:183). On the other hand, gold mines, like other forms of improved property may have been lifted out of the public domain and the use of these may have been restricted to the developer and his/her descendents (Ibid:151). Power and prestige depended not only on wealth, redistributed in lavish feasts, but also on military valor in the endemic inter-regional headhunting and feuding (Ibid:220) - and on the successful building of political alliance networks (Blair and Robertson Vol.20:270 and Scott 1974:187). Wealthy leaders and their followers were interdependent and upward and downward mobility were always possible. The active interference of the Spanish after the late sixteenth century rapidly began to make changes inevitable.

Scott (1974:14) has argued that the first response of the Benguet gold miners to the Spanish was to curtail their gold mining activities to "present a less attractive target". Between 1571 when Salcedo entered the Cordillera Central for the first time, and Quirante's expedition of 1624, the amount of gold entering the lowlands had dropped so low that Quirante openly doubted that the fabled Igorot mines were of any quality at all (Blair and Robertson Vol.20:279). Quirante said that those mines which he investigated all appeared to have been "abandoned long ago" (Ibid:283). This Igorot ruse was so well carried out that no further attempts were made by the Spanish to

commercially exploit gold deposits in Benguet¹⁷. Scott (1974:117) theorized that it was around Quirante's time that the Ibaloi culture hero Amkidit was organizing a controlling network of family members and allies on the western slopes of the Cordillera Central to regulate what gold was still being traded into the lowlands. To do this, he and his allies had to exploit their own people and play the role of middlemen between gold producers and gold buyers. This may have been the first development of the ancestor-based bilateral descent group as a property-controlling group in Ibaloi society since the descendants of Amkidit explicitly traced their rights in monopolistic control of gold trade routes back to Amkidit.

From this point on, the evidence for increasingly stratified Ibaloi social structure appears in the historical records. In their subsequent dealings with the Spanish, the "principalia" of the Ibaloi areas were concerned with making whatever concessions or stands were necessary to protect their favored position in Ibaloi society. First gold, then tobacco, and finally cattle, coffee and rice paddies became their stock-in-trade. The *peshit* feasts became the prerogative of those families who inherited the right to perform them. Headhunting was repressed as inimical to the *kadangyan* interests (Scott 1974:291). Prestige through military valor became less important as an avenue to political power and was eventually eliminated all together.

In terms of property, the *kadangyan* were able to monopolize most productive resources by the simple expediency of controlling the labor which made it productive. In the beginning, the *main'gel* or war chief, may have received a portion of each household's production in exchange for his protection of them. However, the gold trade allowed the redistribution network of the canao-style feasts to develop and wield more influence in the choice of political and economic leader. Meat as a direct exchange item also served to attract laborers to the gold traders. Informants in Kabayan recalled that the most expedient method of getting a large construction task done (such as building an irrigation canal or a paddy wall) was to feed the workers meat so long as they were willing to do the assigned labor. The Ibaloi customary law also tended to reinforce the control of the rapidly-developing upper class. For example, law breaking was punishable

¹⁷ The only mines opened there by the Spanish were developed two centuries later and were copper mines (Scott 1974:246).

by a large fine or indemnity - usually in the form of a feast for the elders of the community. If the price was too high to pay, then debt slavery resulted to whomever could cover the cost of the fine (Scott 1974:188). The religious belief system also played a large role in this process since the "canao imperative" could also result in debt slavery. While slavery was the most blatant method of controlling labor, the *kadangyan* had other methods such as the "share" systems of the *pastol* and the *silbi* (Tapang 1985:11-13). Internal usury, debt slavery and the manipulation of societal customs allowed for the development of a stratified system which did not reach the same extent anywhere else in the Cordillera Central.

Furthermore, until the mid-twentieth century, the *kadangyan* were able to maintain their privileged position through astute responses to every new economic and political development. Even taxation initially worked to their advantage, since it hit hardest the subsistence farmers who retained independence by the cultivation of root crops on the isolated heights. Taxation forced these people to come down into the valleys to work for the "well-to-do owners of terraces" for loans or hire to pay their taxes (Scott 1974:291). The introduction of bureaucratic changes such as property registration and land titles also worked to the advantage of the *kadangyan*. The indigenous basis for control over real estate is not entirely clear; although exclusive rights to land were gained by the individual who improved land, marginal if any improvements were made to grazing lands. How did the *kadangyan* exert control over these? In Fray Antolin's time, cattle were contracted out to villages who allowed them to graze within their territory (Scott 1974:153). Tapang (1985:14 and 28) argues that when the *kadangyan* began to breed cattle, (which must have developed early in the nineteenth century), they based their title to the land on customary tenure laws. This may be true, but appropriation by the wealthy class may not have followed the same process as occupation by the poorer class.

For example, M. Rodman (1984) found that customary land tenure among the Vanuatu did not prevent the development of new forms of social inequality under new economic conditions. As among the Ibaloi, customary land tenure laws were flexible and allowed for "the practise of land acquisition by encroachment" - usually by the politically and economically "strong" against weaker members of their own kingroup (Ibid:65).

Funerals and their rites allowed for competition over inherited lands to occur; those who payed for pigs got the land - especially other relatives at the expense of the deceased's offspring (Ibid:68). This scenario was also often recounted to me in the Cordillera Central, where young people complained to me of their relatives defrauding them of their rightful inheritance. The importance of the *bunak* in such "acquisition by encroachment" can be imagined, and the American bureaucracy found it a problem when it attempted to redistribute lands to the poor in Benguet (Keesing and Keesing 1934:166). The wealthy in each region could establish some kind of claim to any productive lands - *bunak* membership, no doubt, being the criteria for establishing rights, and wealth and power being the means of enforcing one's claim over other's. As in Vanuatu society, this encroachment was initially tolerated because in the past, the true ownership would always be remembered and asserted after the death of the usurper (Rodman 1984:65). However, as with the Vanuatu, the Ibaloi could not foresee that the *kadangyan* families would be able to freeze the recycling of land parcels among the *bunak* membership, using the process of permanent improvements (coffee plantations, rice terraces, gold mines) and through state land title.

On the other hand, as the Keesing's (1943:198) pointed out for the Benguet uplands, and as Lynch (1979) pointed out for Filipino society in general, the stratified organization of society worked for many years because it satisfied everyone's needs. The *baknang* system originally had its good points and the *kadangyan* were the organizers and innovators in agricultural development. Over time, however, it is clear that the *kadangyan* class was able to shed old responsibilities and consolidate their hold on wealth and privilege. The extent to which the Ibaloi system of property relations differed from the Bontok and other upland groups, lay in the degree of differentiation of rank and political power levels. These were able to develop because of the internalization of trade relations, the lack of other cross-cutting social and corporate ties (such as active headhunting and the required kin avenging groups, the *ator* associations and the continually-viable property-holding cognatic descent groups of the Bontok), the introduction of usury and the development of the chieftainship positions. As in other areas where hierarchical societies with chieftainship positions have developed (and where ritual plays an important role in rank and status), it is unclear whether this

development is linked to excess production or to the appropriation of that excess production. However, when we compare the Ibaloi to other neighboring ethnic groups, several important similarities and differences emerge.

Cross-Cultural Evidence: Upland Property-Systems and Jural Concepts - The Ibaloi Difference

Indigenously, the Cordillera ethnic community comprised a state unto itself; although some political cooperation and trade existed between neighboring villages and regions, they were socially, politically and economically independent of each other. This independence was contingent upon a resource base which was contained within recognized territorial boundaries. The community as a whole operated to protect these boundaries by force of arms, for the mutual benefit and individual resource development of the community members (see Barton 1949:137; Prill-Brett 1985:3; Tapang 1985:30; Worcester 1906:796). Land, water, natural products and minerals were exploitable by all residents through birth right; although individuals and groups could monopolize certain resources for certain periods, no one could alienate community resources to outsiders. It was this necessary territorial integrity which often gave colonial authorities the impression that property within ethnic communities was a communal resource, subject to communal administration.

However, if we examine the indigenous jural concepts of property rights and compare it to jural concepts common to the west, a surprisingly similar general principle emerges. Sonius (1963:24) speaks of this principle when he writes:

...there is an awareness that land is so vitally important for the survival of all, that the unrestricted power of individuals over it is unacceptable, and yet on the other hand it is the work of the individual which makes the land productive.

Sonius feels that all polities (whether a community or a nation state) must arrive at a balance in property relations such that the right of the group to protect productive resources for the common good does not overshadow the right of individuals to benefit from their own labor. He further argues, that in some polities the rights of the common group will find fuller expression than the rights of the individual, while in other polities, the reverse will be true (Ibid:24). Among the Ibaloi, as among western nations following "Roman law concepts" (Ibid: 19), productive decisions over scarce resources are

generally made by the individual - not by a communal group.

That is to say, the *na'ama* of an Ibaloi community view all lands which fall within the territorial boundaries of that community as basically falling into two categories - land which has no individual or family claim upon it and is therefore open to exploitation by any one who is a member of the community - and productive lands which have been removed from general access under the principle of primi ocupanis (as evidenced by improvements to make the land productive). The exclusive right to use and benefit from improved lands belongs to the individual(s) who first improved it; these rights are acknowledged by the community and protected in customary law. These rights are passed on to the descendents of the first individual(s) to make permanent improvements in the land.

The community does retain some rights in productive or improved property, however, since transfers of property rights are subject to the approval and notarization of the respected elders. According to Sonius (Ibid:19), this is also consistent with Roman-law concepts since even in the west, absolute ownership has never existed. Ownership is always restricted by regulations and laws limiting the interests of the owner as versus other interests (of other individuals or of the polity in general). Alienation of land to non-community members was generally forbidden in all Cordillera communities in the past - since by definition such people were enemies. The community also enforced rulings that restricted the alienation of lands to non-members of the descent group.

Further, the opening and first development of lands - or the exploitation of community resources in general - by non-members of the community was also not allowed under customary rules. According to customary law, the community is a social group: a "right and duty-bearing unit" (in Appell's terms), which has jural recognition. This unit is comprised of members, some of whom are temporarily residing away. Only those members presently residing within the community can operationalize their rights to unimproved lands - however, all members - present or absent, retain their inherited rights in improved lands first developed by their ancestors. Thus, the rights in community resources, held by community members, are of several types - ranging from those expressed over a very short time and wide space (as with hunting, fishing or

gathering natural products) to those expressed over a very long time and to a well-defined space (as with ancestral land rights to individual rice paddies). The groups associated with these rights are correspondingly wide (the entire community) in the former case, and narrow (a single individual) in the latter case.

This is true of most Cordillera ethnic groups. For example, Drucker (1977:7) argues that certain types of land within Bontok communities are more or less restricted in terms of access to and use of them, depending on their perceived economic value. Rights in property may be restricted to an individual, to the members of a nuclear family, to the members of a wider kinship unit, to the members of a cooperative unit, or to the entire community (see also Guy 1958:17). The majority of differences found in property relations among the Bontok, Kalinga, Ifugao, Kankanaey and Ibaloi (all of which are ethnic groups of the Cordillera Central) arise in relation to the role of kinship in access to these productive resources.

While all of these groups give the individual full property rights in property developed by that individual, differences arise when such property is devolved to the next generation. Rules generally differ for inherited property (developed by former generations), conjugal property (developed by a married couple in the present generation), moveable property, real estate and other resources depending on economic value and degree of improvements invested in the property. In none of the above ethnic groups, does the property of an individual or nuclear family revert back to the communal holdings upon death or changing circumstances in the family development cycle (as occurs in "communal" villages of the Andes and elsewhere - see Behar 1984). However, depending on the importance of the cognatic descent group⁷¹, or on various groups based on territorial principles (such as "wards" - see Eggan 1967:197), property devolution is very different for each of the above groups.

In Bontok communities, for example, when a young couple marry, they each are awarded some inherited property from their individual families (Keesing 1949:586), a common pattern found in other ethnic communities as well⁷². In addition, this couple can

⁷¹According to Eggan (1967:188), Firth (1963) was the first person to coin this phrase, meaning all the descendants of a single couple traced through both the male and female line.

⁷²This allows the parental generation to evaluate the economic capabilities of the new couple and to make a judgement whether these and other lands will be

open newly-swidden lands, cultivate woodlots, establish fishing sites and build rice terraces and irrigation systems over the course of their lives and this property is termed conjugal (also common to the other ethnic groups): However, Bontok children will inherit various portions of this property according to strict rules of devolution that are not common to all ethnic groups under discussion. For example, the eldest child receives most inherited and conjugal rice fields. The eldest girl will receive some of the inherited lands from her mother's family; the oldest boy will inherit some property passed on from his father's family (Prill-Brett 1975:12-13). Younger siblings will inherit conjugal rice paddies as individuals, and all children will inherit conjugal swidden lands, pasture, fishing sites, woodlots and irrigation systems as a group (Botengan 1976:69,75 and 83). As generations pass, the wealth of the senior children (called "kadangyan") is ensured (Keesing 1949:594). On the other hand, the common holdings of the cognatic descent group descending from the original couple, may be sold, or some may be developed into rice paddies, to start the cycle over again - or it may be held by a wider and wider group until it takes on the aspect of a community resource again. Both Drucker (1977:7) and Prill-Brett (pers.com.) noticed this cyclical pattern to property relations in Bontok communities.

While Eggan (1967:198) notes that other Cordillera ethnic groups also had so-called "corporate" bilateral descent groups (ie. property-holding units) including the Ifugao (ibid:188,191) and the Kankanaey speakers of Sagada (ibid:197), few have the strict inheritance laws of the Bontok which prevent fractionalization of landholdings - (although the Ifugao also devolve the majority of inherited property to a single heir (Barton 1969:43-5). Eggan argues that under conditions of increasing population pressure and the territorial stability imposed by wet-rice agriculture, the territorial-based unit or "ward" has less conflicting social ties than kinship units. He feels that the "ward" was therefore spreading among the Igorot groups and replacing the corporate kinship units at the time of American contact (ibid:198-9, see also Eggan 1963:352). Here also, the Bontok give the best example of this development, with their ator - which are neighborhood groups cross-cut by kinship (patrilineal ties) according to Keesing.

⁷⁾(cont'd) finally awarded to the newliweds upon the death of the parental generation. However, in no ethnic group listed do the inherited lands of one spouse ever pass over into the hands of the family of the other (see Botengan 1976:80).

(1949:579,587). Jenks (1905:49-50) also saw the ator as political and territorial units and viewed Bontok villages as an aggregate of these "wards".

However, Prill-Brett (1985:11) has reexamined the Bontok ator and shown it to be an association of men who represent their families and who together, own property such as swiddens, forest stands, rice fields, real estate or fishing sites. These resources are exploited by any member of the group, and in addition, may be sold or used to finance ator activities, such as ritual events connected with headhunting, feuding, and peaceacts (see also Drucker 1977:8). Like the Bontok corporate kin group (or tayan), the ator as a group, is held collectively responsible for the actions of its individual members (see Bacdayan 1980:175). However, the membership of a single ator are not drawn from a common residential or territorial area within the village; affiliation is usually through the male line, although there are means whereby membership can also be by choice. Thus, while ator ties cross-cut and supplement tayan ties, and vice versa, the ator is not free of kinship connections. Also, the eldest members of an ator serve as the Bontok judiciary (Jenks 1905:32) - responsible for judging their own ator members. A council of such elders drawn from all ator within the village (which Prill-Brett calls the "super-ator"), forms the intugtukan (Richards 1959:89), the supreme judiciary of the village and the chief political authority as well. This would indicate a complementary role for the ator and the tayan - where the former allowed the latter to cooperate in a larger political unit without superceding the economic, political or social role of the kinship group.

Other Cordillera ethnic groups also have property controlling groups with a membership criteria based on some aspect of kin relations. Even the knowledge involved in a craft specialization was a guarded secret kept within the community and sometimes within a kin unit (see Jenks 1905:118 and 146); outmarrying females were no longer allowed to practise these crafts while inmarrying females were taught them. The most common expression of the kin group rights to property, however, is found connected with land - especially inherited land (Moss 1922:249; Barton 1949:51). The most common expression of these rights is found in the restriction of sales of inherited land to non-kin members (see Barton 1949:107-9, 1969:32; Bello 1972:156; Botengan 1976:12-13; Eggan 1967:197; Guy 1958:18; Moss 1922:249). Further, as land

pressure becomes increasingly problematic in these ethnic communities, the residual rights of other members of the bilateral descent group have been manipulated so that litigation (claiming kinship connections) and making the economic presentations proper to close kin at funeral ceremonies has become the means to acquire valued lands (Drucker 1977:107).

As more people from these isolated communities receive a western-style education and become involved in the wage economy, customary law is increasingly coming under attack. Old inheritance rules are no longer followed - especially in relation to group-held resources. State land title laws have begun to break down the corporate holdings of tayan and ator in Bontok communities (Botengan 1976:85); the new titles are often used by a few to the disadvantage of the majority (see Lawless 1978:145, 153 and Bello 1972:83). Despite the continuing tradition of the customary laws as administered by the council of elders, the introduction of new jural concepts has placed a strong tool in the hands of dissenting members of these ethnic communities (see Aranal-Sereno et. al. 1983:450).

As was pointed out earlier, the Ibaloi of Benguet Province experienced the same sorts of forces for economic and jural change as other neighboring ethnic groups; however, they experienced these difficulties a full century before their full impact was felt in other areas. From the similarities in Ibaloi customary land tenure and organization of kinship groups, there is a strong possibility that the Ibaloi also had corporate kinship units, holding property together and having common liability and responsibility for the actions of single members of the kin group. However, the diachronic developments connected with the gold trade meant that the resources and strengths of the corporate bilateral descent group became less important (and perhaps even liabilities) at the same time that new alliances built on wealth and mutual interests were emerging. The role of the stratified groups in Ibaloi society is suggested by similar events in other areas of the world where the economic interests of one class of society has required that property interests be wrenched out of the corporate control of kin groups or other corporate groups, and placed in the hands of the individual, following the contact period. Lam (1983) for example, found that the Hawaiian nobility gained the same individual tenure in lands by removing it from the control of various indigenous corporate groups - only to

find themselves faced with the much more economically and politically powerful corporate groups of the colonizing society. Unlike other Cordillera groups, the Ibaloi no longer rely as heavily on kinship criteria in the formation of property-controlling groups - and even the common-interest corporate groups of the innovating *kadangyah* families (ie. irrigation systems), are now viewed as "communal" resources.

The Communal Issue

One factor, therefore, which is challenged by the historical and cross-cultural examination of the Cordillera ethnic groups is the conception that such communities were "communal" in their economic organization. It is far from the foregoing discussion that it is inaccurate to state that:

Not only is land viewed as communal; even production is communal. To be able to cultivate and produce enough rice in the hilly slopes requires constant effort and work on a scale impossible for an individual to achieve. Without communal organization, it is difficult, if not impossible, to sustain a self-sufficient and subsistent Kalinga community (Aranal-Sereno et. al. 1983:438).

While this is an obvious mis-statement, it reflects a misperception common not only to outside observers but also to many educated Igorots, as the following quote indicates:

It is a common observation among lawyers of the Province that in many instances it is the predominant practise of our people in the past to have a land title be named to a single individual, although the parcel of land embraced and covered by the said title is owned, and possessed by several individuals and/or families of the community. Understandably, this practise was devised for convenience purposes and to curb extra expenses as well. In addition, it is my personal observation that our people are prone (sic) and inclined to this set-up because of our communal oriented culture. (Bacoling 1984:9-10 emphemine).

The author of this passage is arguing that the communal tendency in Igorot communities has resulted in the practise of "block titles" which are sought for communal lands. However, my data indicates that block titles generally covered numerous individual holdings under customary land tenure - not communal holdings. How has such a misinterpretation of customary tenure become so widespread and how has it affected property systems?

The problem seems to arise from two factors; first, a misunderstanding of the property rights found in indigenous communities, and second, the misuse of the term "communal" to cover all cases of interest being held by more than one individual in any scarce good. The first factor is as common as the second, but with more far-reaching

implications. Dove (1982:15), for example, writes:

One misconception, with far-reaching consequences, pertains to the "communal" nature of peasant or tribal life....

and he examines those consequences in relation to the Dayak longhouse and misinterpretations of Dayak society. He found that Indonesian officials had developed a repressive approach towards the Dayak longhouse because of its so-called "communal" organization. This was associated with communism and was therefore viewed as inimical to progress founded on the individualistic economic development of nuclear family holdings (Ibid:18-19). On the other hand, developers sought to employ the reputed communal organization of longhouse communities as an asset to be employed for development purposes - in the cooperative application of labor and resources to build an irrigation system, for example. These development plans were unsound because the programs were built upon a fundamental misconception of property relations in a Dayak community (Ibid:21).

Dove (Ibid:25) found that the Dayak longhouse (as Appell 1974:8 found for the Rungus longhouse) is actually a collection of separate, independently-owned family compounds. Further, while an important shared resource of all members of the Dayak longhouse is "the rights to all land in the longhouse territory" (Ibid:32), in fact:

The territorial rights of the longhouse are residual rights. Primary rights, meaning rights of use and of devolution (by gift, exchange, sale or inheritance) are held either by individual households or by small clusters of households related through partition (Ibid:32).

Setting aside the question of which rights are primary and which are residual, Dove here recognized the important difference between territorial rights in the land held by the group in common, and usufruct rights in the land as held by individuals or groups of individuals. This is a basic distinction, which when unobserved creates confusion and the misapplication of the communal concept.

Thus, when we look back at the four historic types of Ibaloi villages extant at the time of American contact, plus the fact that other Cordillera ethnic groups preserved a single type of territorially-closed community for the most part, it is easy to see why early administrators drew the conclusions that they did (ie. that the Ibaloi were the most "subdued" and "civilized" of the upland tribes because of their contact with the Spanish). Based on an assessment of the more "communal" swidden villages of the Ibaloi as the "true" form, other types of Ibaloi villages were perceived as having a culturally

contaminated social organization initiated by the paternalistic, status conscious Spanish (see Keesing and Keesing 1934:68,74 and Keesing 1962:64; Report of the Philippine Commission, 1900, Vol. 1:45; Richards 1950:61). The fact that the *baknang* of the Ibaloi had social status, wealth and political power to a degree not found in other ethnic groups, indicated to American administrators that the old communal rights and economic independence of the poorer class had been eroded due to Spanish influence. One goal of the first land laws enacted by the Americans in Benguet, therefore, was to create a means for this poor landless class to acquire land and also to allow for a supervision of all land transactions to prevent further exploitation of the poor.

Ironically, it is the Regalian doctrine - and the American support of this Spanish policy (see Aranal-Sereno et. al. 1983) - as well as the introduction of the Torrens title system which has proved the greatest threat to the territorial control exerted by upland communities over their land and resources. This, combined with the fact that state law provides the only legally recognized tenure in land, means that any group tenure in land which may have existed and provided an insurance for any poorer members of the community or kinship unit could not be protected against appropriation by the wealthy or informed few. As in other colonial regions of the world, attempts were made by the colonial authorities to distribute land into individual holdings; the end result being the consolidation of land into a few hands after a short time (see Africa Instituut Leiden 1951:118; Bastin 1954:92; Feeny 1977:12; Lyon 1970:11; Money 1861:69; Tomosugi 1980:14). As the *kadangyan* families of Benguet began to lose control over labor¹⁰, they responded by further consolidating their hold on the land. This consolidation was not seriously challenged in most Ibaloi communities until the aftermath of the Second World War - which hit hardest those Agno River Valley communities in the path of the retreat of Yamashita's troops.

¹⁰New religions meant that the *abiteg* did not have to mortgage their lands to obtain animals for canao; new laws prevented slavery and debt peonage; alternative forms of employment in the cash economy drew retainers away; education trained the *abiteg* in their new rights and roles.

Post-War Developments in Ibaloi Property Systems

The Second World War is often pointed to as a watershed in Ibaloi society and in the Philippines in general (see Fry 1983:218; Leano 1958:7-8; and Tapang, 1985:5). For the Ibaloi, it marked the final decline of the absolute power of the *baknang* in many communities. The Japanese occupation destroyed their cattle herds, already decimated by land tenure problems reducing grazing areas (Tapang 1985:29). The destruction throughout the path of Yamashita's final defense in the uplands, played havoc on land title records, the Benguet economy and the guidance and control of community elders - many of whom died under the harsh occupation conditions¹¹. Post-war political unrest in the lowlands was reflected in a more "enlightened" policy by Benguet province officials - who supported opening all unimproved lands to the people for agricultural development (Fry 1983:214) both to relieve famine and to provide a tax base for reconstruction.

In Kabayan, post-war developments had several major effects with the construction of the Ambuklao hydro-electric dam, all land titles processing in the Agno River watershed of the dam was suspended. Nevertheless, improvements to "public" lands were recognized for usufruct title under the tax declaration act. The practise of registering lands for individual ownership has further weakened the control of the cognatic descent group over inherited property. It allowed for the opening of lands along irrigation canals and threatened the social cohesion of these corporate groups, as well. The accumulative effects of this period has been the lack of state recognition for any property-holding group between the level of the individual and the level of the entire community.

Membership criteria in property-holding groups, therefore, has been challenged by other members of the community who demand a share in all scarce resources; boundary maintenance problems have resulted. Finally, multiple jural levels in Ibaloi society have meant that conflict over access to scarce resources can no longer be resolved at the community level in many cases. If we examine individual resources and social groups concerned with them in Kabayan, we can see these problems at work.

¹¹The population in general took a severe dip in its upward climb during the war years - many people died of starvation since they fled their homes to avoid the Japanese, others died fighting guerilla actions.

The first example occurs at the so-called "communal" level of property control. With state priorities for economic development and the economic exploitation of all national resources towards that goal, the government is increasingly reluctant to recognize customary tenure laws in any minority tribal region (Prill-Brett 1985:15). However, the above "communal" misconception has often been employed in the state allocation of resources to upland ethnic communities. One of the most obvious examples of this process is in the granting of state concessions of forest stands to communities as communal reserves. However, another example includes the allocation of funds or resources for improvement of indigenous irrigation systems.

In Kabayan, for example, the same mayor who spoke of the community's "communal" irrigation which is supported by the cooperative labor of all community members - later told me of a lack of "cooperative spirit" when it came to communal self-help projects. He described a situation which developed when a government agency was persuaded to donate eight bags of cement to line canals in the "communal" irrigation system:

That cooperative spirit which was common to the Ibaloi of the past is disappearing now, perhaps because of the outside assistance they receive. For example, at one time I was able to get eight bags of cement which I donated to line that Ensangaey Canal. But the people - when they were assembled to work on that canal - then they asked who would pay for their labor. Can you imagine? To line their own canal? Also, those workers wanted food, cigarettes and even beer! Whenever I try to initiate "self-help" projects here, the people they laugh.

However, the behavior of the people called to work on Ensangaey Canal is not difficult to explain when the property relations of Kabayan are clearly understood.

In situations where extra-household labor is solicited, it is customary for Ibaloi households to provide the mid-day meal as part of the worker's payment. Not only food, but a few cigarettes and some drinks may be part of the exchange agreement even in cases where the assistance required is not straight-forward labor. This was observed, for example, when members of the community *na'ama* were called upon to settle a dispute in a household. Further, as one elder told us:

Sometimes, the one who owns more lots there [where irrigation is to be developed] will give a little pig for the men who would work on the irrigation. That is their pay also. They would butcher it at the house of the rich man, then they would eat.

At a time when meat was a scarce commodity in Ibaloi culture, labor exchanges for a meal of meat was a common method employed. Finally, in communal irrigation work,

landholders along the canal who did not send a representative to join in the group labor would sometimes be fined the cash or the food and drink necessary to provide a meal for the ones who did work. In the light of this information, the actions of the Ensangaey Canal members may be interpreted in one of several ways.

First, the owners of newer rice paddies along any one canal in Kabayan (ie. not descendents of the founding landowners within the original canal service areas) may not feel that it is part of their responsibility to do "improvement" labor on an infrastructure in which they have no secure tenure. Indeed, one elder complained to me that the owners of the newer rice paddies often refused to do regular maintenance labor since their paddies were so small and received the least amount of water. Such landowners along Ensangaey Canal may have chosen to treat the cementing labor as another case where the original rice paddy owners were soliciting their labor - in which case, they were entitled to the traditional payments.

Second, much of the day-to-day labor and irrigation management on many canals is carried out by *e'so* tenants since this is their responsibility as the workers on the land. Once again, however, improvements over and above regular maintenance work on the system could be viewed as the responsibility of the actual landowners who are gaining a permanent benefit. Such tenants might also be expected to treat the situation as one in which their labor was being demanded without normal compensation. Finally, it may be as the mayor pointed out, that the landowners along Ensangaey Canal were lacking in cooperative spirit - especially if they estimated that eight bags of cement was not likely to reach very far along the length of this - one of the longest canals in Kabayan.

The fact is, that irrigation in Kabayan is not communally organized. As with Ifugao (Conklin 1980:28) and the Bontok (Prill-Brett 1983), an Ibaloi irrigation canal and its superstructure belong to its constructor and his (their) descendants. However, the Ibaloi and the Ifugao differ slightly from the Bontok on the issue of the use of "excess" water. For example, Conklin writes that if A builds a canal to his plot and B later opens a field between the source and A's plot, then:

B may tap into the channel only by making payment (*adang*, usually in pigs) to A and by agreeing to share the upkeep of the channel. With time, the original ownership may become hard to trace. Even where it is well known, old rights of appropriation become weaker than those of validation by active repair and contributory labor.

Although the payment of use-right fees was documented in other Ibaloi communities, it

does not appear to be practised in Kabayan. However, in other respects, the Ifugao and Ibaloi appear to have the same problem in terms of controlling the size of the membership benefitting from one canal. The Bontok, would never tolerate such interference between a source and a longstanding irrigation area (Prill-Brett pers. comm.), and their jural and ritual systems are still able to control water use (see June Prill-Brett 1983, for a description of these in Tukukan, Bontoc).

The problem with both the state and native Ibaloi water-use concepts, is that even those with a clear claim to a source of water, cannot deny the excess, over and above their needs, to other potential users. In terms of the economic and efficient use of a resource, this only makes sense. The usual practise, of course, is to allow downstream or down slope development of further rice paddies, taking advantage of perennial excess. With this practise, in the event of a dry year or a reduction in the flow of water, the first people to suffer are the last developers and the last people to suffer are the first developers of any water source. This, unfortunately, was the practise followed on many Kabayan major canals. The post-war development of opening unused lands for improvement by the poorer class in Benguet, allowed "waste" lands lying between a source and the original field sections of an irrigation canal to be opened up for irrigated paddies.

These waste areas were probably not developed into paddy lands by the original inhabitants because of a steeper slope, cooler temperatures due to increased altitude or problems of shading by opposite sides of the valley. The land-hungry *abiteg*, however, found them suitable for coffee plantations, subsistence vegetable gardens and fruit trees. Over the years these waste areas were improved by the removal of large stones, composting and carrying in of better soil. Walls were constructed to prevent erosion and to allow for ponding and eventually, rice planting began. In the wet season, these new paddies required drainage and in the dry season, their owners began to tap water from the canal originally built to irrigate the fields below. As long as the water in the canal was sufficient for the downstream, original users, this development created tension, but no outward conflicts.

However, with the increasing development of the waste areas and an overall reduction of the available water supplies due to watershed erosion, open conflict soon

developed. The issue was no longer one of excess-water use, but of the survival of the downstream users. I have outlined in the irrigation chapter, how this conflict was resolved through the use of water rotation and water distribution practises in the CotCot-Salat area. The jural issues of ownership and group organization, however, have never been fully resolved. Any future attempts by the national government to provide development assistance to this supposedly "communal" resource is going to run into a veritable "rat's nest" of water tenure and irrigation group membership disputes. Part of the problem, of course, is that the "communal" concept of water use has received considerable reinforcement from government officials and bureaucracy. It also has some validity from the indigenous point of view, since many resources in the traditional Ibaloi community were shared and controlled by large groups of people. However, there were suitable rules and procedures for creating and maintaining group boundaries and to prevent some of the group monopolizing group resources. Although such mechanisms are viably operating in other Cordillera communities to this day, the Ibaloi of Kabayan are experiencing difficulties, especially in the area of boundary maintenance and in the jural recognition at the state level of indigenous property-holding groups.

The problem for the outside observer, lies in identifying where ethnic communities such as the Bontok diverged from the Ibaloi in their resource development and ownership practises, such that the Bontok were able to maintain the above-mentioned boundary-maintenance mechanisms for such group-held resources, and the Ibaloi were not. The evidence suggests that the historic development of property relations and group ownership in these two societies differed sharply sometime after the establishment of the gold trade monopoly families in Ibaloi society. Subsequently, both the jural realm and the ritual realm of the Ibaloi has been substantially changed by socio-economic forces while those of the Bontok have successfully resisted alteration. There is some evidence that the Ibaloi communities suffered from a lack of means to unite separate corporate groups such as the Bontok ator and supra-ator council. Indeed, the competition for control of the gold trade and for the chiefly positions of the *baknang* may have created schisms in Ibaloi society, which provided a wedge for the introduction of external jural and political organization.

There is also some evidence that the Ibaloi of Kabayan community are attempting to preserve their jural realm and to struggle with these issues wherever they are allowed jurisdiction; one tool which they have adopted to a certain extent, is the concept of "communal" resources. However, it is the larger issue of jurisdiction that is central to any future viability of the Ibaloi jural system and by extension - to community control over property resources. So long as the people of Kabayan are expected to deal with less than full state recognition of customary property tenure laws, at the same time that they are refused the full placement of bureaucratic supports for the state tenure rights, conflict will continue to be a serious hamper to economic development in this region.

D. The Role of Corporate Theory in Cognatic Societies

Several conclusions can be drawn from this thesis: first, members of the discipline of anthropology still need to do more work in clarifying what is meant by "communal", "corporate", or "cooperative" when these terms are applied to discussing property and property relations in non-western societies. Towards this goal, George Appell's methodology is very useful for discerning how property-holding groups are organized, how the rights in property are distributed among the membership and where conflicts may arise. As the examples from the property system of the Kabayan Ibaloi has shown, this methodology can be very important in a number of situations: in understanding the extant social organization of groups concerned with productive resources (such as indigenous irrigation groups); in understanding the problems which can be created when external agencies are attempting to establish "benevolent" development projects; and finally, in warning of the consequences for national policy issues when an incomplete understanding of minority groups and their property interests are affecting national government initiatives.

However, a second issue examined in this doctoral thesis concerns the development of a diachronic perspective on the analysis of property systems for an increased understanding of how they may change over time. From this perspective, Appell's methodological approach does not go far enough in specifying the necessity of focusing on diachronic variables in property systems. Neither does Appell put enough

emphasis on the questions raised by the study of pluralistic society, where competing or conflicting units of jural or political authority may be affecting the control and use of productive resources and the productive process. In some situations these two issues may be related. For example, it is obvious from a diachronic analysis of Ibaloi property systems, that vague external agencies, such as the Spanish administration or the American Torrens title system, cannot be held to have a direct causal relationship in changes to indigenous Philippine upland cultures and their property systems. In the Ibaloi case, for example, it has been shown that the role of individual actors within Ibaloi society was at least as important as colonial governmental policy and economic initiatives. In order to better understand the forces which influenced the behavior of these individuals in relation to productive resources, it was necessary to turn to the discrepancy between indigenous jural concepts and use of those resources and the new jural concepts being imposed by the colonial governments. The material from this thesis suggests that in any situation where such a discrepancy exists, it will play a central role in the evolution of property systems.

In an important way, therefore, this research builds on Appell's attempts to understand "emergent" structures in society. The role of the decisions and actions of individual actors can be seen to be central to the purposive seeking out of alternatives in the "opportunity structure" as can the operation of groups with common vested interests. Further, as Vorr Benda-Beckmann (1983) has suggested, the plural jural system can provide the necessary leeway for individual actors or interest groups involved in lifting behavior out of the "opportunity structure" and installing it in the "social structure". This thesis shows that the question of "emergent" structure hinges on purposive political and economic actions. Because of this, we must be very aware of the specific groups, goals and special interests of the various political actors within the social structure and within the "opportunity structure" - at the present time, and in the past.

Third, this thesis raises the issue of principles of recruitment to various property-holding groups in cognatic societies and shows, as Appell has argued, that this is an empirical question to be tested. It would appear from the Ibaloi data that kinship does play an important role, not only in recruitment to property-based groups, but also in the organization of those groups and in the assignment of status within them (as in the

irrigation systems). Evidence suggests that bilateral descent groups may be more important in some cognatic societies than others, and that Appell is right when he attaches significance to whether or not the property-holding group is a ritual entity as well as a jural entity. Certainly the role of the ancestors in the ritual belief system is an important indicator that descent may play an important role in the formation of property-based groups, now or in the past. However, it is also clear that changes in the jural system are not immediately reflected in the ritual system and care must be taken, again, to be aware of the diachronic influences. However, the Ibaloi data also demonstrates that other criteria for membership recruitment and boundary maintenance - and even the status of individual members of the group - can be employed in such societies. Common interest, social stratification and relative rates of investment all also played an important role in productive groups among the Ibaloi.

Thus, this thesis has suggested that other qualifications for inclusion in property-holding systems may be more important or may eventually supersede kinship considerations. Among the *kadangyan* class in Ibaloi society, alliance networks and corporate joint-venture organizations were often couched in kinship terms, but common interest and social background were actually more important than descent or other kinship considerations. Important questions to ask in terms of the organization of such groups include: what inputs does each individual bring to the cooperative venture of the group? What rewards does the individual receive? These are but variations of the questions raised by Appell's methodology - but it is important to point out that Appell does not appear to recognize or place much importance on the multiplex relationships which obtain within property-based groups of the cognatic society. In terms of the canal-based irrigation groups of Kabayan, the leadership abilities of certain men within the membership would be (and have been) seriously undercut if they did not stand in other various important relationships to the other members of the group - including landlord, family member, respected elder, and sometimes even municipal official.

This thesis has also reinforced recent criticisms of the overemphasis on the "communal" or "cooperative" nature of peasant or tribal society. It has shown that supposedly "communal" irrigation systems within Kabayan are not "communal" at all - neither in the sense that every member of the community has a right to benefit from

them or share in their resource base, nor in the sense that the community leaders direct all productive efforts for the equal benefit of all community members. Indeed, the indiscriminate application of the "communal" concept in upland communities of the Cordillera Central, has increased boundary maintenance problems for such groups - even as the members of these communities are struggling to deal with a state imposed jural system which refuses to recognize any level of ownership between the community and the individual.

And this point leads back to the above-mentioned jural plurality issue. Today, any researcher working in developing countries will sooner or later have to cope with the existence of some level of plural jural operations. Multiple jural levels exist in most peasant societies, and also in tribal or minority areas of other nation states. The effect of the purposive action of individuals in the exploitation and reinforcement of the plural jural situation requires more research. This thesis has suggested the importance of such research for understanding the current state of affairs in the property relations of such polities, and also for the understanding of the social process which has brought about that current situation. In the context of economic development, the need for such understanding cannot be overemphasized.

Finally, therefore, in terms of the role of corporate organization in the property systems of cognatic societies, it can now be said that so-called "corporate" groups do play a significant role in the development of productive resources - and may also play a very significant role in bilateral societies without ancestor-oriented descent groups, as well. This is because corporate organization does not have to depend on unilineal descent systems to provide a framework and a means of determining and assigning status within the group; indeed, it may not even rely on questions of kinship at all. As both Schneider (1985) and Appell (1974) have pointed out, the issue of the basis for recruitment is an empirical issue which can be determined after a careful assessment of the property system determines what role group ownership of productive resources plays in any one society. Common purpose, common residence and multiplex relationships of various natures can also form the basis for recruitment to such groups. Appell's methodology can be a significant starting point for research into such issues in bilateral, cognatic - and probably (as he hoped) for unilineal systems as well. However,

we must continue to build on Appell's methodology: incorporating diachronic questions of the evolution of property systems; emphasizing the role of individual actions and goals and recognizing the forces which will impinge on those actions and goals. Only in this way, can we begin to grasp the true nature of property relations in all societies.

Table 1: Percentages of Households in Various Income Sources

Community Income Sources	Percent of Households Census #1	Percent of Households Census #2
Farming	74.7	71.9
Paid Farm Labour	11.8	10.3
Salary	30.0	39.7
Commercial	15.8	24.7
Gold Panning	32.4	47.3
Rental	9.5	3.4

Census #1 included 172 households
Census #2 included 146 households

Table 2: Labour Sources and Crop Types

Labour Type	Crop Type By Person/Hours and by Percent			Total
	Rice	Vegetables	Camote	
Household Percent	6,120 47.3	3,205 75.4	4,490 92.6	13,815 62.6
Poldeya Percent	2,298 17.8	1,048 24.6	360 7.4	3,706 16.8
Atang Percent	3,141 24.2	0 0	0 0	3,141 14.3
Oboan Percent	1,392 10.7	0 0	0 0	1,392 6.3
Total	12,951	4,253	4,850	22,054

Table 3: Landholdings By Income Categories

	Irrigated Land	Non-Irrigated Land
Lowest Economic Level		
Mean	.2765	.5933
Minimum	.0150 1.0000 dry	NIL .1500 wet
Maximum	.6750 .4333 dry	1.5000 .1680 wet
Lower Middle Economic Level		
Mean	.4387	1.8070
Minimum	.0486 1.50000 dry	.0500 .1034 wet
Maximum	1.3304 19.3662 dry	19.3662 1.3304 wet
Middle Economic Level		
Mean	.4437	2.8512
Minimum	.0500 .3000 dry	.0700 .3500 wet
Maximum	1.3353 9.9190 dry	16.6190 .5000 wet
Highest Economic Level		
Mean	.5994	7.6930
Minimum	.0697 .7000 dry	.7000 .0697
Maximum	1.7394 17.5000 dry	27.2500 1.0000 wet

1

in hectares

2

figures for landholdings include household counterpart holdings in wet or dry as indicated.

FIGURE 1: APPELL'S MODEL OF PROPERTY RELATIONS AND GROUP OWNERSHIP



-a scarce good or service.



-an interest in a scarce good or service.



-an individual or constituted member of a social group.



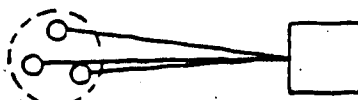
-a social grouping; a right and duty bearing unit, whose existence is recognized by the jural system under analysis.



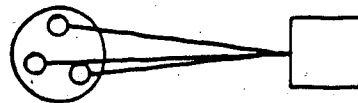
-a social grouping; a right and duty bearing unit whose existence is not recognized by the jural system.



-a JURAL ISOLATE. A right and duty bearing unit which is recognized by the jural system, and has an interest in a scarce good as a group.



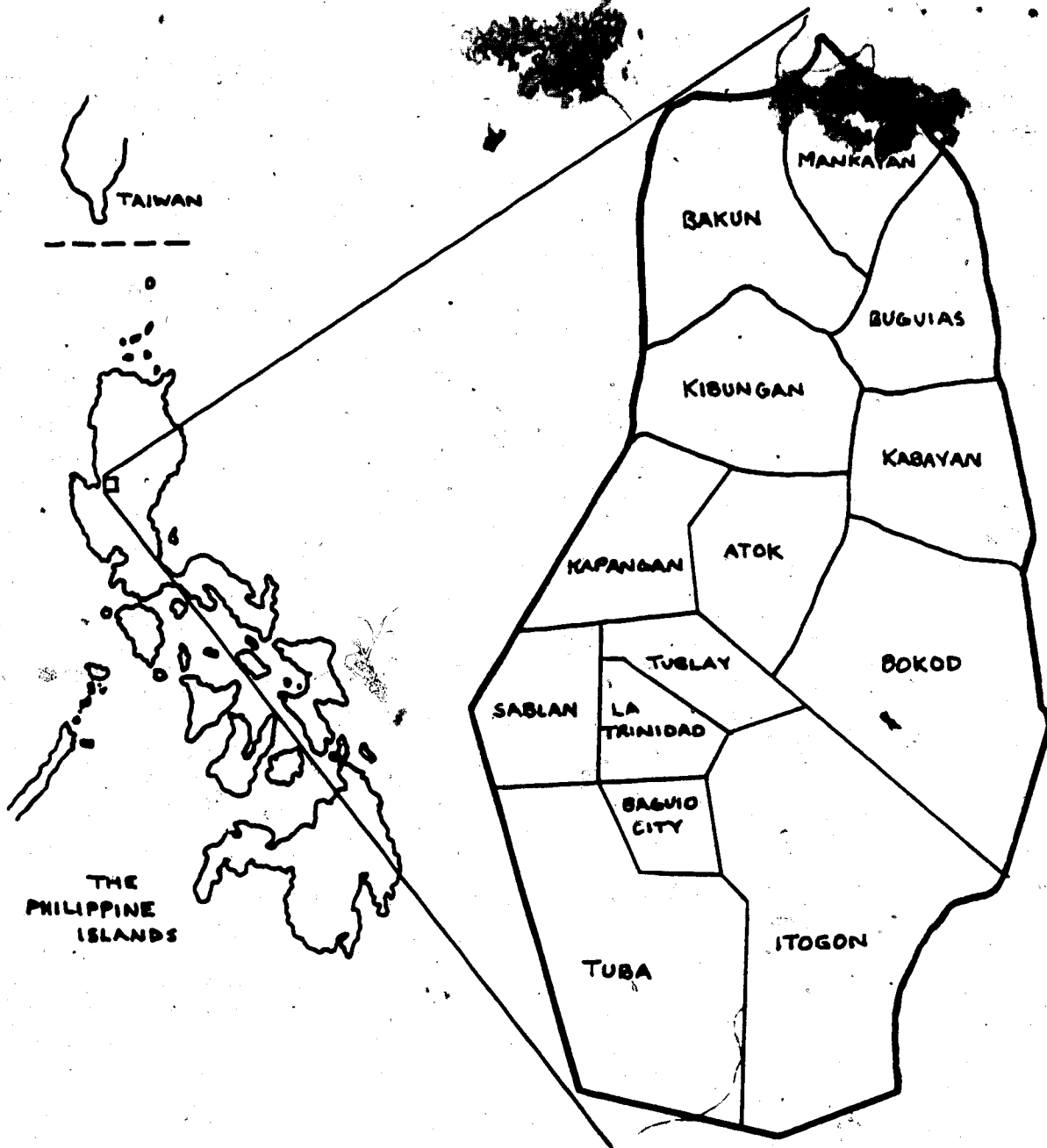
-a JURAL AGGREGATE. A social grouping not recognized by the jural system and in which the members hold interest "in severally" in the same scarce good or service.



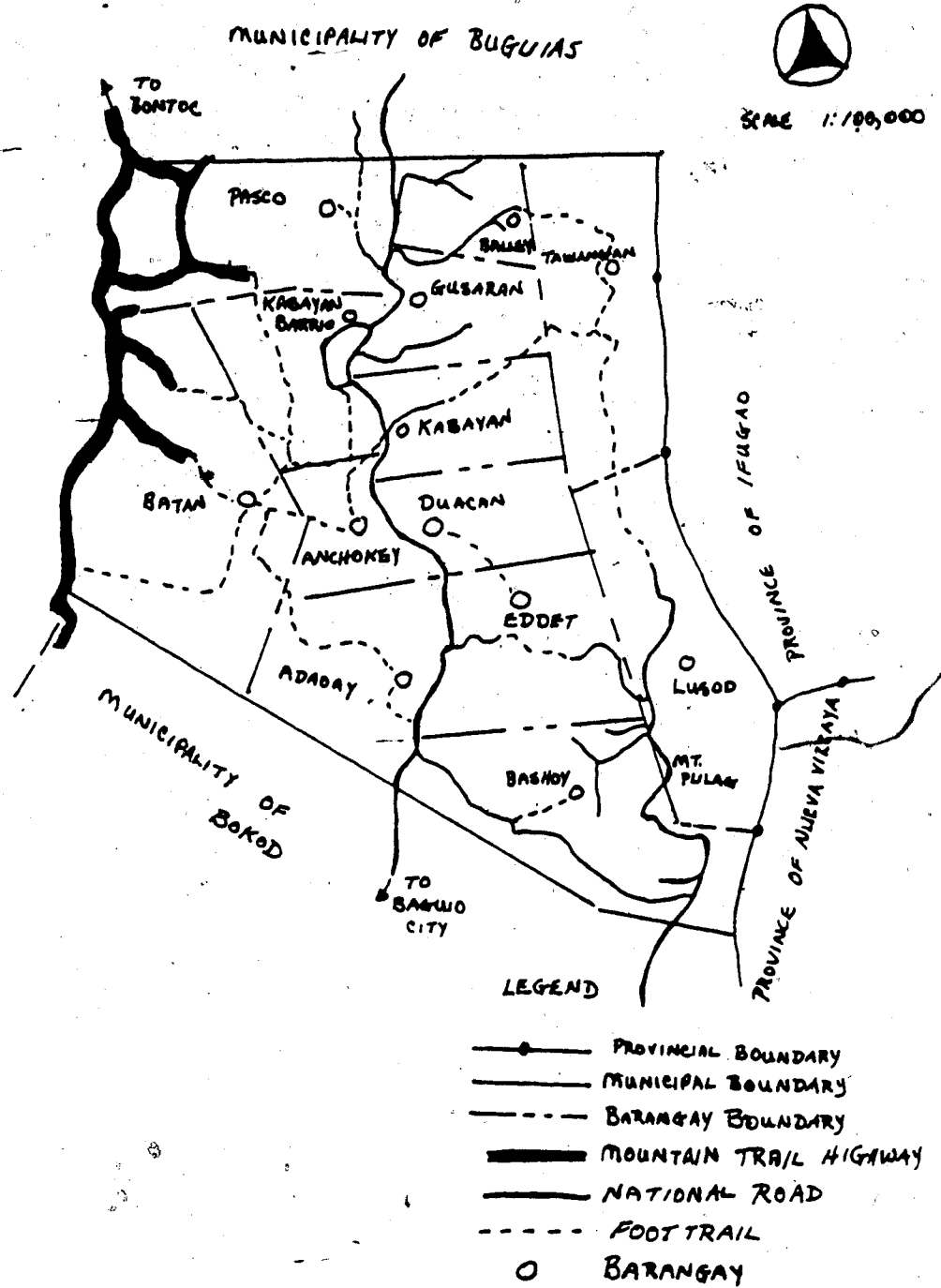
-a JURAL COLLECTIVITY. A social group which is recognized by the legal system and in which the individual members all have recognized shares to the rights in the same scarce good.

Adapted from Appell, G.N. 1976. The Rungus Social Structure in Cognatic Society and its Ritual Symbolization. In The Societies of Borneo: Explanations in the Theory of Cognatic Social Structure. G.N. Appell ed. Special Publication of the American Anthropological Association Number 6.

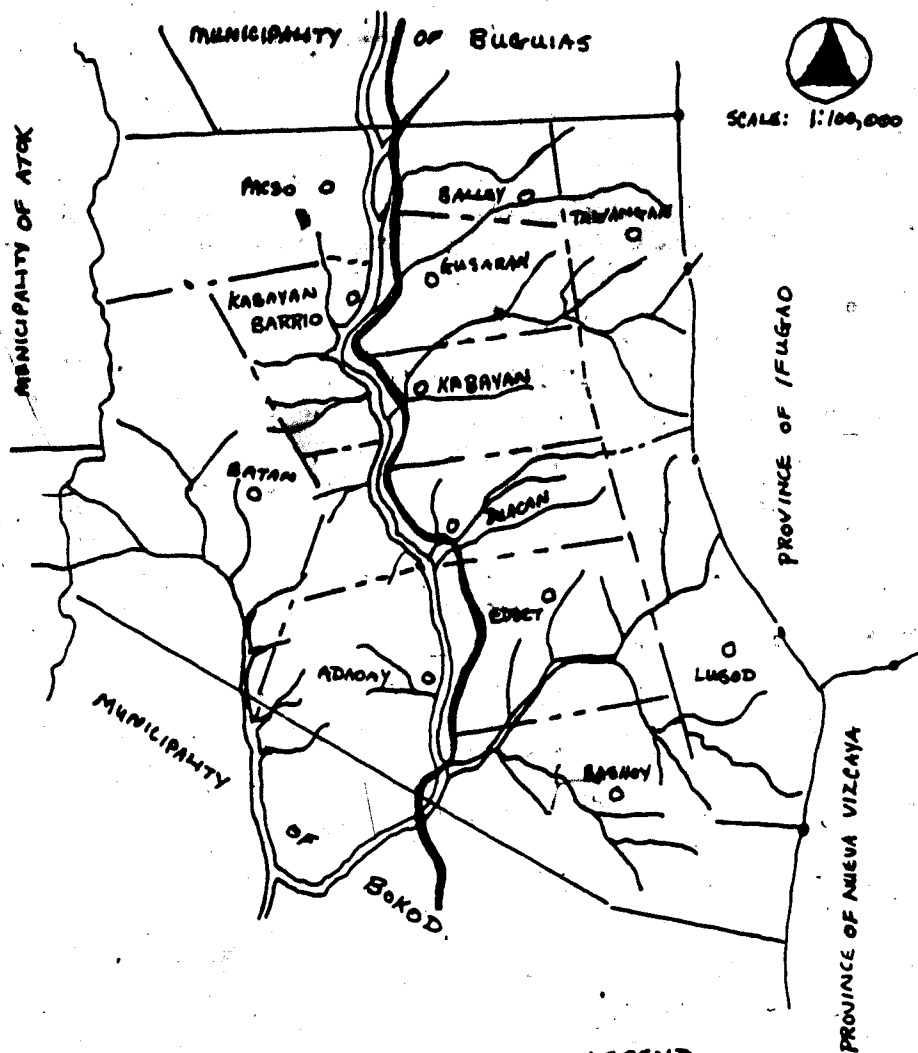
MAP 1 BENGUET PROVINCE; PHILIPPINES



MAP 2 KABAYAN MUNICIPALITY CIRCULATION



MAP 3 KABAYAN MUNICIPALITY WATER RESOURCES

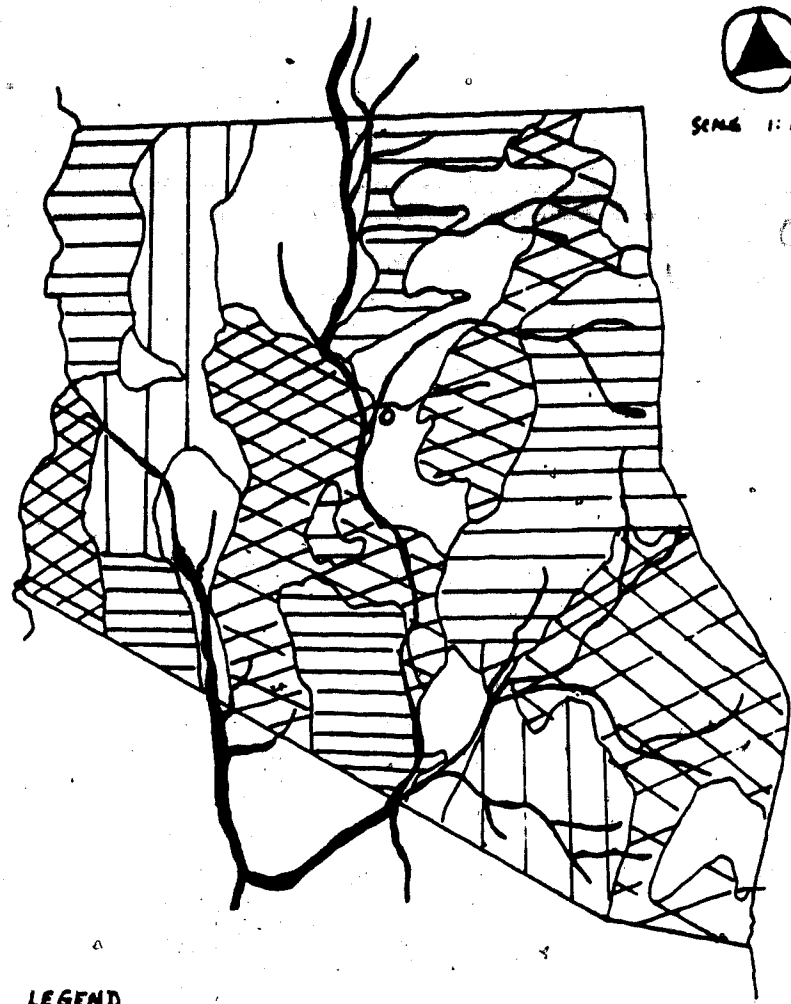


- LEGEND**
- PROVINCIAL BOUNDARY
 - MUNICIPAL BOUNDARY
 - - - BARANGAY BOUNDARY
 - BARANGAY
 - NATIONAL ROAD
 - RIVER / CREEK








MAP 4 KABAYAN MUNICIPALITY SLOPE MAP



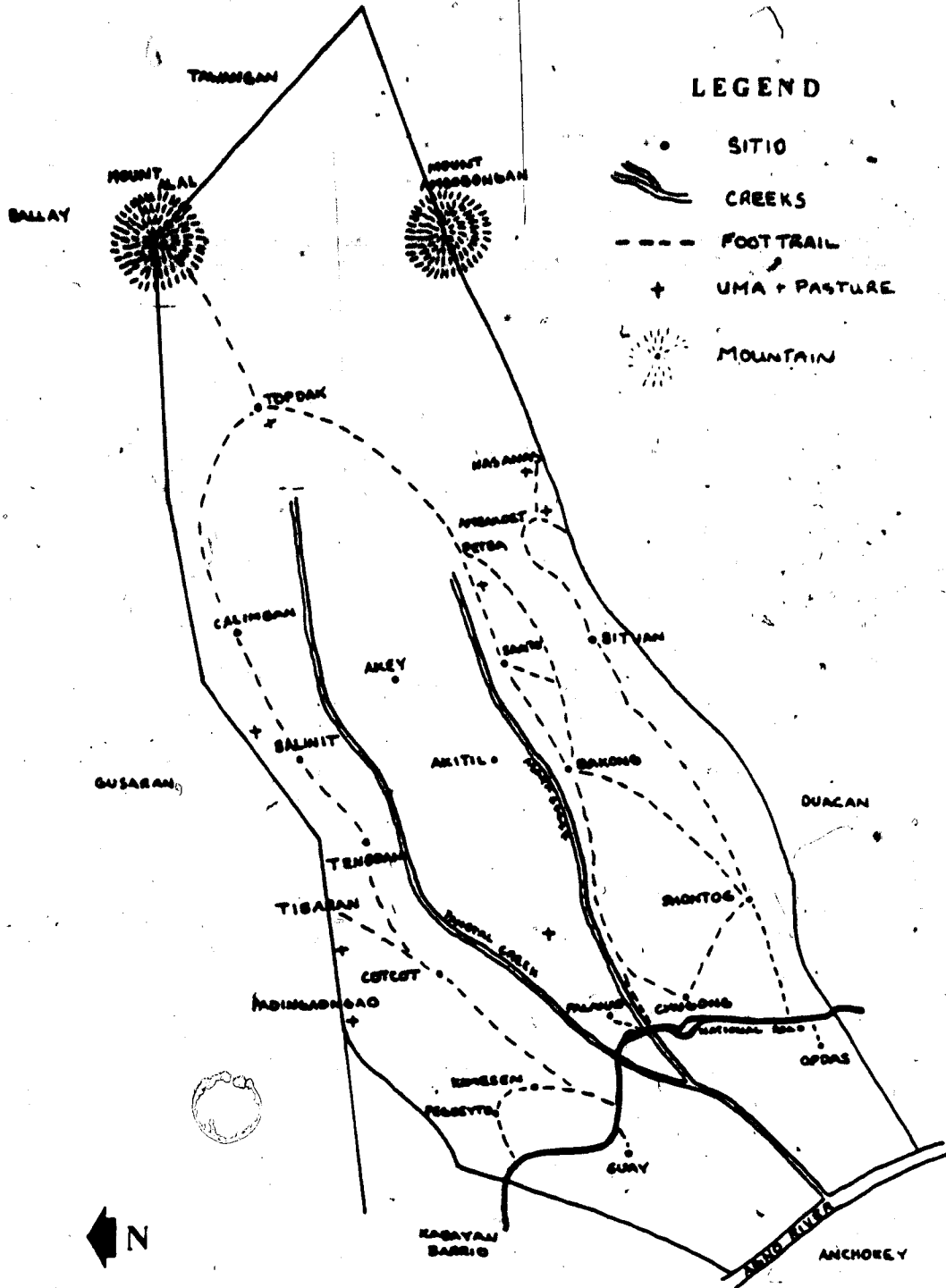
SCALE 1:100,000





LEGEND

-  STEEPLY SLOPING TO HILLY MOUNTAINOUS WITH SLOPE RANGING FROM 35% OVER
-  STEADY SLOPING & ROLLING WITH SLOPE RANGING FROM 15-25%
-  MODERATELY SLOPING & UNDULATING WITH SLOPE RANGING FROM 8-15%
-  GENTLY SLOPING & UNDULATING WITH SLOPE RANGING FROM 3-8%
-  KABAYAN BARRANGY
-  BARRANGY BOUNDARY
-  RIVER CREEK

MAP 5 KABAYAN POBLACION

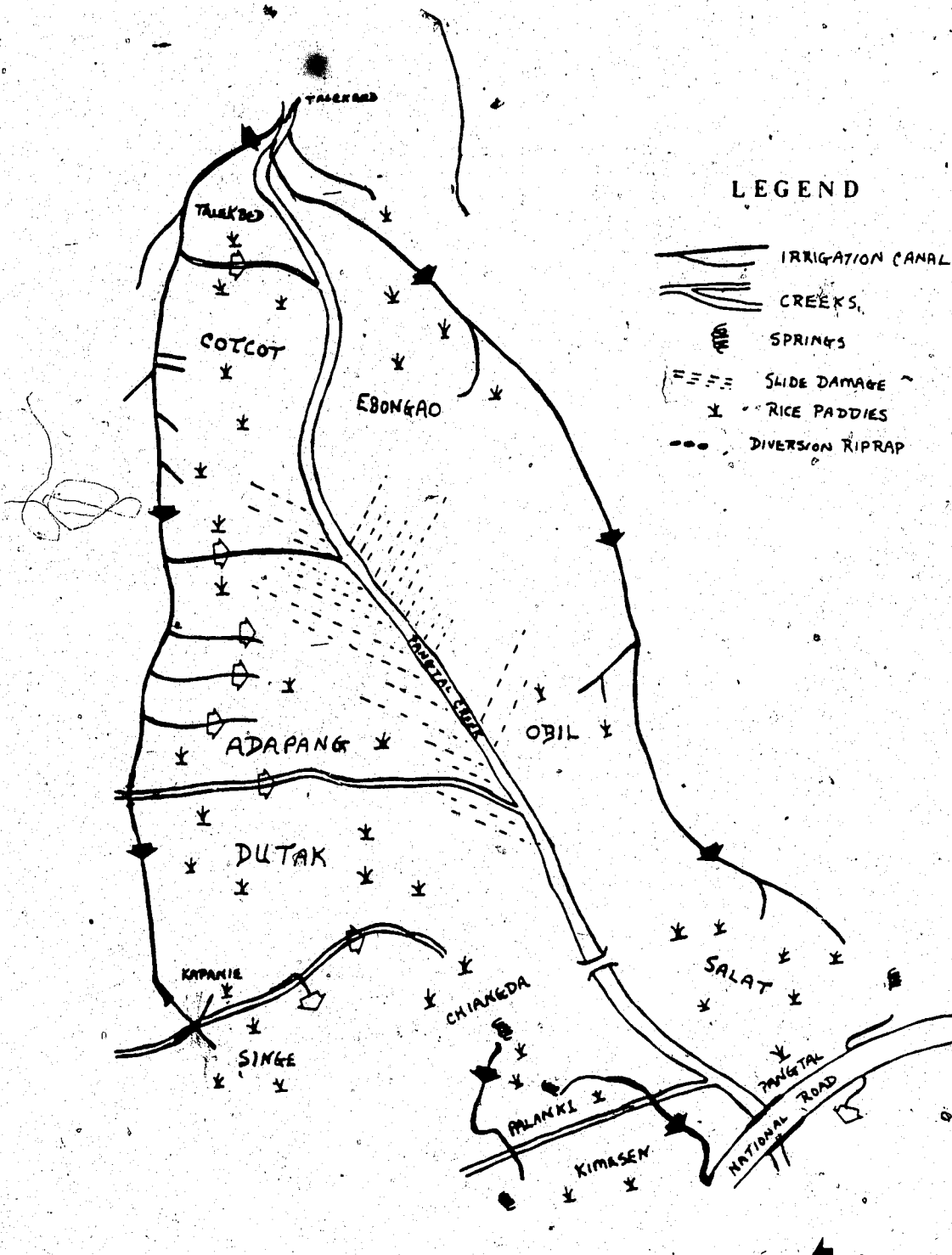


LEGEND




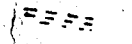


- SITIO
-  CREEKS
- - - FOOT TRAIL
- + UMA + PASTURE
-  MOUNTAIN

 N
 NOT TO SCALE

MAP 7 COTCOT-SALAT IRRIGATION SYSTEM



LEGEND

-  IRRIGATION CANAL
-  CREEKS
-  SPRINGS
-  SLIDE DAMAGE
-  RICE PADDIES
-  DIVERSION RIPRAP

MAP 8 COTCOT-SALAT PADDY LAYOUT



NOT TO SCALE

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**APPENDIX ONE: THE ORGANIZATION AND OPERATION OF THE LUPONG
TAGAPAYAPA**

I. Creation of the Lupong Tagapayapa (Known as Lupong)¹²:

Composition - Barangay Captain will be Chairperson. Not less than ten, not more than twenty other members to be constituted every two years by appointment of the Barrio Captain, unless disputed by the people. Each member to take an oath upon entering office.

II. Function:

1. To meet once a month to exchange ideas on amicable settlement of disputes,
- or 2. To effect speedy resolution of disputes by conciliation panels.

III. Conciliation Panels:

There should be constituted for each dispute, a panel made up of three members of the Lupong and called a Pangkàt ng Tagapagkasundo (Pangkat). These three can be chosen by the Lupong or by the contestants.

IV. Recording:

Decisions and minutes should be kept and submitted to the proper city or municipal court. Notices should be served to the parties.

V. Recompense:

None.

VI. Exclusions to Their Deliberations:

¹²The source for this document was the "Katarungang Pambarangay" Rules and Regulations, Presidential Decree Number 1508. Establishing a System of Amicably Settling Disputes at the Barangay Level.

Where one party is the government.

Where one party is the public officer or employee and the dispute relates to the performance of his duties.

Offenses punishable by more than 30 days or fines of more than 200 pesos.

Offenses where there are no private offending parties.

Other cases which may be determined to be outside their realm by the Minister of Justice and Minister of Local Government.

VII. Venue:

Disputes over real property must be settled by the Lupong of the area where they are located.

VIII. Witnesses:

May be summoned and must appear upon paid of contempt of court.

IX. Time Limit:

Fifteen days, not to exceed thirty days.

X. Council:

Legal representatives are not allowed. People must appear in person unless they are under age, in which case, a relative who is not a lawyer may appear.

XI. Effect:

Unless there is a filing for a nullification of the Lupong decision within ten days to a municipal court, it will have the force of a final judgement of court.

XII. Responsible Agent:

Minister of Local Government and Community Development will implement this decree.

XIII. Procedure:

1. Complaints which are to be heard by the Lupong must be aired to the Barangay Captain beforehand. It is his decision to call the Lupong to create a conciliation panel.
2. The Lupong must hear a case before it can go to another court, except in certain cases (see exceptions above).

XIV. Restrictions on Membership:

Members of the Lupong must be residents, or must work in the community for which the Lupong is formed.

APPENDIX TWO: LUPONG TAGAPAYAPA CASE ONE: THEFT

Promissory Note¹³

To Whom it May Concern:

We, Bacob Lumita and SioPit Copsico, both of legal age, single and a resident of Poblacion, Kabayan, Benguet Province, hereby promise and agreed to pay the amount of 422 pesos (Four Hundred and Twenty Two Pesos), Philippine Currency broken down as follows:

Madaeo Daycap	200 pesos
Nalep Limes	200 pesos
Oslove Gindel	22 pesos

The above stated amounts represent the payment of chickens and eggs which we stole last November 2, 1982.

Furthermore, we promise not to steal from now on.

The amount of 422 pesos will be paid on or before December 15, 1982 at Poblacion, Kabayan, Benguet Province. If it will not be paid on November 15, 1983, or failure to pay the same, another ten percent of the principle amount will be added therein.

Signed this 25th day of November, 1982 at Poblacion, Kabayan, Benguet Province¹⁴.

¹³The following decision was taken from the report of the proceedings; only the names of the participants and dates have been changed.

¹⁴This was followed by the signatures of the two respondents, the three complainants and three witnesses from the Lupong. In addition, it was notarized by the Station Commander of the Integrated National Police for Kabayan.

APPENDIX THREE: LUPONG TAGAPAYAPA CASE TWO: ASSAULT

Republic of the Philippines, Province of Benguet, Kabayan, Office of the Barangay Captain, Poblacion¹⁵

Joseph NiaoNiao, Jr.

(complaintant)

For: Physical Injuries.

Theodoro Nascilo

(respondent)

AMICABLE SETTLEMENT

We, Theodoro Nascilo, respondent and Joseph NiaoNiao, Jr., complaintant, do hereby agree to settle our dispute under the terms and conditions, as follows:

1. That I, Theodoro Nascilo agree to pay/refund all expenses to be incurred by Joseph NiaoNiao, Jr. such as consultation/doctor's fees, medicines and all other expenses;
2. That I hereby agree to come and pay all expenses incurred by Joseph NiaoNiao, Jr. on or before May, 1983; and
3. That I further agree to bind myself to comply honestly and faithfully with the terms and conditions of our settlement.

Entered into this 5th day of December, 1982 at Kabayan, Benguet Province, Philippines¹⁶.

¹⁵This assault case was also taken from the records of the proceedings. Again, the names and dates have been changed.

¹⁶There followed the signatures of the two disputants, as well as five witnesses and notarized by the Barangay Captain. It should be noted, however, as with the former case, we did not collect data on how well these decisions were complied with. Elders interviewed about the Lupong felt that it was effective in settling disputes and that most people respected its powers.

APPENDIX FOUR: WATER DISTRIBUTION AGREEMENT

CotCot-Salat *Mandapis* Responsibilities and Distribution Schedule¹⁷

WATER DISTRIBUTION SUBJECT

We the people or person who are concerned with the distribution of water do hereby agree that we appoint a person to distribute the water with absolute authority that none others will alter decision of person authorized to distribute the water under the [distribution subject]¹⁸.

BADKEY, ADAPANG

8 to 4 PM

COTCOT

4 PM to 7 PM

DOTAK

7 PM to 4 AM

(Notarized by the signature of the Barangay Captain).

Witness:(signatures)

1. Marcelino Alumno

7. Hamilar Sangao

2. [Coy ap new] Gadangis

8. Colae Pacday

3. Peredo Depinos

9. Florencio

4. Brado Domis

10. S. Sabo

5. Moises Empeso 11. [unintelligible] 6. Fausto Somewat 12. Domis for H. Ateniao

Salat down to CabCab to be handled by Florencio Sinong.

I, Florencio Sinong, do hereby do solemnly (sic) swear that I'll all within my power to do my best.

So Help Me God. (Followed by signature.)

¹⁷Taken from the proceedings of a 1984 meeting of the Kabayan Sanguniang Bayan (Municipal Council).

¹⁸Note that words placed in square brackets were stained and hard to interpret.

APPENDIX FIVE: STATE WATER PERMIT REQUIREMENTS

Republic of the Philippines

NATIONAL WATER RESOURCES COUNCIL

8th Flr., NIA Bldg., EDSA, Quezon City

REQUIREMENTS FOR WATER PERMIT APPLICATION

- () Evidence of ownership which shall either be the title or tax declarations of the properties proposed to be irrigated;
- () Location plan indicating therein the point of diversion;
- () The coordinates (latitude and longitude (sic)) as determined graphically from a Bureau of Coast and Geodetic Survey Map with a scale of 1:50,000;
- () Articles of Incorporation and By-Laws of the Corporation or Association;
- () Clearance from the Provincial Irrigation Engineer of the province to determine whether the application will or will not adversely affect existing or proposed national systems of projects;
- () Clearance from the Public Works District Engineer's Office of the province to determine whether the application will or will not adversely affect domestic water supply in the locality;
- () Certification from the local office of the Ministry of Agrarian Reform stating among others that the proposed irrigable area is or is tenanted and the same not covered by the Land Reform Program of the government considering that the area is more than SEVEN (7) hectares;
- () A clearance from.....
to determine whether the proposed abstraction of water by the application will or will not adversely affect existing or proposed project, considering that the point of diversion is within the territorial jurisdiction of
- () A certificate of tree planting in compliance to Presidential Decree No. 1153.
- () Filing fee of one hundred pesos.

Borromeo P. Melchor

Provincial Irrigation Engineer I