
College of William and Mary, Williamsburg, VA. Dept. of Anthropology.

Sep 85

403p.

Studies in Third World Societies, Department of Anthropology, College of William and Mary, Williamsburg, VA 23185 (write for price).

Collected Works - General (020) -- Reports -- Descriptive (141)

MF01/PC17 Plus Postage.

Agricultural Laborers; *Developing Nations; Developmental Programs; Economic Development; Foreign Countries; Higher Education; Industrialization; *Land Use; *Modernization; Non Western Civilization; Rural Areas; Rural Development; *Social Change; Social Sciences; *Sociocultural Patterns; Traditionalism

Africa; Bangladesh; India; *Indonesia; *Malaysia; Mexico; New Guinea; Philippines

Many developing nations are engaged in efforts to transform the traditional agricultural sectors of their economies into modern forms that are more closely linked to the national economy and the export market. Almost universally, the traditional rights to land of the indigenous populations are ignored. The 12 essays in this book examine the processes of the integration of indigenous agricultural populations into the modern world economic system. The essays are: "Integration of the Periphery to the Center: Processes and Consequences" (G.N. Appell); "Landlessness in Palau" (Mary McCutcheon); "The Formation of Aboriginal Reserves: The Effects of Land Loss and Development on the Btsisi of Peninsular Malaysia" (Barbara S. Nowak); "Land Tenure and Development Among the Rungus of Sabah, Malaysia" (G.N. Appell); "The Kantu' System of Land Tenure: The Evolution of Tribal Rights in Borneo" (Michael R. Dove); "The Bulusu' of East Kalimantan: The Consequences of Resettlement" (G.N. Appell); "Agricultural Development and Social Equity in the Upland Philippines" (James F. Eder); "Government Interference and Loss of Land: An Interpretation of Growing Landlessness Among Adivasis of South Gujarat, India" (C. Baks), "Modernization, Pauperization, and the Rise of Landlessness: A Case Study from Bangladesh" (S.M. Nurul Alam); "Development Policy, Land Reform, and Economic Stratification Among the Mbeere of Central Kenya" (Jack Glazier); "Truck Farming, Foreclosure and Class Structure in Rural Mexico" (Thomas Crump); and "Little Landlessness, But..." (Anton Ploeg). (BZ)
Modernization and the Emergence of a Landless Peasantry
Essays on the Integration of Peripheries to Socioeconomic Centers

Studies in Third World Societies
PUBLICATION NUMBER THIRTY-THREE

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY Vinson H. Sutlive, Jr.
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

POINTS OF VIEW OR OPINIONS STATED IN THIS DOCUMENT DO NOT NECESSARILY REPRESENT OFFICIAL OERI POSITION OR POLICY.
STUDIES IN THIRD WORLD SOCIETIES

is devoted to the study of cultures and societies of the Third World. Each publication contains papers dealing with a single theme or area, addressed both to scholars and laymen as well as to teachers, students, and practitioners of social science; the papers should be of value also to applied social scientists, planners, demographers, community development workers, and other students of human cultures and societies.

COPYRIGHT

by

THE EDITORS

Library of Congress Catalog Card Number: 86-072044

Communications concerning editorial matters, including requests to reprint or translate, and correspondence about subscriptions, change of address, circulation, and payments should be address to:

The Editors
STUDIES IN THIRD WORLD SOCIETIES
Department of Anthropology
College of William and Mary
Williamsburg, Virginia 23185 U.S.A.
Phone: (804) 253-4522
International Editorial Advisory Board

Theodore Agoncillo (University of the Philippines), Carlos H. Aguilar (University of Costa Rica), Muhammad Ali (University of Malaya), Jacques Amyot (Chulalongkorn University, Thailand), Ghaus Ansari (Kuwait University), George N. Appell (Brandeis University), Harold Barclay (University of Alberta, Canada), Etta Becker-Donner (Museum für Völkerkunde, Vienna, Austria), Harumi Befu (Stanford University), Ignacio Bernal (Instituto Nacional de Antropología e Historia, Mexico), Ronald M. Berndt (University of Western Australia), Fernando Camara (Instituto Nacional de Antropología e Historia, Mexico), Paulo de Carvalho-Neto (São Paulo, Brazil), S. Chandrasekhar (California State University), K.C. Chang (Harvard University), Chen Chi-lu (National Taiwan University, China), Hackeny Choe (Seoul National University, Korea), George Coelho (National Institute of Mental Health, Maryland), Ronald Cohen (Ahmado Bello University, Nigeria), Ronald Crocombe (University of the Pacific, Fiji Island), May N. Díaz (University of California, Berkeley), K.O. Dike (Harvard University), Fred Eggen (University of Chicago), S.C. Dube (India Institute of Advanced Study, India), S.N. Eisenstadt (Hebrew University, Israel), Gabriel Escobar M. (Pennsylvania State University and Lima, Peru), Claudio Esteva Fabregat (University of Barcelona, Spain), Orlando Fals Borda (Bogota, Colombia), Muhammad Fayyaz (Punjab University, Pakistan, and Queen's University, Canada), C. Dean Freudenberger (School of Theology, Claremont, California), Morton H. Fried (Columbia University), Isao Fujimoto (University of California, Davis), C. von Furer-Haimendorf (London School of Oriental and African Studies, England), Dante Germino (University of Virginia), Walter
Goldschmidt (University of California, Los Angeles), Nancie L. Gonzalez (Boston University), W. W. Howells (Harvard University), Francis L. K. Hsu (Northwestern University), Charles C. Hughes (University of Utah Medical Center), Erwin Johnson (State University of New York, Buffalo), Victor T. King (University of Hull), Koentjaraningrat (University of Indonesia), T. A. Lambo (World Health Organization, Switzerland), Gottfried O. Land (University of Colorado), Peter Lawrence (Sydney University, Australia), Diane K. Lewis (University of California, Santa Cruz), Dapen Liang (Asiamerica Research Institute, California), Abdoulaye Ly (University of Dakar, Senegal), Robert A. Manners (Brandeis University), Jamshed Mavalwala (University of Toronto, Canada), Eugenio Fernandez Mendez (Universidad de Puerto Rico), Alfredo T. Morales (National Research and Development Centre for Teacher Education, University of the Philippines), Gananath Obeyesekere (Princeton University, N.J.), Gottfried Oosterwai (Andrews University), Morris E. Opler (University of Oklahoma), Alfonso Ortiz (Princeton University), Akin Rabibhadana (Thammasat University, Thailand), V. J. Ram (United Nations, Beirut, Lebanon), M.S.A. Rao (University of Delhi, India), J. B. Romain (CRESH, Haiti), Renato I. Rosaldo (Stanford University), Irving Rouse (Yale University), Miguel Acosta Saignes (Caracas, Venezuela), Kernial S. Sandhu (Institute of Southeast Asian Studies, Singapore), Spiegal-Rosing (Ruh-Universitat Bochum, Germany), Rodolfo Stavenhagen (El Colegio de Mexico), Akira Takahashi (University of Tokyo, Japan), Reina Torres de Arauz (Instituto Nacional de Cultura y Deportes, Panama), Donald Tugby (Queensland University, Australia), Victor C. Uchendu (University of Illinois and Kampala, Uganda), Lionel Vallee (University of Montreal, Canada), Mario C. Vasquez (National Office of Agrarian Reform, Peru), L. P. Vidyarthi (Ranchi University, India), B. M. Villanueva (United Nations, New York City), Hiroshi Wagatsuma (University of California, Los Angeles), Wong Soon Kai (Kuching, Sarawak), Inger Wulff (Danish National Museum).
CONTENTS

Publication Number Thirty-Three

September 1985

MODERNIZATION AND THE EMERGENCE OF A LANDLESS PEASANTRY
ESSAYS ON THE INTEGRATION OF PERIPHERIES TO SOCIOECONOMIC CENTERS

Edited by

G. N. Appell
Brandeis University

Page No.

PREFACE xi

PART ONE INTRODUCTION
1 Integration of the Periphery to the Center: Processes and Consequences
   - G. N. Appell
   Brandeis University 3

PART TWO PALAU
2 Landlessness in Palau
   - Mary McCutcheon
   Smithsonian Institution 53

PART THREE MALAYSIA
3 The Formation of Aboriginal Reserves: The Effects of Land Loss and Development on the Btsisi of Peninsular Malaysia
   - Barbara S. Nowak
   State University of New York College, Brockport 85

4 Land Tenure and Development Among the Rungus of Sabah, Malaysia
   - G. N. Appell 111

6
PART FOUR INDONESIA
5 The Kantu' System of Land Tenure: The Evolution of Tribal Rights in Borneo
   - Michael R. Dove
   Winrock International Institute for Agricultural Development

6 The Bulusu' of East Kalimantan: The Consequences of Resettlement
   - G. N. Appell
   Brandeis University

PART FIVE PHILIPPINES
7 Agricultural Development and Social Equity in the Upland Philippines
   - James F. Eder
   Arizona State University

PART SIX INDIA
8 Government Interference and Loss of Land: An Interpretation of Growing Landlessness Among Adivasis of South Gujarat, India
   - C. Baks
   University of Utrecht

PART SEVEN BANGLADESH
9 Modernization, Pauperization, and the Rise of Landlessness: A Case Study from Bangladesh
   - S. M. Nurul Alam
   Chittagong University

PART EIGHT AFRICA
10 Development Policy, Land Reform, and Economic Stratification Among the Mbeere of Central Kenya
   - Jack Glazier
   Oberlin College

Page No.

vi
PART NINE MEXICO
11 Truck Farming, Foreclosure and Class Structure in Rural Mexico
   - Thomas Crump
     University of Amsterdam
     353

PART TEN NEW GUINEA
12 Little Landlessness, ...
   - Anton Ploeg
     State University of Utrecht
     371

Notes on Contributors

401
MODERNIZATION AND THE EMERGENCE OF A
LANDLESS PEASANTRY
ESSAYS ON THE INTEGRATION OF PERIPHERIES
TO SOCIOECONOMIC CENTERS

Edited by

G. N. Appell
Brandeis University
Many Third World countries are engaged in efforts to transform the traditional agricultural sectors of their economies into modern forms that are more closely linked to the national economy and the export market. These transformations involve monocropping, such as wet rice and commercial plantations, and in some instances turning former agricultural land into fast growing forest plantations. This is usually made without any assessment of the interrelations of the traditional agricultural systems to the local environments or the contributions that the indigenous systems of agriculture and their cultivars have to make to the national societies or to the world. And almost universally the traditional rights to land of the indigenous populations are ignored.

As a result, traditional farmers may find that they no longer have adequate access to land for farming and for essential raw materials so that many have to become landless agricultural laborers or seek employment in other economic sectors. And their children have to find sources of employment that frequently require migration to urban centers. As the transformation continues and sources of capital are invested in it from the more wealthy urban centers, a new landlord class may come into existence and a landless or near-landless peasantry will emerge. Thus, this integration of peripheral and indigenous populations into socioeconomic and political centers frequently results in their economic deprivation, contrary to stated goals (see Hopkins, Wallerstein, et al. 1982:69-70).

Also planners almost universally ignore the social consequences that such transformations have on the national society. The value that an independent and strong farming population has in contributing to the social stability of the country is overlooked. And the social costs of adaptation to the new socioeconomic system, including the health costs of increased behavioral, physiological, and psychological impairments, are never assessed or considered. Nor is there usually any attempt to evaluate and preserve the knowledge of the ecosystems that the local populations have won through hard experience, or to evaluate the knowledge contained in their agricultural systems. Yet these bodies of
knowledge are of considerable value and use (see Appell 1975a, 1975b, 1975c).

This book examines the processes of this integration of indigenous agricultural populations into the modern world economic system. The resultant destruction of the indigenous systems of land tenure and the creation of a landless or near-landless peasantry is, of course, not new, nor solely the product of Western colonialism (e.g. Baker's [1984] analysis of these processes in precolonial India.) It is perhaps as old as the development of urban centers with their agricultural peripheries. Thus, if the historical records were scrutinized, I would expect to find these same processes at work in the expansion of the Han Chinese as in the expansion of the Western economic system, as in the expansion of socialist systems.

There are many reasons both overt and covert for the development processes that lead to the destruction of the indigenous societies on the peripheries. In some instances, it is the building of dams. In others, it is the expansion of plantations and cash crops, or the desire to create a pool of labor from the subsistence farmers to serve the economic interests of the center. In many instances it is simply the ignorance of the administrators, who cannot make that creative, humanistic leap of finding out what the other culture is all about. Instead they assume that because those on the peripheries are different they must be "stupid," or "dirty." Whatever the case, such development hides behind the justification of "progress" and bringing a better life, even when this is hardly the case.

Unfortunately, the lessons of history have been ignored. History provides a means to surmount man's inherent time boundaries. And the lessons of history are that when a periphery is integrated into an expanding economic system without adequate planning that incorporates the vision of those whose lives are being remodeled, without time for the people in the periphery to adapt on their own, and without justice, costly social dislocations or revolutions are the common consequence. However, for the opportunist elite, who are disengaged from their own society and who have safe havens for the funds they can procure through expropriating the lands of other people, history is the other man's problem.
The origins of this book are many. In 1960 when I was working in the Colony of North Borneo I read in a newspaper that a New Zealand land surveyor was coming to consult with the lands department and institute the Torrens system of land registration. I wrote him and asked to meet with him so that I could explain the native system in the hope that it could be accommodated in the new system. I never received a reply.

In 1980 my family and I were in a small Southeast Asian nation, rather disconsolate because we had been prohibited from entering a neighboring country where we had many friends. As we sat around the cheap but not inexpensive hotel replanning our research agenda, in walked three individuals from that neighboring country. We had never met them, but they had heard of us and wanted to meet with us. As we were talking about the current conditions in the region, one individual turned to me and said, "Development in my country is creating a class of landless peasants."

I can remember being struck by this insight from an individual who had not been trained in the social sciences. Time stood still for a moment as I consumed what he had said. And it seemed to me that the least that anthropology could do would be to record in detail those village-level processes around the world that have been producing landless peasantry. This unexpected event triggered this book.

When I got back to my academic world, I began to talk with other anthropologists. And I found that they all had had similar experiences in their field work that I had had in mine, in which an indigenous population was being integrated to its own disadvantage into the national and world economic system. They were disturbed by the fact that the indigenous systems of land tenure in the regions where they had worked were being destroyed under the guise of "progress" and "development," and they were worried about the consequences of this for the future. Most argued that this also involved the unnecessary destruction of other aspects of the indigenous sociocultural organization and that this was frequently the product of simple ignorance. Thus, the goals of this book grew to analyze all the various processes that occur as indigenous societies are integrated
into the world economic system. These processes have been mentioned and sometimes recorded, albeit incompletely, ever since the expansion of Western colonialism. However, in those earlier times, even at the time of the settlement of the American West, there were no trained observers to record the nature and consequences of these processes. Thus, the historical records do not provide accounts of the local-level processes of social change in the detail we are now able to with trained social scientists. Here, I thought, was an unparalleled opportunity to get detailed reportage on these processes by trained observers and develop theories and conceptual tools that would, in addition, make the reinterpretation of historical accounts more productive. But these opportunities to see and analyze the processes of integration as they affect independent indigenous groups have come at that point in history when time is running out. The rapid expansion of the world economic system since World War II has been wiping out the sociopolitical and economic organizations of these groups at an unprecedented pace so that in many cases only the older informants have knowledge of their traditional society.

Anthropologists are uniquely situated in terms of their theoretical interests and research foci to detail these microprocesses leading to the growth of landlessness and eventually the integration of the periphery into the sociopolitical and economic structure of the center. However, there have been two drawbacks to anthropologists contributing to the understanding of these processes. First, it has been my experience that few anthropologists understand the importance of indigenous systems of land tenure or have learned the intellectual tools that are needed to isolate the critical incidents of land tenure in the villages they study. This is one aspect of anthropological training that cries for correction.

Secondly, I solicited a number of papers for this volume from anthropologists who had critical data and who at first were excited at the potentialities of such a study. But as time developed I found that they were in fact hesitant to prepare chapters for the book. One got the definite impression that anthropologists are afraid to detail these processes in their research communities for fear that they might not be able to return. If I am right in my assessment, critical knowledge is being lost as a result of
unenlightened self-interest. Thus, I found some were more concerned with solving their parochial intellectual problems than with the fate of the people they had lived with, and who, with cooperation and kindness, had contributed to their visitors' academic success. And I was saddened by this, and wondered what its implications were for the future of the people that they had studied.

The results of anthropological research, in addition to making a contribution to knowledge, are frequently used in legal cases where an indigenous people are attempting to establish an ancestral claim to their land or get just compensation for their loss. Thus, one of the purposes for anthropologists to publish their data is to provide the evidence so that at some point in the future the societies they studied can take action to regain their rights. This has happened in the United States, Canada, and Australia. Whether other nations in the world will at some future point recognize injustices and attempt to right such wrongs is a question that can not be answered. But anthropology should help raise the consciousness of such governments and be prepared to help.

Eventually we will come to see that the concept of colonialism, which has more usually been used to refer to the expansion of the political and economic interests of the European powers over the peripheral regions of the Third World, represents a universal social process involving the authoritarian limitation of human liberties. Thus, the processes by which the articulation of peripheral regions to the Western economic and sociopolitical centers has occurred, along with its resultant social structures, do not appear, from the evidence of this book, to be markedly different than the articulation of any center to its periphery, whether between regions within a country or elsewhere. And those processes today which are called "progress" and "development," where they are defined and directed externally from the population involved, must be understood as a disguise for what is in fact a form of colonialism. And by framing these processes and structures in universal terms we are much better able to understand the current trends in the Third World that are leading to internal colonialism and neocolonialism.
The cultural rationalization behind these forms of integration are based on what I have termed economic fundamentalism (see Appell 1985). In this the underlying assumption is that economic and material considerations constitute the primary force that shapes the basic ideas, attitudes, and wants and needs of man; that progress is both natural and one of the greatest goods; that economic growth is the solution to all human ills and discontents; and that man is measured by his economic status and not his character.

This is truly a desiccated, simplistic view of man, which does not include in its accounting the human costs of change. And in the service of these goals more frequently than not the rule of law and human rights seem to be casualties to the process. Rawls (1971:60) in his Theory of Justice states two basic principles of justice. The first is that each person is to have an equal right to the most basic liberty comparable with similar liberties for others. And he writes (1971:61):

These principles are to be arranged in a serial order with the first principle prior to the second. This ordering means that a departure from the institutions of equal liberty required by the first principle cannot be justified by, or compensated for, by greater social and economic advantages.

BIBLIOGRAPHY

Appell, G. N.

Appell, G. N.  


Baker, Christopher John  


Rawls, John  
PART ONE
INTRODUCTION
CHAPTER ONE

INTRODUCTION
INTEGRATION OF THE PERIPHERY TO THE CENTER:
PROCESSES AND CONSEQUENCES

G. N. Appell
Brandeis University

Development has resulted in the destruction of traditional rights to land almost everywhere and, as a consequence, created a landless or near-landless peasantry. Marginal cultivators and landless workers are growing in ever increasing numbers throughout the rural regions of the Third World, so that they now form the bulk of the rural poor (Esman 1978). The members of this dispossessed peasantry must sell their labor, and often the labor of their children, at very low rates to survive (Esman 1978:ii). Hopkins, Wallerstein, et al. (1982b:69) argue that this "movement towards part-life-time proletarian household status has entailed, overall, a broadly lower level of living. ... fully subsistence households are, in general, materially better off than partly proletarianized households [those that obtain part of their income from selling their labor power]; and partly proletarianized households are, in general, less well off materially than fully proletarianized households."

Hopkins, Wallerstein, et al. (1982b:69) maintain that the economic status of part-life-time proletarian households is because:

The labor of part-life-time proletarian households everywhere costs capital less than the labor of life-time proletarian households for exactly the same work not only because the costs of reproducing the former are partly (usually largely) borne by others than the 'employers' (caught up in the concept of the 'unlimited supplies of labor' and its effects on real wage-levels), but also because full proletarianization carries with it
political conditions conducive to the growth of workers' organizations, with their upward pressures on wage-levels... real wage-levels... as a result tend always to be higher in the core than in the periphery.

Growing landlessness also contributes, if not leads directly, to political instability (see Russett 1964). Therefore, the processes that lead to landlessness should be of considerable interest not only to those concerned with social justice, or those interested in the processes of modernization, but to a wider audience that is concerned with the political processes and future of the Third World and the relationship of the developed world to it.

In this volume we will be examining the microprocesses occurring at the village level that lead to landlessness. But these form only part of a series of interconnected events that lead to the integration of populations on the periphery into the economic web of local socioeconomic centers and eventually into the whole world system. Thus, to understand the problem of growing landlessness and its relation to this social transformation, we will have to examine the whole range of social forces that impact on local populations as the center gains control of the raw materials, labor, wealth, and ideology of the regions peripheral to it.

In delineating these processes, it is not germane to attempt a clarification of the definitions of landlessness and near-landlessness (see Esman 1978 for example), although McCutcheon's contribution to this volume raises interesting and important questions in this regard. We will instead be focusing on the processes involved in the social transformation of peripheral populations which are as old as the development of the first economic center after the advent of the agricultural revolution some 10,000 or more years ago.

One of the most useful conceptual orientations in this regard is the concept of center, or core, and periphery. There is a relationship in this to central place theory in geography. But this concept has found its most recent expression in dependency theory and in the work of Wallerstein, Hopkins, and their associates in their study of the world system and the impact that economic expansion of the
North Atlantic states has had on the peripheral, Third World countries. But the structure of relationships that they are analyzing are not unique to the world system or to the metropolitan countries and their colonies. Each small state, each region, has its own socioeconomic center which attempts to exercise control over its peripheries and integrate the resources of those peripheral regions into its own political economy. Thus, what is needed in world system research is more consideration of the secondary centers of economic and political expansion that are located in each country and in each region, which also have an impact on their peripheries.

But what is lacking in all theoretical orientations, including world-system theory and dependency theory, is an examination of the microprocesses that occur at the village level as the periphery is integrated into the economic core (see Baker 1984 for a criticism of this with regard to dependency theory). In looking at these microprocesses at the village level, whether as a result of social forces which have been termed "colonization," "internal colonialism," "neocolonialism," or "development," it is important to recognize that these represent continuing, universal processes that are common to all situations wherever an economic center begins to expand and bring into its orbit ever increasing sections of the local populations on the peripheries. It is my contention, as I will show by a contemporary example from the State of Maine, U.S.A., that these processes are the same in the relationship of all economic cores to their peripheries regardless of time or place or level of development of the periphery.

Therefore, the goal of this monograph is not only to understand the processes which lead to the growth of a landless peasantry and the consequences in order to mitigate these deleterious processes; but it is also to produce a more developed theory of core and periphery relations with testable hypotheses by looking at the village-level microprocesses. This is important as the economic, social, and political processes at work at the centers of economic growth have been well studied by economists, political scientists, and sociologists. But the minute processes at the village level whereby the periphery is linked with the center, the processes whereby relatively independent communities are brought under the control of the center,
are less well known, less well studied. We believe that this book will make a major contribution towards understanding these processes.

METHODS OF OBTAINING CONTROL OVER THE PERIPHERY

Physical and Psychological Coercion

The range of methods whereby the core develops control over the resources of the periphery can vary from the use of overwhelming force to more subtle methods. For example, many of the indigenous occupants of the peripheries in the Amazon Basin have been simply eliminated by the superior weaponry and technology of expanding national interests. In parts of Indonesia the tribal minorities occupying the peripheries are removed by military force to resettlement centers to free up the natural and labor resources of the peripheries for exploitation by the center (see Appell 1985b, 1985c; Appell-Warren 1985; and Appell on the Bulusu' in this volume).

In nation states where the occupants of the peripheries have greater access to the national legal system and to the political processes, the integration of the peripheries is more subtle. Let us briefly look at an example from a rural area in the State of Maine.

The region is dependent on small-scale, part-time farming, lumbering, small-scale manufacturing, and small-scale outdoor recreation, such as providing guides for hunters and fishermen. More recently there has developed a large ski and golf resort along with associated businesses that cater primarily to those from the various urban centers who are looking for leisure recreation. Individuals from the center have also been moving into the region to occupy skilled jobs, such as carpentry, etc., supervisory jobs, such as superintendent of schools, manager of wood products companies, or to live off of income invested in the economic center. Institutions from the core have also funded institutions in the periphery, frequently sending their own personnel to run them, as in various rural Christian missions.
Recently a project was initiated, entitled "Project PRIDE," for purposes of economic improvement. It was funded from socioeconomic centers such as the state Department of Education and foundations located in urban areas of the state. And the project was able to enlist the interest of the recreation industry and related businesses to support its activities. Many of these were having a hard time finding local labor. The ultimate source of this project was two individuals in the local regional school system who were originally from outside the region and apparently concerned about their own future employment.

It was argued by the initiators of the project that the traditional sources of employment for the local population would not be available in the future. The goals of Project PRIDE were thus explicitly to prepare the young people for jobs in the service sector, which, translated into the local economic situation, meant low paying jobs servicing the out-of-state tourists at the local ski and golf resort. In announcing this project the director wrote that the PRIDE Task Force had also identified low self-esteem as a local and economic problem. "Low self-esteem impedes achievement in school and on the job. To be successful our students will require the abilities to adapt to change and to learn new skills. The PRIDE Task Force has identified the skills and attitudes necessary to be a successful person, and a contributing, productive member of the community" (Project PRIDE n.d.:1).

Yet no survey had been made of the actual level of self-esteem. This was but one aspect of the application of stereotypes by those who had moved in from economic centers to categorize the local people and differentiate themselves as relatively sophisticated members of the economic core. Thus, many of the representatives from urban centers, such as clergy, teachers, part-time summer residents, and others who have found jobs in the region, typically complain that the local inhabitants have the highest incest rate in the country, that they have major problems of alcoholism, that they are ill housed, that they are sexually profligate producing far too many teenage pregnancies, that they are uncultured and need to be taught about good music, good theater, and good books.
The implication in the announcement of Project PRIDE was not only were the local people low in self-esteem but that they were not successful and were unable to contribute to their communities. This created a lot of hostility among that sector of the population that had been born and raised in the region. These local residents have been under increasing social pressure from the center over the last three or four decades. Individuals from the center with a surplus of cash have been buying up the farms and houses of the local population for summer retreats or for a place to live in retirement, while more and more of the local population have been forced to find housing in trailer parks.

This example illustrates one of the common threads in all attempts at bringing the periphery under greater control of the center for purposes of obtaining the resources there. It involves the use of dehumanization and attacks on self-esteem to achieve these ends, or what I have termed "psychosocial deprivation and devaluation." But also in those instances where force is used to deprive a population of its resources, dehumanization provides the justification for action. However, in this book we will not be considering in depth the use of naked force to obtain integration, although the contribution of Appell on the Bulusu' is relevant. But whatever the methods used, force or argument, attacks on self-esteem and dehumanization of the rural population is a universal process.

PSYCHOSOCIAL DEPRIVATION AND DEVALUATION IN SOCIAL CHANGE

... labor is the technical term used for human beings, in so far as they are not employers but employed; it follows that henceforth the organization of labor would change concurrently with the organization of the market system. But as the organization of labor is only another word for the forms of life of the common people, this means that the development of the market system would be accompanied by a change in the organization of society itself. All along the line, human society had
become an accessory of the economic system [Polanyi 1957:75 (orig. 1944)].

When members of the economic centers contact members of the periphery, they commonly treat such populations in dehumanizing terms, attack their personal worth and self-esteem, and either deny or ignore their social identity by not accepting their cultural and ethnic status. We will examine here the nature of the devaluation and deprivation of self-worth, leaving to later the problems relating to recognition of ethnic identities.

The Character of Dehumanization

One of the persistent but covert themes not only in the processes of modernization but also in social science theory itself is that of dehumanization. It is not a process solely characteristic of the contact of indigenous societies with Western society, or its derivatives. It appears to be a universal human process whenever a society wants to take control of the labor or natural resources of another society. (For example, see the chapters here on the Rungus and the Bulusu'.) Thus, even today change agents from the economic centers of various countries still denigrate and belittle the members of a population and their sociocultural system to achieve their goals of change. Usually the very act of development itself is phrased in terms that implicitly, if not explicitly, devalue the culture of the indigenous population and its members (see Appell 1975a, 1975b, 1975c, 1980). What is surprising is that dehumanization still finds expression in the social sciences in various forms and in the attitudes of Westernized indigenous elites. It is important to define the nature of dehumanization before we proceed.

Bernard, Ottenberg, and Redl (1971:102) define "dehumanization" as a defense against painful and overwhelming emotions that entails a decrease in a person's sense of his own individuality and in his perception of the humanness of others. They view dehumanization as "not a wholly new mental mechanism but rather a composite psychological defense which draws selectively on other well known defenses, including unconscious denial, repression, depersonalization, isolation of affect, and compartmentalization . . ." (1971:103).
There are both adaptive and maladaptive functions of dehumanization. The surgeon uses a form of dehumanization so that he can perform without emotional involvement. Bernard and colleagues divide maladaptive dehumanization into two processes: self-directed dehumanization, which relates to self-image and indicates a diminution of an individual's sense of his own humanness; and object-directed dehumanization which refers to perceiving others as lacking in those attributes that are considered to be most human. The important point is that these two forms are mutually reinforcing.

Bernard and colleagues further divide object-directed dehumanization into two forms, partial and complete (1971:105):

Partial dehumanization includes the misperceiving of members of "out-groups," en masse, as subhuman, bad human, or superhuman; as such, it is related to the psychodynamics of group prejudice. It protects the individual from the guilt and shame he would otherwise feel from primitive or antisocial attitudes, impulses, and actions that he directs—or allows others to direct—toward those he manages to perceive in these categories: if they are subhumans they have not yet reached full human status on the evolutionary ladder and, therefore, do not merit being treated as human; if they are bad humans, their maltreatment is justified since their defects in human qualities are their own fault... The main conscious emotional concomitants... are hostility and fear.

The more complete form of object-directed dehumanization "entails a perception of other people as nonhumans—as statistics, commodities, or interchangeable pieces in a vast 'numbers game.' Its predominant emotional tone is that of indifference... together with a sense of
noninvolvement in the actual or foreseeable vicissitudes of others” (Bernard, Ottenberg, and Redl 1971:105-6).

Dehumanization has been a dominant theme in Western tradition with the application of the metaphor of the machine to humans and human activities and the use of natural science models in the social sciences (Randall 1976, Rifkin 1980). And dehumanization has deep historical roots in the response of modern societies to native peoples (Appell 1975b).

The historical literature on the contact of modern, expanding societies, both capitalist and socialist, is full of pejorative terms in describing indigenous peoples. They are "savage," "dirty," "primitive," "backward," "ignorant," and so on. "They live like animals," is one popular phrase. This labeling process is a clear warning that the potential victims are being denied their individuality and their community with other men (see Kelman 1973, Kuper 1981:25-92). And "all members of the group are guilty solely by virtue of their membership in it" (Kuper 1981:86). Such discourse in which a group is talked about in non-human terms is essentially a danger signal that justifications are being manufactured for treating others as one would treat dangerous animals (Legum referred to in Kuper 1981:85).

While dehumanization is always deeply involved in the expansion of economic and political centers, anthropologists, usually sensitive to the stereotyping of indigenous peoples, have not generally followed up the implications of such discourse. Such discourse is preparatory to forcibly dispossessioning an indigenous people of their material and labor resources. This provides the justification for actions which would not be sanctioned if the target population were really "like us." Dehumanization discourse puts the target population beyond the normal moral restraints in dealing with others.

Dehumanizing discourse has many other psychological functions as well. It has ego functions in supporting one's claim to superiority. Another function is to resolve the cognitive confusion that arises in viewing the social behavior, culture, and cultural ecology of another group. "Things" are out of place to the outsider. Common symbol vehicles may be used to indicate different meanings. As
Douglas (1966) has pointed out, when matter is out of place it is referred to as "dirty." And this is one of the paramount reasons that the members of indigenous societies are almost universally referred to as "dirty." The organization of their material world is different from that of the outsider, and cognitively threatening.

Dehumanizing discourse in putting the victims beyond one's moral community also serves deeper psychological functions for the victimizer. First, it permits the victimizer to usurp resources without guilt, as well as without conflicts from cognitive discontinuity. It also involves the projection of deep psychological impulses. Commonly, members of the center refer to the members of the peripheries as "lazy," "drunkards," "immoral," "dirty," "savages," and the like (e.g. Alatas 1977). While this is an expression of the victimizers' anxieties in dealing with people who are not members of their moral community, it also represents the projection on others of the victimizers' deep impulses that are constrained by their cultural rules. Those who are beyond the cultural rules of the victimizers' society must, in fact, be savages. They represent the more "savage" unconscious desires and impulses of the members of the center. Only by bringing these peripheral savages into the cultural rules of the center can they be saved from the antisocial impulses attributed to them, and thus the members of the center are saved from themselves.

Dehumanization processes may also include a cloud of officially sanctioned semantics to clothe the use of immoral force and to hide the true purposes of government action. Such terms as "re-education centers," "resettlement," and the like may be used (see Kelman 1973:48).

In addition to dehumanizing labeling and a sanctioned semantics of manipulation, there is frequently a theory to rationalize destructive actions, such as "progress," or "evolution." Kuper writes (1981:88-89), "Colonization was linked to evolution, the conquered peoples being conceived as lower in the scale of evolution with rights and capacities by no means comparable to those of their conquerors."

Dehumanization of the periphery is thus in the service of the economic interests of the center and the resolution of the psychological conflicts involved in dominating a
peripheral population. These processes of dehumanization are always present in every attempt at modernization. In this monograph these processes are detailed by Appell in his analysis of modernization among the Rungus and the Bulusu.

**Dehumanization and Self-Esteem**

Another function of dehumanizing discourse is to erode the self-esteem of the target population in order to make control of it easier. These threats to self-esteem are part of the whole process of deprivation of personal worth and the devaluation of social and ethnic identity that occurs when a population is confronted with development or modernization. And the acceptance of the dehumanizing stereotypes of self-worth by the target population then makes it much easier for the government and change agents to manipulate that population and bend it to their will.

In situations where force is inappropriate and where explicit dehumanization through negative stereotypes is discouraged, such as in relations between centers and peripheries in the United States, attacks on self-esteem are, nevertheless, an integral part of attempts at integration. Thus, whether force is used or not, the processes whereby the center or representatives of the center get control of the resources of the peripheries, both labor and material, have a common theme, irrespective of time or place, as the example from rural Maine illustrates.

**Additional Functions of Psychosocial Deprivation and Devaluation**

Psychosocial deprivation and devaluation serve many other functions. They create jobs for those of the emerging elites in the center, who are employed to go out and teach the new cultural traits and administer the peripheral populations. But many of the new cultural traits are of less value for survival in the rural environment than those that the local population have already devised to deal with their ecosystem (see Appell 1975a, n.d.c). Therefore, what other reasons might there be for this structure of interaction between the center and the periphery in which the peripheral population is regarded as so degraded and so useless? Why are there not fewer self-imposed culture bearers and
more cultural preservers recording what is of importance before it is lost?

Perhaps the answer lies now in a universal culture of development and progress that predetermines these relations. But there may also be deeper social functions of the peripherization process. The members of the center live in situations of rapid social change. Their social positions are frequently unclear because of this, under threat, and constantly needing redefinition as social circumstances change. By defining themselves vis-à-vis the periphery as being superior, the members of the center are able to justify their social positions, creating a more stable and stronger social identity. Particularly for those new to the center, dehumanizing the inhabitants in the peripheries help establish their membership in the center.2

The Return of Dehumanization

Dehumanization of victims has the consequence of dehumanizing the victimizer (see Kelman 1973:50-52). The victimizer loses his sense of community and identity with others. He becomes increasingly brutalized to "the extent that he is dehumanized, and loses the capacity to act as a moral being" (Kelman 1973:51). This is one of the unexpected and unpredicted consequences of modernization. And it suggests that wise planning for development and modernization, if the society is to function well, should include explicit policies and efforts to prevent any attempts at the psychosocial deprivation and devalution of any segment of the country's population.

DEVELOPMENTAL PROCESSES IN THE INTEGRATION OF THE PERIPHERY TO THE CORE

The speed at which peripheries are integrated into the economic sphere of sociopolitical centers depends on the amount of force used. Thus, the various stages of integration listed below can be short-circuited with force. This list of stages is not necessarily in chronological order so much as in order of development and loss of independence.
1. Travelers and traders arrive in the periphery. Epidemics of contagious diseases such as measles, tuberculosis, smallpox, mumps, etc., sweep through the indigenous population, resulting in a major population decline. Cohorts of children are particularly decimated. But this does not mean that the indigenous group was previously completely isolated. Epidemics may have periodically swept through the group as a result of contact with a mediating indigenous group who were in earlier contact with traders and travelers. And trade goods may have reached the group previously through mediating indigenous groups.

2. The government makes itself known and attempts to develop a monopoly over the use of force in the region. This involves the appointment of local level political leaders, such as chiefs or headmen, to represent the government interests. Either existing local leaders are selected for this, or the government picks its representatives from outside the indigenous political hierarchy. In the latter case the indigenous leaders are undermined, and this can create factions and conflict. In both cases it is likely that the newly appointed government representatives will have greater power than under the indigenous structure (see Glazier in this volume).

3. The government next attempts a census of the population and imposes a tax, creating a demand for money in a situation where there is only a small elasticity of money supply.

4. Dehumanizing labels are used to refer to the local populations by members of government and members of the economic and sociopolitical core. Terms such as "primitive," "savage," "dirty," "backward," "lazy," "dumb," "animals," make their appearance. A semantics of manipulation also develops in government circles as policy is designed for economic development and obtaining control over indigenous resources for the benefit of the core. Thus, government policy is phrased in a sanitized semantics to disguise any authoritarian or illegal procedures used in manipulating and gaining control over the local populations. This semantics itself adds to the processes of dehumaniza-
5. For purposes of government and increasing commerce, transportation and communication improvements are made, starting with improved paths and trails to commercial centers. Eventually roads are built into the peripheral areas, aircraft landing fields are constructed, small ports are established, etc. This includes the installation of radio communication or telephone connections with government posts and the developing economic centers in the peripheries.

These improvements in communications and travel provide better security for travelers and the movement of goods. It also facilitates the movement of labor from the hinterland to plantations and other centers of economic activities.

6. As the peripheral community is integrated into a national network of communication and trade, epidemics every decade or so continue. The loss of time and energy to these diseases may cause sufficient biosocial incapacity so that the community is unable to maintain its cultural ecology.

7. There is a development of small shops servicing the local population. The goods available are, by and large, consumables such as sugar, flour, candy, soft drinks, cloth, etc. Thus, excess cash or agricultural products rather than being converted into assets as previously are used to purchase consumables. New forms of property are also introduced which depreciate, such as radios, clocks, etc. As a result there is less surplus to invest into the traditional forms of property, which may have been nondepreciable, and less motivation to do so. As a consequence, the old forms of investment drop in value.

8. As the old forms of property drop in value, there is a loss of mechanisms whereby agricultural surpluses may
be saved and invested. Each society has various methods of investing its surplus, which serves as a buffer against times of trouble. However, as a cash economy develops with alternative uses for cash and surpluses, there is a lack of interest in investing in the old forms of property, such as beads, gongs, headdresses, brassware, weaving, various forms of primitive "money," etc., particularly since these forms of property are losing their value. In a real sense the community becomes poorer through a deflation of property values. At the same time the methods of savings used in the metropolitan community are not in place. There are no banks at the village level (e.g. Ploeg 1985a:268). There are no postal savings, etc. In Canada to deal with this problem at one point a flying bank was instituted to service remote northern communities.

9. Members of the local population may become indebted to shopkeepers in order to purchase consumer goods. Shopkeepers may in fact encourage this indebtedness so that they may gain control over the land, the labor, and sale of the produce of their debtors (see Appell 1978:144-45; Baks in this volume).

10. Government development planning for the periphery increases. The administration is frequently ambivalent on how to manage local ethnicity, whether to recognize it or override it as a hindrance to nation-building. But whatever the case the administration continues to view the local populations in stereotypic and dehumanized terms. Goals of the planning include plans to make the members of the periphery less group oriented and more individualistic. This refers to the belief that tradition impedes development. The papers in this volume of Dove, Eder, and Appell illustrate the falseness of this assumption.

Also prevalent is the belief that the members of the periphery are not true economic maximizers, that they have to be taught to be economic rationalizers. This is not in fact the case but only the perception of the members of the center who are ill-informed about the context of decision-making at the village level, including the parameters of the ecosystem (see the
various contributors to Bartlett 1980 who discuss this issue).

11. Government departments intrude into village life. Medical services are instituted to deal with the health needs created by integration. And this results in population increase, putting pressure on the resources of the region.

12. At some point in the integration of the peripheries to the core, missionaries appear on the scene. The ideology of the peripheral group is a threat to the core, and the function of missionaries is to help change this ideology to match that of the core. Their work also results in creating a more commoditized and monetized vision of the world. For example, at the simplest level they begin to pass the collection plate at services. Like the representatives of government, missionaries also view the inhabitants of the peripheries as not fully optimizing, not realizing that subsistence farmers and peasants are universally optimizing individuals but who are basing their decisions on different values and different risks.

13. Psychosocial deprivation and devaluation increases in intensity. Indigenous clothing and local handicrafts are ridiculed. In some instances the local population is forbidden to wear their traditional clothing (see Appell 1975a, 1985b, 1985c; Appell-Warren 1985). The local language is disparaged and discouraged. For example, the speech of hunting and gathering groups on the peripheries may be referred to as sounding like birds. It may be forbidden to use the local language in schools, and pupils may be punished for doing so (see Ashcroft 1978).

14. The increase in the cash economy and the conversion to Christianity, or Islam, produce social differentiation within the village so that interest groups and factions form opposed to each other in the maneuvering for power, prestige, and property. Frequently, religion becomes the focus of conflict between parent and child (e.g. Young 1987).
15. The meaning of work and life is slowly eroded by government pressures on the peripheral population to change the basis of their economizing decisions from their own values to the values of the center; by the pressures of missionaries to have their symbolic interpretation of the social order accepted; and by the denigration of the traditional culture by both government personnel and missionaries. Work in indigenous societies is supported by a complex web of ritual and religious meanings which provide motivations for it. These also provide meaning to life. With the breakdown of the traditional ways, work no longer has meaning other than its cash value. Labor power is exchanged for money rather than exchanged for more fundamental, religious rewards in response to existential concerns (see Marglin 1984:43; Appell 1985d).

16. At some point in the continuum of integration of the periphery into the core a revitalization movement (Wallace 1956) usually arises. These movements represent "creative efforts to repair the fabric of societies rent by forces over which the indigenous peoples had little or no control" (Adas 1979:xxvii). Thus, in the face of economic, military, or cultural domination they are "attempts to create viable new ideologies, institutions, and social bonds in situations where long-standing world views and customary relationships were eroded ..." (Adas 1979:xix). The form and content of these movements have differed greatly, some involving violence and organized resistance to the forces from the center while others have stressed peaceful reform or passive withdrawal (Adas 1979:xviii). Such movements include types that have been called "nativistic," "millennial," "messianic," "revivalistic," etc.

17. The government administrative machinery develops and intrudes further into indigenous life but without sufficient bureaucratic controls or feedback. This fosters the development of predatory traders, corrupt government personnel, and various schemes to defraud local individuals of their rights and property (see Appell 1985a, 1985b; Appell-Warren 1985). Alliances between government personnel and traders may develop to exploit opportunities for illegal gains with respect to services provided the local population or to gain
control over local resources. The failure of administrative feedback and controls fosters corruption (see Glazier in this volume) and may result in anti-government activity (see Appell 1966).

18. The use of money increases and has a higher transaction value than its face value due to its scarcity. More and more activities become commoditized and monetized, particularly labor, land, and wealth transactions. This represents further movement along the continuum, which Wolf (1969:279) describes:

Where previously market behavior had been subsidiary to the existential problems of subsistence, now existence and its problems became subsidiary to marketing behavior.

19. The national legal system is imposed on the village for the major crimes and for disputes unresolvable at the village level. This results in a plural jural system composed of the indigenous and the imposed, which permits greater differentiation and the development of factions within the village through the use and manipulation of the two jural systems for personal ends.

20. Inefficient markets develop with marked swings in prices of commodities. For example, right after harvest the price obtained for grain is unreasonably low. When there is a shortage just before next harvest and individuals have to purchase grain to cover their shortfall, the price of grain rises precipitously. The appearance of inefficient markets can drain the peasant community of many of its assets because of the vagaries of agricultural yields.

21. The substitution of goods manufactured at the center for local manufactured products, many but not all of which were the product of household labor, accelerates. For example, locally woven cloth is replaced by cloth made at various economic centers. Under-employment at the village level may develop as manufactured products substitute for local products.
22. Wage labor begins. Cash is needed to meet tax payments and for other goods that have become available through traders and shops. The opportunities for wage labor may be at a considerable distance from the home village, necessitating the migration of labor for part of the year or for several years. This causes family instability and various other social problems. Such wage labor is frequently on plantations (see Crump in this volume). The government, in addition to taxation, may stimulate the growth of a labor force for plantations by discouraging agricultural entrepreneurship in the peripheral populations (see Glazier in this volume).

Other forms of wage labor may also become available such as working as laborers in expeditions searching for oil or minerals. The opening up of mines may also provide an opportunity for employment.

23. The shift continues from subsistence agriculture with surplus invested in material or social assets to a cash crop agriculture with surplus invested in personal consumables. Cash cropping brings with it a dependence on a distant market and on information. The farmer needs information about that market and changes in it, as well as agricultural information on managing new crops, on fertilizers, the handling of new pests, etc. Yet one of the significant characteristics of the periphery is that information is scarce and not readily available (e.g. Ploeg 1984). As a result the members of the periphery are at a disadvantage in responding to economic changes and opportunities and are, therefore, more vulnerable to exploitation by representatives from the center or by those who have clear channels of information from the center.

24. The government ignores the indigenous system of land tenure, or attempts to destroy it, and imposes its own system on the local cultural ecology. One of the founding myths of the capitalistic form of integration is that of "primitive communism." Local forms of land tenure and ownership are destroyed or ignored and change is instituted on the unsupported charge that the population is "communistic," or "communal," with the goal being to introduce individualism and private
ownership for purposes of development (see Appell 1985d; Appell’s article on the Rungus in this volume; Glazier in this volume; Dove 1985). It is to the advantage of the government to ignore the indigenous system of property ownership in order to gain control of the population’s resources. And this process occurs even in those cases in which private ownership and enterprise are a critical part of the indigenous sociocultural system (see the chapter on the Rungus in this volume).

25. The government also imposes its own system of community settlement, which is inefficient in terms of operating the indigenous cultural ecology, adding to the costs of production (see the situation among the Bulusu in this volume).

26. With the breakup of indigenous settlement patterns and the destruction of the native system of land tenure, the opportunity is created for capital to move from the core to the periphery to purchase land or start plantations, taking advantage of the local labor.

27. With growing individualization of economic activities and land tenure, rural social stratification increases (see Glazier in this volume). Furthermore, the government system of land tenure, in which individuals rather than corporate groups hold title to land, facilitates the land being used as security for loans. Loans are incurred to cover tax assessments, the purchase of consumer goods, to cover periods of bad harvest, and to purchase agricultural inputs to increase productivity. If the environment is unpredictable, it may be impossible to repay loans and local title to lands shifts to the moneylenders (see Baks’ article in this volume).

28. The symbolic expression of the village social order is attacked by both missionary and government personnel. The argument frequently is that the symbolic activities and the indigenous system of redistribution is economically wasteful (see Appell for an example of this among the Bulusu). This approach does not consider the latent functions of such activities. Every social system develops its own symbolic elaborations (see Homans 1950), which serve a variety of critical functions other
than meeting solely economic needs; and these other functions are just as important to human life. On the other hand, the symbolic activities of the members of the economic center are not viewed as wasteful but necessary to be a fully functioning member of society. They do not see that these are just as "irrational" and have their own function for redistribution and symbolic expression (e.g. Appell 1985a, 1985b; Appell-Warren 1985; Tibbles 1957).

29. The new political figures and power brokers that have been arising to mediate between the local population and the outside consolidate their control at the expense of traditional leaders. They control and broker the services and resources offered by the government and other representatives from the core to the local population as well as the labor services of the local population to the center. The local system of redistribution and protection against risks begins to break down and starts to reorganize around these new power figures (see Crump's paper in this volume).

30. Plantation owners may oppose the further development of cash cropping by the indigenous populations, which would enable them to earn money in ways other than by working on expatriate-owned plantations. As a result, there is a delay in developing local extension support for cash crops, and marketing facilities are not created (see Ploeg 1985a:225). The consequence is that there is little knowledge among the local populations of the markets for their produce or labor (see Ploeg 1985a:262-64).

31. Schooling is begun at some point. Its goal is usually to educate the children for skilled work in government administration. There is no effort to focus the education on an agricultural future (e.g. Ploeg 1985a:256). And the family's labor pool is reduced.

32. The monetization of agricultural transactions rapidly expands.

33. The breakdown of traditional redistributive and maintenance mechanisms within the community is almost complete. Under the traditional form of organization
there were redistributive mechanisms that provided support to those in need and which protected the community against health and agricultural risks. Also, under the traditional form of social order, there were maintenance mechanisms that controlled behavior by various sanctions. With the breakup of the traditional settlement pattern, with new forms of property and systems of ownership growing, with the loss of the traditional system of land tenure, with the breakdown of traditional sanctions for behavior, all of which is part of the whole pattern of growing individualism that disarticulates the individual from the community, there is growing anomie, family instability, and antisocial activities.

34. As the traditional support mechanisms break down, the government develops new institutions such as cooperative societies and credit agencies to help develop community integration so that the community will be more responsive to development plans.

35. As the depersonalization of transactions and relationships grows, contractual forms of relationships increase.

36. Production of cash crops increases at the expense of food production. This brings about an increasing dependency on purchased foods (e.g. Ploeg 1985b:314), which may leave the community open to starvation if there is a drop in prices of cash crops (e.g Prentice 1969).

37. The commoditization of land transactions increases. Land is first put up as security for loans to tide a family over a bad agricultural year or for agricultural inputs. Eventually a market for the sale and purchase of land develops. However, with excess cash in the economy accumulating in the urban centers, this can then be invested in the rural areas, with the growing loss of local control over land.

The individualization of land tenure and the creation of a market for land sales are crucial steps in the processes whereby peripheral populations are separated from their ownership of land. In many
cultural areas in the Insular Southeast Asian region, only those residing in a village may use the land there under traditional law. This suggests a useful model for governments concerned with a growing landless peasantry. They can mitigate the loss of local ownership of land by requiring that any sale of land be made only to those resident in the village where the land lies. This can slow the flood of excess capital from the centers to the peripheries for investment in land under absentee ownership.

38. This whole period of change is characterized by the intrusion of the predatory aspects of the larger economic system into the local economic system and the disruption of it. And at the same time the full structure of the economic system that helps create wealth, such as savings, legitimate lending institutions, information services, etc., are not introduced nor are support institutions introduced. By support institutions I mean not only those that help the individual weather difficulties, such as medical services, welfare services, etc., but also those services that help the individual compete more appropriately, such as in-depth agricultural services, education, etc. When eventually these "modern" systems of support and educational services are instituted in the peripheries, they are of lower quality than those provided to the populations in the economic center, which puts the peripheries at a further disadvantage.

39. Agrobusiness enterprises grow in size to take advantage of the labor supply.

40. Throughout this period of change, policy formation is made at the center with little knowledge of the needs or wants of the local populations or little knowledge of the appropriateness of plans to the local conditions (see Alam and Glazier in this volume). As the local level is not integrated into the policy making mechanisms, not only are the plans inappropriate, but those at the local level also know very little about the processes that are at work to integrate them into the center, and therefore they are unable to respond appropriately (see Ploeg 1985a:260).
41. Landlessness grows, but the opportunities for wage labor are restricted primarily to males. This results in the underemployment of women and children who previously were contributing to the local economy through work in the fields. This exacerbates the decline of the viability of the local economy. And it is associated with growing social stratification and the potentiality of class conflict. As Torry writes (1986a:31): "all things considered, the more arable land a man is forced to mortgage or sell at a loss, the greater the peril his wife and daughters face owing to a reduction in the need for their labor ..."

42. Temporary and permanent emigration of population from the periphery begins. Young people move to the center for education. More ecological niches exist in the urban centers, and people move to the cities. This is not only because of the employment opportunities there, which no longer exist in the periphery, but also because by being there they are closer to the pulse of change and opportunity. Others, who lack opportunity and land in the periphery and do not migrate to the cities, swell the landless peasantry that works as migrant agricultural labor.

43. Government increases its efforts in welfare ventures to deal with the economic and social deprivation in the periphery. This becomes a form of redistribution of surplus from the core to the periphery.

44. Tourism and recreation industries develop in the periphery. The periphery begins to attract the affluent from the economic centers for purposes of recreation, retirement, and vacations. It also attracts those who find that the social conditions of the center are not congruent with their interests and need for quality of life.

The Return of the Repressed

With modern transportation, the technology and skills of the center can be rapidly dispersed to the periphery. Thus, capital moves from the center to establish manufacturing plants in third and fourth order centers located out in the peripheries where the cost of labor power is lower.
Many products are now manufactured in the periphery that were originally manufactured in the center and which provided employment in the center. This raises unemployment in the center. The original repressed, that is the populations in the peripheries, have returned to cause disintegration in the center, and the center starts to retaliate by setting import quotas.

ADAPTATION OVERLOAD AND THE DESTRUCTION OF CULTURAL DEFENSE MECHANISMS

As the center extends its economic and political control over the population and resources in the peripheries, the population there is faced with major changes in its settlement patterns, its economics, its property systems, its organization of work, its ideology, and even its family organization (see Appell n.d.a for examples of these). This then creates demands for adaptation, and if the changes are too rapid, it may create an adaptation overload. At the same time the indigenous support systems are eroded and the cultural defense mechanisms for protecting the population against disease in their environment are destroyed. As a result, there is increasing psychological, physiological, and behavioral impairment in the population in the periphery.

For example, changes in the cultural ecology of the population, such as a shift from cultivating dry rice to wet rice, exposes the population to a new set of pathogens and health risks for which cultural defense mechanisms may not have yet been devised. And previous cultural defense mechanisms against disease may be eroded by government intervention. Thus, among the Rungus of Sabah, Malaysia, the government decreed that pigs should be kept in pens. This removed a source of excrement disposal from under and around the longhouse as well as eliminated the process whereby coconut shells and anything that might catch water were being turned over and disturbed so that malaria carrying mosquitoes had fewer breeding opportunities near the settlements.

Impaired self-esteem has been associated with increased ill health. Consequently, as the peripheral population is
subjected to dehumanization and attacks on its self-esteem, not only is its ability to cope eroded but also its health status as well. Associated with these threats to self-esteem, acts of dehumanization, and loss of a functioning cultural system, as the population is being integrated into the core, are disturbances of social identity, which again are found associated with health impairments.

Social stress depresses the response of the immune system. Consequently, the social stress that arises as a result of dehumanization and the demands for socioeconomic change lowers the ability of the physiological system to respond to disease, and we can expect the incidence of disease among the peripheral population to rise on this account alone during periods of rapid social change.

The capacity to manage social stress, to respond to demands for adaptation, and to resist disease is related not only to a population's level of self-esteem but also to the vitality of its support systems. These support systems are found in the various symbolic activities, in the network of kin, in the structure of friendship, in the willingness of neighbors to help. Yet integration to the center uniformly results in the destruction of settlement patterns, the narrowing of kin obligations, the breakup of neighbor and friend relations. As a result, the community support mechanisms are eroded at a time when they are most needed and before other support mechanisms always found in the center are made available.

The integration of the periphery to the core also creates role conflict and ambiguity as new roles are learned and old roles changed and eroded. But role conflict and ambiguity have also been found associated with various health impairments.

In addition to adding to the adaptation load of a population, change contributes to a sense of psychological loss as old institutions and beliefs change and disappear. This psychological loss has been found to be analogous to the sense of psychological loss experienced in the death of a significant other (see Appell 1980, n.d.a). Using this analogy, one would expect to find, during stages of rapid change and integration into the core, periods of hostility and aggression interspersed with periods of apathy as well.
as various forms of health impairment, until the trajectory of social bereavement is worked through.

These symptoms of social bereavement, along with psychosocial deprivation and devaluation and role conflict and ambiguity, form a characteristic set of phenomena that accompany rapid social change. I have termed this the "social separation syndrome" (Appell 1980). In certain cases, unless it is properly managed, the population may never regain its psychosocial health and will either die out or linger as a rural depressed population that cannot adapt to any challenge, exhibiting various diseases of maladaptation.

Thus, the increased adaptation load on the population has a spiraling effect. It creates health impairments, which cannot be successfully coped with during the breakdown of local support and maintenance institutions. This in turn adds to the adaptation load and precipitates ever increasing maladaptation, which adversely affects succeeding generations. The next generation can become psychobiologically impaired as a result of the demand overload on the members of the parental generation, who cannot adequately parent their children at these times.

The association of health impairments, psychological, behavioral, and physiological, with adaptation overload suggests a hypothesis that explains many of the observations made about populations on the periphery. These populations during the periods that they are being integrated into the core will express greater apathy, alternating at times with greater hostility, higher rates of antisocial acts, greater family instability, higher rates of disease and disability, greater impairment in the ability to work than at times of little social change. And this hypothesis would also apply to populations living in internal peripheries, which may be near the center but which have been passed by in previous phases of expansion.

The more the conditions of integration are dictated by the members of the core, the greater will be the social dislocations and symptoms of maladaptation in the peripheral populations. The greater the control over the processes of integration that the members of the periphery have, on the other hand, and if given sufficient time to adapt to change, the more appropriate will be the response of the periphery
to the challenge. Development will then be endogenously driven rather than exogenously. And as a result it will be less stressful, more successful, and permanent.7

CONTRIBUTIONS TO THIS VOLUME

McCutcheon analyzes the development of land scarcity on Palau as a result of various factors, including a series of colonial administrations that never understood the indigenous system of land tenure. There are now a large number of individuals with no title to land. Yet because of the institution in which usufruct is freely shared, the Paluans are not land poor. However, this may not be so in the future.

Nowak in her study of the Btsisi in Peninsular Malaysia first reviews the former British colonial policy on reservations and then the present Malaysian government policy on resettling of the Btsisi and other Orang Asli groups. As a result of economic development, particularly plantations, land is scarce for these peoples. They have been moved to reserves, where in the case of the Btsisi there is both a health problem and a scarcity of fresh water. One of the basic goals of the government is to convert these people to Islam and teach them Malay culture. The future for the Btsisi is not very bright as there is increasing land scarcity, particularly for the next generation, and yet there is some question as to what other forms of work will be available.

Appell in his article analyzes the consequences of development and social change among Rungus of Sabah, Malaysia. He describes how development policies, ignoring the Rungus land tenure system, have set in motion changes that have produced land scarcity. And development projects have been largely unsuccessful because they were designed without understanding the complex human ecology of the Rungus domestic family system. This is based on a complex agroecology that provided many types of crops and many pathways for subsistence and income so that the failure of any one part would not jeopardize a family's livelihood. Monocropping, on the other hand, is vulnerable to ecological disaster and price fluctuations outside Rungus control.
However, the growing scarcity of land has not produced major social dislocations because there have been opportunities for wage labor in government jobs and in the private sector and because there is an educational system which facilitates socioeconomic mobility through preparing the students for positions of significance and power in the government hierarchy or in private enterprise. On the other hand, if there is an economic recession and these opportunities contract, then the scarcity of land may become a critical issue.

Dove describes an important example of endogenous development in his study of the historical modifications of Kantu' Dayak land tenure system. The Kantu' are a people of West Kalimantan, Indonesia. Dove shows how the traditional system of land tenure was changed and modified by the Kantu' themselves to respond to social developments and growing scarcity of land. During the time of inter-ethnic warfare, the Kantu' cut primary forest for their swiddens. It was more economical given the contingencies of warfare and provided greater safety. With peace, however, secondary forest became preferred, as it produced a greater yield. Also the planting of rubber tree groves on old swiddens began. As a result of this, and contact with the nearby Iban, the land tenure system of the Kantu' changed from one where the cutting of primary forest did not create any permanent usufruct rights to one in which permanent usufruct rights were created and owned by the household that cut the primary forest. When a household moved to another village, the secondary forest over which it owned usufruct rights reverted to the village reserve, and any resident could cut the forest and establish permanent usufruct rights. But then with growing population pressure, this customary law (adat), again changed. Now the land in the village reserve became actively administered by the village headman so that resident households were given turns in cultivating the secondary forest abandoned by those leaving the village. As the processes of integration continued, still further developments arose. Dove's contribution is an important one in that he shows how a society can change on its own to challenges and respond effectively when it has the time and is not being forced to react to policies determined by the economic centers.
Appell describes the processes whereby the Bulusu' of East Kalimantan, Indonesia, have been removed from their traditional village areas to resettlement sites. He presents a synopsis of traditional Bulusu' society and analyzes how it is being changed by the resettlement process. This involves the loss of cultural identity, and the use of authoritarian methods to create the change that the Bulusu' do not welcome. Not only are the Bulusu' becoming land poor, entering the national economic system at the lowest strata, but the process of resettlement has disrupted the endogenous integration of their economy with the regional economy that they had already begun. This has resulted in a significant drop in the export of Bulusu' agricultural products to the nearby port city, and as a result the region has become economically poorer. The Bulusu' present another example of that endogenous development, has been more economically sound than has development planned from above.

Eder asks the question whether tropical upland agriculture can develop in a direction that does not lead to environmental degradation and progressive socioeconomic inequality with an absolute increase in poverty. He is concerned with how to avoid the pattern of upland development that leads not simply to impoverishment but to eventual landlessness. He examines three relatively successful communities in the Philippines that are characterized by small-holder agricultural economies based on shifting cultivation. He reaches three conclusions. First, subsistence production should be viewed as something to coexist with cash production, not as something to be phased out. This minimizes the need for farmers going into debt. Second, diversity of crops, not simplification, is associated with economically successful communities, as this helps reduce risks and encourages entrepreneurial activities. Furthermore, the mixture of cash-intensive activities with labor-intensive activities within the same community enables the excess of capital or labor in one economic activity to flow to other economic pursuits within the local community rather than being attracted towards the economic centers. Third, for the long-term viability of such communities it is important to combine agriculture with tree crops and the use of grasslands for domesticated animals. Eder points out that the great advantages of mixed farming regimes is that they promote social stability and stimulate entrepreneurship.
And he concludes that critical to the development of economically sound upland farming communities is security of land tenure. Thus, national governments in their own self-interest must recognize this and act on it now to protect the indigenous land tenure systems.

A further interesting aspect of Eder's study is that all three communities predominantly maintained control over their destinies. Their futures were not being dictated from the core. The Ikalahan case is particularly interesting, in that this ethnic group is not only directing its own agricultural development but in addition controls its own high school.

The Adivasi live in South Gujarat, India. Baks examines the history of land reform to evaluate how it affected the Adivasi. The Adivasi in the early stages of integration of the periphery to the economic centers came under the control of moneylenders. And much of the British colonial legislation was used by these moneylenders to continue their control over Adivasi land. Even the land reforms after Independence did not result in the betterment of the Adivasi position. The Adivasi represents clearly a situation in which landlessness is a product of administrative misperception and malfunctioning.

Alam shows that in Bangladesh landlessness, near-landlessness, and rural impoverishment have increased significantly in recent years. He analyzes the many factors that have contributed to this. He concludes that a large segment of the rural population has been impoverished and the problem of landlessness exacerbated as a result of the unrealistic and inappropriate programs developed by planners, bureaucrats, and politicians who lack an awareness and an understanding of what the conditions are at the village level. Thus, the hope that the new rice technology and the new forms of cooperatives would alleviate rural landlessness and impoverishment has not worked out because the larger landholders have had more access to sources of credit and therefore have had a higher participation in the new rice technology. On the whole these programs of rural development have been of little help to the small landholder.

Glazier discusses the general policy of land reform in Kenya during the colonial period and post-Independence.
Originally, the colonial administrators supported and reinforced the traditional land tenure system to inhibit agricultural entrepreneurship among the Africans so as to ensure a supply of labor. The post-colonial Kenya government developed an agricultural policy with an emphasis on rural capitalism and developing entrepreneurship among the small farmers. The assumption is that customary modes of land tenure inhibit agricultural output. The government has, therefore, introduced individualization of land tenure in an attempt to terminate control over land by kinship groups. This will enable farmers to pledge their titles to land as collateral for agricultural loans, which, in the official view, will accelerate rural development. Glazier examines the impact of this policy on the Mbeere, a patrilineal, egalitarian people with a mixed economy based on agriculture and livestock raising.

For the Mbeere to obtain individual title to land, first the rights of the lineage to its land have to be established and then land held by the lineage has to be distributed to its agnates. As a result, disputes and conflict over land have risen precipitously, and the courts are now clogged with land dispute cases. Chiefs and their lineages are having greater success in these because of their position. Chiefs were originally appointed under colonial rule, and this imposed a political hierarchy upon an originally acephalous society. These chiefs increased their economic position by their cash wages and the acceptance of gifts of livestock for favors. The conflict over land has resulted in growing self-seeking, the breakdown of community solidarity, and an increased fear of strangers. Where before there was no shortage of land, there is now the prospect of a marked disparity in land distribution. Thus, land reform has resulted in the accelerated formation of rural classes on a previously egalitarian society. With a growing population and the increase in social stratification based on access to land, it now appears that a class of landless, or near-landless workers, will develop laboring for a better-off class of landholders, or the landless and near-landless will have to migrate to urban areas where already there are not enough opportunities for job seekers.

Crump analyzes the social and economic transformations that have occurred among the Chamula, an Indian community located in the highlands of the Mexican state of
Chiapas. The old agricultural system was based on the swiddening cultivation of maize and the raising of sheep for their wool on grassland converted from forest. The consumption of alcohol for ceremonies increased the demand for cash, and one source of cash was seasonal labor on coffee plantations. However, until government reform, the Indian labor was in a highly disadvantaged situation. By the time that the Pan American highway opened up the area, much of the native land had been mortgaged for cash to carry the farmers through the agricultural year. With the highway new opportunities arose for truck farming, but these were primarily available to those who had government connections. Such individuals were able to obtain land through the foreclosure of mortgages, with the previous owner now a laborer on the truck farms. However, this and the reform of the conditions of plantation labor has increased the prosperity of the whole community. Thus, Crump asks, given the previous conditions, what could have been a more advantageous form of integration of this region to the economic center, even though there has been a growth of landlessness? The question posed by Eder on how development can occur without creating a progressive socio-economic inequality, as individualization of the social organization grows, remains to be answered in the future as the integration of this Chiapas region to the larger economic centers expands.

Ploeg analyzes the economic position and prospects of small-scale farmers in Papua New Guinea. Landlessness is not a problem, except in a few areas. But the economic situation for these farmers is not secure or satisfactory. As a result of colonialism, they have become dependent on a mixed cash and subsistence economy. And most Papua New Guineans want to expand their cash earnings. The government also wants to increase the cash earnings of these producers to enlarge their tax base. And if the economy of the small producers does not allow the government to increase its tax income, there is the possibility that the government will favor the establishment of a class of larger scale farmers and neglect the small producer. Ploeg examines the possibility that there will arise a class of indigenous large landholders, resulting in scarcity of land for others, but he concludes that traditional methods of estate transfer will militate against that. He analyzes various other factors that might cause a scarcity of land or
the inability to produce sufficient cash income, including: population increase, land suitability, the availability of labor, prices, market fluctuations, and marketability of export crops. Ploeg gives two examples where communities ended up with less income raising commercial crops than food crops. He finds that it is unlikely that Papua New Guinean farmers will be able to achieve the level of prosperity that they would like to attain. And he argues that this represents a conception of life which is frustrating in itself as it identifies enjoyment primarily with material possession. Thus, he concludes that his argument calls for a reorientation of values away from the materialistic values shared with our own society.

FUNDAMENTAL CONCLUSIONS TO THIS VOLUME

We have looked at the social conditions that arise in the integration of peripheral populations with the economic and political systems of the center. And certain fundamental conclusions can be drawn.

In the capitalistic mode of integration great emphasis is put on "individualism" and freeing the individual of past constraints so that he can become an entrepreneur and an economic maximizer in the terms of the economic center. And this involves the breakdown of the individual's sense of community and participation in it. This is a misreading of the ideas associated with individualism that arose with the advent of classical liberalism in the West. And it puts misplaced emphasis on economic rather than social goals in a form of ideology I refer to as "economic fundamentalism" (see Appell 1985d). Individualism is not just freeing the individual of traditional constraints as it is simply conceived. It also involves the imposition of other constraints to prevent the pernicious exploitation of other members of society. Those who speak for individualism seldom are aware of these constraints or the social costs that individualism produces. A whole series of support mechanisms have grown up in Western countries to mitigate the costs of individualism. Thus, when the stripped-down version of individualism is introduced in other societies without the supports and constraints, the consequences can be extreme to the social fabric and to the social and mental health of the population. It is this stripped-down version
that is the source of many of the social dislocations in Third World countries. Even constrained individualism is under reconsideration as having gone too far in the West and what is needed is a return to what has been called "civic humanism." "The concern here is less with the rights and privileges of individuals or their private needs and more with the responsibilities of enlightened citizenship or notions of community" (Rothblatt 1986:1013).

Associated with the stripped-down version of individualism is a disregard for the ecological costs for immediate economic gain. But this issue is complex and has been treated elsewhere.

A second conclusion is that when administrative systems expand from the center into the peripheries, irrespective of being capitalistic or socialistic, they do so without the usual built-in controls and feedback found in more mature administrative systems. This results in the growth of graft, dehumanized treatment of those administered, and the development of policies completely out of touch with local conditions and local needs. This is because the administration is overdetermined by the goals of the center and is undercontrolled by those who are being subjected to it. Thus, when the integration of the periphery to the core fails to occur under the terms that the representatives of the center specify or expect, the blame is put on the victims, the peripheral populations. They are accused of defective human character, personality, or intelligence on the one hand; and/or on the other, of having a "traditional," restrictive, or retrograde culture. The elites from the center are never able to perceive the fundamental causes. These are, first, social conditions produced by the interaction of the center with the periphery creates the situation whereby the adaptive resources of the population involved are so flooded that it is impossible for it to respond effectively to the demands from the center; and, second, the population may not want to or choose to integrate with the center on the terms presented to them. The choice not to integrate becomes unacceptable to the elites from the center, and this is ironic since modernization is in fact learning to make intelligent choices under conditions of rapid social change, yet not learning to respond to the demands of others.
Moreover, it is quite clear from the materials in this volume that peripheral populations, given enough time and relief from external demands, do in fact develop their own responses to challenges presented from the center so that they can maintain control over their own economy and their own land while integrating with the center. Under these conditions of endogenous development their adaptive resources are not overwhelmed. These populations create their own social inventions to deal with these challenges. And these responses are more organically sound than an integration that is forced on them from above. However, the center is never patient. It is always authoritarian in its approach to the periphery. And so the development of such local level adaptations and responses are usually short-circuited by the demands for speedy transformations that are set by the policies of the center. As a result the center creates the conditions for political instability and the creation of social costs that are not perceived as the product of the center's actions. These costs are explained away by putting the blame on the character of the population itself, as when the disadvantaged are characterized as lazy, or stupid, etc. And these costs are externalized from the development process itself primarily to the population of the periphery (see Appell 1975a).

Organic, sound development must come from the periphery, from the bottom, itself. And time, patience, and choice are the critical characteristics of such successful development. The unilateral involvement of the government to determine the futures of the periphery always produces unnecessary social disorder. Instead the involvement of the government should be that of becoming a voice for the peripheral populations. Designs for the future that come from the elites are almost never realistic to the conditions, social and environmental, of the periphery. This is because they are the product of those who are socially, intellectually, and physically removed from the conditions of the periphery and the nature of choices and risks faced by the peripheral population faces (e.g. Appell 1985d). The government should thus facilitate the thrust of the periphery, and not impose itself. In certain situations when the integration of the periphery to the center gets out of hand and the peripheral populations are becoming disadvantaged by market forces that are beyond their control, and beyond their knowledge, then the government must
intervene, as it has in the rural sectors of Norway and other nations, to prevent such economic and social distortions.10

Finally, what is desperately needed as a basis for action on the part of the center is a model, a conception of what is a healthily functioning society and not a rich society, as economic surplus has never guaranteed happiness, contentedness, nor a moral society. As Madan (1983:37-38) argues: "the issue of 'life-styles' is (or should be) the central issue in development effort: instead we have pursued possessions and ended up with being pursued by possessions, many of which have, far from being precious turned out to be costly, not only in terms of the exhaustion of natural resources but also in terms of ecological, cultural and human destruction. It is high time we realized that 'Every act of development involves, of necessity, an act of destruction' (Appell 1975, p.31)..."

Thus, any such model of a healthily functioning society will have to incorporate the participation of the peripheral populations as fundamental to it. They should have the decision as to what aspects of their culture are to be lost, what they have to surrender in the integration of the periphery to the center.
NOTES

1. The argument whether peasant, landless or otherwise, are the instigators of rebellion and revolution or are mobilized by outside forces as the peripheries are impacted by the economic activities of the center is well reviewed by Skocpol (1982). The point is that the landless and peasants whose livelihood is threatened by becoming landless or land impoverished form potential interest groups that can contribute to political instability.

2. The hypotheses in this section are so phrased to be testable. Populations in the center can be ranked according to the strength of their social identity and status of their social position. It is hypothesized that those who are in less secure positions will exhibit greater prejudice against the members of the peripheries.

3. Government personnel are not the only ones who have difficulty with the problem of ethnicity. Connor writes (1972:319): "Scholars associated with theories of 'nation-building' have tended either to ignore the question of ethnic diversity or to treat the matter of ethnic identity superficially as merely one of a number of minor impediments to effective state-integration." Some scholars have argued that ethnicity may be a product of the growth of economic centers.

4. Thus, Hoben (1980:341) writes: "Until recently, development planners and a majority of scholars concerned with development assumed that the agricultural practices of low-income rural people are governed by tradition, change only slowly, and are often poorly adapted to local conditions. Moreover, it was assumed that traditional rural societies were more or less static, and that their institutions must be broken down or greatly modified because they were constraints on more rational development."

5. Thus, Johnson argues (1980:41) economists or government officials are mystified and frustrated "when confronted with the behavior of particular farmers. In fact, what is actually surprising is that anyone would
think that an abstract theory, operationalized with reference to an industrial firm or similar limited frame, could prescribe behavior for farmers who have lived in an environment their entire lives, observed countless details about its soils, crops, weather, labor supply, market prices, and government intervention, and have integrated these experiences with cultural 'rules of thumb' into a total understanding that all our research methods in combination can hardly fathom."

6. The discussion in this section is an abbreviation of the data and discussions presented in Appell (n.d.a).

7. Madan (1983), reviewing the literature on development, argues that Third World countries must find other models for development than that provided by Western economics and the Western experience, since this has unacceptable social costs. He calls for endogenous development and argues that it is the peripheries that hold the key to alternative, better futures. See also Appell (1975a, 1975b, 1975c).

8. Alatas (1977) nicely describes the manner in which the blame for conditions actually created by the colonizer and the commercial activities of the center are projected upon those who are the victims. He calls this the principle of misplaced responsibility: "a situation is created by colonial rule. This situation affected a change in native society, and native society is then blamed for the resultant situation" (1977:205).

9. An example of this authoritarian approach to development is found in Hyden (1980:31), a consultant to the Ford Foundation: "Development is inconceivable without a more effective subordination of the peasantry to the demands of the ruling classes." And (1980:32): "In order to understand the political situation in Africa, then, it is important to recognize that a large group of social actors [peasants] are still to be drawn firmly into ties of dependence with the ruling classes, a precondition for effective exercise of state power." This model of society is strangely the inverse of one of the most critical statements of American democracy that appears in Lincoln's Gettysburg Address (1863). To turn that statement on its head we might thus read
that this form of government is not of the people, not by the people, nor for the people.

10. When the periphery has some control over the political processes, it can better protect its economic future. For example, Nebraska has instituted a tough family farm law to help protect its farm land and farm families from the flow of capital out of the economic centers. "The real issue is (the) type of economy and society we Nebraskans want," argues Nebraska's Center for Rural Affairs, a public-policy group. "Do we want a corporate-farm economy where tax-subsidized investors feed cattle in lots employing Nebraskans at little more than the minimum wage?" (Farney 1986:64).

BIBLIOGRAPHY

Adas, Michael

Alatas, Syed Hussein

Appell, G. N.
Appell, G. N.


Appell, G. N.


n.d.b Ownership: Property Relations in the Analysis of Social Structure. (Revision of manuscript entitled Observational Procedures for Land Tenure and Kin Groupings in the Cognatic Societies of Borneo.)


Appell, G. N. (editor)

Appell-Warren, Laura P.
Ashcroft, Norman D.

Baker, Christopher John

Bartlett, Peggy F. (ed.)

Bernard, Viola W., Perry Ottenberg, and Fritz Redl

Connor, Walker

Douglas, Mary

Dove, Michael R.

Esman, Milton J.
Etienne, Mona and Eleanor Leacock (eds.)

Farney, Dennis

Hoben, Allan

Homans, George C.


Hyden, Goran
Institute for the Study of the U.S.S.R.

Johnson, Allen

Kelman, Herbert C.

Kuper, Leo

Legum, Colin

Madan, T. N.

Marglin, Stephen A.

Ploeg, Anton
1984 Development Administration in an Isolated Sub-District. Administration for Development No. 22.
<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Title</th>
<th>Journal/Book Details</th>
</tr>
</thead>
</table>
Skocpol, Theda

Tibbles, Thomas Henry

Torry, William I.

Wallace, Anthony

Wolf, Eric R.

Young, Michael
PART TWO
PAPAU
CHAPTER TWO

LANDLESSNESS IN PALAU

Mary McCutcheon
Smithsonian Institution

INTRODUCTION

In the Palau Islands of Micronesia, land is in limited supply. There are only 175 square miles of dry land distributed very unevenly among some 300 islands. Constrained as they were by their island environment in precontact times, the people of Palau had developed a land tenure system that minimized inequities in access to land.

However, since the turn of the century, land tenure customs yielding to various administrative and economic pressures have undergone some fundamental changes. Now large numbers of people have no title to land. And yet there is no truly land-poor class in Palau. This seems, at first glance, to be contradictory. How can there be, on the one hand, people without land and yet no landlessness? To resolve this paradox, I shall first break down the theoretical features embodied in the concept of land tenure. Next, I shall describe land tenure patterns through history in Palau showing an evolution in the various kinds of rights that different people have in land. Finally, I'll argue that use rights are abundant and available in a nearly egalitarian way, while title to land is in the hands of a minority of individuals or clan.

LAND TENURE DIMENSIONS

Bronislaw Malinowski provided an apt example of the complexity of land tenure from his experiences in the Trobriand Islands.
Taking a definite plot, I inquired successively, from several independent informants, who was the owner of it. In some cases I had mentioned to me successively as many as five different "owners" to one plot--each answer, as I found out later on, contained part of the truth, but none being correct by itself [Malinowski 1921:3].

Malinowski thus showed that ownership is not a basic concept; it can be broken down into still smaller features.

First, there are various types of rights. There are rights of use, rights of administration, rights of occupation, rights to keep some or all of the products of the land, rights to buy and sell and otherwise to alienate the land, and rights to decide who will use the land for what purpose.

Rights imply obligations: Obligations to share certain produce, obligations to pay taxes or use rights fees, obligations to yield to use by others, obligations to extend hospitality to visitors, and obligations to respect the decisions of those in power regarding the use of the land.

This bundle of rights and reciprocal obligations with respect to land links people together in what Hoebel calls a large "web of social relations" (Hoebel 1958:431). So it is the definition of personnel that forms the next dimension of land tenure. There may be individuals, groups of individuals, or categories of individuals who hold one or more rights or obligations with respect to others.

How long or when these rights and obligations are in force is another dimension. Rights may be held in perpetuity and be subject to wills and testaments of individuals or rules of succession to membership in corporate groups. Other rights may be temporary. They may be seasonal or pertinent to a specific day or time of day. They may be recurring or isolated. They may be conditional to the fulfillment of contractual agreements or to the duration of something on which they depend, such as a marriage alliance or someone's life.
Different land rights and obligations apply to different types of land, categories of resources, or to different specifically defined parcels. Just as "mineral rights," "water rights," and easements are specified in United States land laws, so too are rights to particular resources distinguished in cultures with unwritten law. Rights to the cultivated produce may be different from rights to the land. And these may be distinguished from water rights and rights to gather uncultivated plants and to hunt wild animals.

This multi-dimensional view of land tenure has been embraced by several land tenure theorists. Max Gluckman (1944) urged that descriptions of land tenure be unambiguously phrased according to a multi-dimensional system embodying rights and obligations, personnel and categories of resources and use. Ronald Crocombe, whose observations are especially applicable to Pacific Island settings, insists that tenure rules be described according to four "multi-faceted principles of ownership" (Crocombe 1974:12).

This approach to land tenure solves Malinowski's research quandary. His question "Who owns the land?" wasn't enough. He should have asked, "Who has what rights and obligations for how long or under what conditions to what resource?"

If land tenure is a multi-dimensional concept, then, it follows that landlessness may not be merely a binary, "you are or you aren't" phenomenon. Some individuals, groups or classes of individuals may not own particular rights to certain land or resources from land. While this absence of rights can be permanent and unchangeable, it can be temporary, or it can be conditional. This is exactly the subtle distinction that explains why some Palauans can have no title to land, while not being, in any practical sense, land poor.

DESCRIPTION AND BRIEF HISTORY OF PALAU

The Palau Islands are an archipelago at the western edge of the Pacific Ocean spanning the distance from seven to eight degrees north of the equator. The biggest island is
Babeldaob having about 140 square miles. At the small end of the size scale are a multitude of tiny limestone islets. Except for the small "Southwest Islands" of Tobi, Sonsorol, Merir, Pulu Anna, and Helen's Reef, the Palau group is culturally homogeneous and has experienced more or less the same administrative history. Today only eight or nine of the islands are occupied year-round by a little over 12,000 people. However, over half of the total population of Palau lives in the centrally located city of Koror and its environs.

Although Palau was possibly sighted as early as 1525 by Gomez de Seguiera (Sharp 1960), it was Captain Henry Wilson of the British packet, Antelope, who, in 1783, made the first extensive contact with the islanders. Traders from Germany, the United States, and England stopped by from time to time in the nineteenth century and finally, in 1885, the administrative authority of Spain was confirmed by Pope Leo XIII. This rule lasted until 1898 when Germany purchased the islands. In 1914 the Japanese occupied Palau, meeting little resistance while the Germans were occupied with the war in Europe. They governed until 1944 when Palau was taken against great resistance by the United States.

For over four decades the Palau Islands have made up part of the United Nations Trust Territory of the Pacific Islands, administered from 1947 until the present by the United States. Palau has just become quasi-independent but will retain ties of "free-association" with the United States.

The research for this paper was conducted in the village of Melekeok on the east side of Babeldaob Island. About 350 people live there, though there is, as I shall emphasize later, little long-term residential permanence. Typical of villages in Babeldaob, the six hamlets which make up Melekeok are situated near the sea. Cultivated land extends into the interior to a distance seldom greater than one mile, exceptions being three more distant homesteads which are planted with self-sustaining tree crops. A landing strip serving the single engine plane and a popular, though crocodile infested, swimming hole are the only other activity areas located at a distance of greater than a mile from the coast. The bulk of the land in Melekeok rests idle and is visited only occasionally by parties of hunters of pigs, pigeons, and wild chickens.
LAND TENURE BEFORE 1900

There is no way of determining from the written evidence exactly what precontact land tenure was like. The best guesses must be founded on inferences from late nineteenth century sources like Jan Kubary (1892). One critical problem is that these descriptions were compiled when the population was between one-fifth and one-twelfth of its pre-contact maximum. Long-abandoned agricultural terraces (Osborne 1966) suggest that one episode of demographic decrease preceded contact by several centuries. Additional cataclysmic drops in population occurred during the nineteenth century as a result of exposure to European communicable diseases. At its height, in the sixteenth century, Palau's population may have been as high as 50,000 (Useem 1949). At the time of contact it was likely to have been closer to 20,000. The population "bottomed out" around the turn of the twentieth century when there were fewer than 4,000 people living in Palau (Force and Force 1972:4). Because population pressure is an important determinant of land tenure rules and of the rigidity of descent group definition, it is unlikely that the ethnographic commentaries of the late nineteenth century are perfectly accurate depictions of pre-European conditions.

While it is unreliable to try to reconstruct land tenure for the precontact period, it is less risky to use 1900 as a base-line date for which abundant ethnographic literature is extant. What follows is a description of land tenure at about the turn of the century based on literature from the late nineteenth and early twentieth centuries, from post-war ethnographies for which dependable old men and women were the main informants, and from present day recollections of old men and women. Some detail must be sacrificed so that I may place emphasis on the larger and enduring issues of group definition, titular rights and usufruct.

Clan and Lineage Tenure

One of the two broad categories of landownership before 1900 was corporate kin group tenure. Under this, members of corporate clans (keblili) and lineages (telungalek) shared rights to use land for homes, gardens, and taro patches. An elder of the kin group, meanwhile, admini-
stered the land allocating use rights and exacting fines for trespassing.

Everyone in Palau belonged to at least one clan. Membership in these social groups was putatively matrilineal, but opportunities for descendants of men and for adoptees availed themselves as demographic imbalances arose and as the special situations of the personalities allowed.

Biological children of female clan members had top priority—indeed, inalienable priority—to kin group membership. Palauans refer to their entitlement as "strong." Children of male clansmen were not so privileged, but frequently opted to fulfill clan obligations with alacrity to compensate for their genealogical handicap. Palauans refer to them as "weak" members, but through generous contributions at clan events they can elevate their status.

Adoptees are said to be equal in status to the siblings who are biological descendants. In times of stress, when pressure for scarce resources dissolved any pretense of courtesy, however, the role of the adoptee was probably modified by his or her biological relationship.

Post-marital residence was generally patrilocal: the bride customarily moved in with her husband in his parents home. There they stayed unless the husband was called to assume the chief’s title of his mother’s clan in another household or unless his father died and left the governance of the family home to a matrilineal heir. Residential life could be unstable, particularly for the wife. And divorce, not surprisingly, was common.

Succession to leadership was ideally matrilineal and should follow the route from a man to his sister’s son. In fact, this, like membership in these corporate kin groups, was commonly manipulated to reflect differences in leadership skills, in attention to customary obligations and in place of residence.

To what extent this rule was rigidly applied at the time of contact is hard to determine. Several factors, in effect at or before the turn of the century, however, were already setting in motion a trend toward patrilineal succession. One of these was the demographic crisis. In
many cases clan members could not afford to be too particular in selecting a successor to a deceased chief.

Another factor was the reign of peace, a condition that began in 1883 with the signing of a treaty drafted by Captain Cyprian Bridge. As a result, marriages occurred between partners from distant areas of Palau. Combined with the custom of patrilocal post-marital residence, this meant that boys were more and more frequently being raised at a distance from their matrilateral roots and probably identified more strongly with their fathers' families.

There were female leaders in addition to the male clan chiefs. They could have been sisters of the clan or lineage chief or some other strong female kin group member. As is true for the male positions, these may often have been filled by genealogically peripheral women.

Both of these leaders played a part in land administration. The man administered land for homes, coconut groves and dry land gardens. He also governed decisions about alienation of land to other kin groups. The women title-holders, meanwhile, governed use of taro patches by other women (Kaneshiro 1958:298).

A village acts as the headquarters of generally ten clans. The chief was supposed to occupy the clan's title holder's house there and represented his kin group in village councils. With patrilocal post-marital residence as the dominant custom, many marriages were village endogamous allowing young men to remain in close proximity to the clan land and other corporate clan interests. Intervillage wars gave more reason to find spouses close to home.

Clans were ranked within each village. The highest ranking two or three clans were considered the elite while the lowest ranking clans were relatively poorer in status. It would follow that clans of different ranks would have had different amounts of wealth in the form of land and Palauan money. John Useem, who did his research in Palau shortly after the war, referred to the lowest ranking clans, the chebuul, or "poor," as being landless (Useem 1949:8), and to some extent this poverty would have been self-perpetuating.
Rank and status conferred rights to tribute, fines, and other donations from the less well-endowed. Palauan money took the form of beads and crescent-shaped objects, and this was the preferred medium of such payments. Land could substitute for money when necessary, and this served to consolidate the holdings of the high ranking clans.

There tended to be some degree of status endogamy, as well, leading to marriage alliances among high ranking clans in mutually friendly villages. Under the system of marriage exchange in Palau, the husband's clan gives money or land to the bride's clan who reciprocates with gifts of food and services. This exchange occurs at formal and informal settings throughout the marriage. These affinal exchanges of money, land, and food thus kept the wealth confined to the rich.

Mitigating this class-divisive tendency, however, was the flexibility in clan membership described above. Through adoption and manipulation of patrilineal links, people could engineer access to an assortment of clans. There are reports in recent years of one man who successfully maneuvered his way into the title-holding position of ten clans. This, while rare, exemplifies the possibilities which increase exponentially as each ancestral generation is taken into account. Higher clans were, by this reasoning, more likely to have active genealogically marginal adherents than were low clans.

Another feature of Palauan social structure was the fluidity in relative position of clans. According to the folklore of Melekeok, which serves as an oral history of the village, we learned of several transfers of power in mythical times. High chiefs fell in rank while low chiefs rose. These shifts are attributed to Draconian punitive acts of an angry blind god-woman. The leading clan now, the Udes clan, is a relative newcomer to the village. This story involving water eels and magic is certainly apocryphal, but equally certainly reflect a real social fluidity.

Wars, tidal waves, famines, and the ebbing and flowing of social circumstance sometimes resulted in the mass emigration of whole groups of people from one village or island to another. Such people may have formed a recognized clan to begin with, but equally likely, they simply
became treated as a clan-like corporate group upon arriving in their new home as refugees. "Drifting" clans must have been common in the old days; they play a major part in legends. Refugees were, of course, initially landless and dependent upon the charity and generosity of their hosts. They were likely to acquire land before long, though, because the village chief was expected to bequeath public land to them (Smith 1983:30, 66, 134). After a generation or two, the descendants of the original immigrants could exploit connections in richer established clans.

The lineage, telungalek, is a subdivision within the clan. At the present time, there are clans that have no subordinate lineages. This may have always been the case though it more probably results from recent declines in populations. It is likely that clans radically depopulated would have discontinued recognition of lineages which may have had only a handful of members. A certain amount of fusing and fissioning would be expected to accompany population fluxes.

Some lineages within clans claim their clan position through strictly genealogical links from an early date in the clan history. Others were incorporated into the clan through collective adoption. They could have been composed of a small cluster of immigrants in need of some formal status in their new community, or they could have been a severely depopulated clan without enough of a membership to stand alone.

It is apparent that the term "lineage," in its strict sense, is not an appropriate English gloss for telungalek. Lineages may have been in existence as long as or even longer than the clan to which they belong. The ancestor that lineage mates have in common need not necessarily have been one who is remembered and whose exact ancestral relationship is known. As corporate groups they were, like clans, of indefinite longevity. The larger and more durable lineages took on some autonomous economic and social functions. There was a variable degree of independence that lineages retained depending on numbers of active members, wealth, and historical affiliation with the clan. Those which were relatively more autonomous owned land and money as corporate groups. Some informants declare that, in the days before population decline, lineages rather
than clans were the only property holding social entities. Other informants assert that both clans or lineages may have had corporate property rights. These varying testimonies may simply reflect differences in the history, demographic health and resilience of lineages.

Houses occupied some of the clan and lineage land. The whole kin group corporately owned the land and the structure, but actual residents in the houses included all sorts of affines and non-relatives. Post-marital residence was in the husband's household, descent was heavily weighted toward the woman's line, and adult men slept in the men's club houses elsewhere. The nightly inhabitants of a typical household could very well have included no strong clan members at all.

**Agricultural Land**

Within the category of agricultural land there were subcategories which entailed specific tenure rights and obligations.

Taro patches were the domain of women; men only helped clear them in their early stages and helped clean the channels twice a year. When a marriage linked a man and a woman from the same village, the wife had both her own clan's land and her husband's clan land to use for her taro. If the wife came from another village, though, and lived, as was customary, in her husband's home, she had no choice and must have used land owned by his clan. Complicating matters still more was the possibility that his mother's clan, to which he was a strong member, was from another village, too. In this case the young wife may have used her husband's father's clan land. For the duration of her husband's father's life, therefore, her claim to land was not only affinal but weakened by the patrilineal link as well.

She had to satisfy relentless demands for taro from her husband's mother's family and by her husband's sister's husband's mother's family. Homer Barnett (1949), John Useem (1949), and DeVerne Smith (1977, 1983) describe the social exchange network in detail. From their work we can see how these chain-like obligations can go on for as many links as are recognized in her husband's kindred. They tend to multiply geometrically with good genealogical recollections.
tions. In return, the wife earned access to the land for herself. Her clan benefited by gaining gifts of land and money often channeled through her children.

Before the introduction of the multitude of short-term crops that are grown today, the dry land accommodated only a few herbaceous, domesticated food plants. Sweet potatoes (introduced possibly as early as the seventeenth century) and Dioscorea yams grew there but these were unpopular starches compared to taro. Bananas also flourished, but required little attention. Two short-term woody plants, cassava and papaya, had been introduced by the end of the nineteenth century, but the former was not yet widely accepted and the latter grew with little or no care.

It was the non-food-producing potential of the dry lands that gave these areas their agricultural value. Tobacco was a well-established and high status narcotic drug in Palau by the 1860s, having been introduced perhaps a century earlier. In an English translation of a report by J. S. Kubary, the plots cultivated in tobacco are described as "plantations" giving the impression both of magnitude and of intensive labor requirements. Kubary observed that one of these fields was owned by the paramount chief of Melekeok (Kubary 1873). Alfred Tetens (1958:33), who was in Palau at the same time, described his own entrepreneurial activities as tobacco farmer commenting on the high value placed on this crop. We surmise from these references that tobacco farms may have been highly coveted and rights to them strictly protected. An educated guess would be that usufruct of tobacco fields was limited to men who were strong clan members, and maybe even more restricted to title holders who could control the dispensation of the product.

The other major non-food short-term plant grown on dry land was the pepper plant (Piper betel) providing the leaf that forms an essential ingredient of the betel nut complex. These plants were probably largely confined to house yards where they could be nurtured and guarded from thieves and vandals. Members of the households, including the men who resided at the men's club house, tended to the plants and used the leaves. Informal reciprocal exchanges probably governed the more extended distribution of them as is the case today.
Long-term cultigens share the dry land with the garden plants. The most prominent is the coconut which grows densely in sandy coastal soils and less so farther inland. Before 1900 it is probable that every house site had several good nut producing trees. Mangoes, breadfruit, wax apples, Tahitian almonds, limes, clamondin oranges, and Polynesian chestnut trees grow around houses and on other clan lands. Some were cultivated from cuttings or seeds, others just propagated themselves from nearby parent trees or from the garbage dumps near settlements. Most of these trees produced abundantly enough to provide whatever food the landowners needed with no sense of deprivation. There was no need for special precautions or even sanctions against taking the fruit since surpluses could not be converted to wealth or status.

There was one long-term cultigen, however, that was exceptionally valued and protected. This, again, was a non-food crop—the areca palm tree. These trees produced the betel nut, an almost universally chewed narcotic nut. They were strictly owned by the planter, sometimes independently of the land on which they grew. Theft was severely punished by imposition of a fine by the village chief and council. Indeed, in times of scarcity, chewing the nut at all was forbidden until enough nuts became ripe for more egalitarian distribution. Households usually had their own clusters of betel nut trees and the broad cobble-paved village roads were lined with avenues of the stately dark green palm. The nut was not the only valued and protected product of the tree. The sheath from which the fronds emerge, when skinned, made a useful wrapper for food. To use this smooth supple, off-white material as a food cover was a gesture of respect to an elder or person of high rank.

Titular rights to these kinds of land resided in the clan as a corporate group, though access was not narrowly restricted to clan members. Residence in houses and use of agricultural land was extended to affines of men. In addition, borrowers who had neither genealogical, adoptive, or marital entitlements could use land that wasn't already taken. Hopeful users had to ask permission of the chief and contribute as kinsmen when the time for social exchange arose. They were expected to display generosity at money raising parties, childbirth ceremonies, marriages.
and funeral discussions, and thus became kauchad or temporary adopted members of the kin group by exhibiting the behavior prescribed for relatives (Kubary 1885, Kaneshiro 1956).

Public Lands

The second broad category of landownership around 1900 was called chutem buai, loosely translated as public land.

The Palau Islands were not traditionally unified as a single entity. They were, instead, divided into autonomous village states (beluu) which were allied dynamically to create loose confederacies. There was no constancy in the membership, however, since friendship and enmity were fluid and changeable. It was the village, not the confederacy or the whole archipelago, that recognized and protected its territorial boundaries. For villages on Babeldaoob, the territory extended from the outer reef to the remote interior. The chutem buai was communally owned by residents of these village states.

While the coastal corridor and the prime fish trap holes were the property of clans and lineages, the vast bulk of the land and lagoon region was chutem buai. The marine regions were used constantly for canoe transportation, fishing, gathering edible invertebrates, cutting nipa palm leaves, mangrove wood, collecting oriental mangrove fruit, and recreation. The interior lands were used for trapping pigeons, hunting wild pigs, cutting lumber, bamboo and firewood. All of these activities share features that make an unrestricted, communal tenure rule practical: they involve little or no stationary investment, they are irregular, and the resources are either wild and abundant or wild and moving.

Any resident of the village-state was entitled to make free, though temporary, use of the public property. A resident who wanted to make use of the land for a fish weir, a plantation of tobacco, a coconut grove, or a taro patch had to ask the village chief's permission and pay a fee to register use and to assure exclusivity of use rights (Kaneshiro 1956). Public land developed for agriculture reverted to the village when it was abandoned. Such
agricultural use of the interior lands was no longer as necessary when population pressure declined during the latter half of the nineteenth century.

Residency could be revoked as punishment for certain inexcusable offenses. It was probably rare, but banishment was a measure reserved as the ultimate means of social control. In the event that a person was expelled from his village, he had to seek a home wherever else he might have some rights to do so.

Public lands could be lost or gained from the village. War was the usual channel for changing boundaries. Victories over adjacent villages meant acquisition of land. Defeat, on the other hand, meant relinquishing land in post-war reparations. When the current era of internal peace began in 1886, however, this redefinition of beluu territory ended. Since then, the bounds have been stable, though never actually surveyed or indicated by any permanent landmarks.

**LAND TENURE CHANGE**

Land tenure rules are very different now. The Spanish administration wrought few changes, but the German, Japanese, and United States administrations all were responsible either directly or indirectly, intentionally or unintentionally, for major alternations in conventions of title holding, inheritance, and use of land.

Meanwhile, there was already a strong tradition for internal factionalism among political leaders in Palau. Under conditions of cultural instability, some of them opportunistically pushed for change that suited their circumstances. Thus the impetus to change traditional land tenure rules was not entirely exogenous to the Palauan culture.

**German Administration**

From 1899 to 1914 the German government was in power. Its administrative policy was dominated by commer-
cial interests which undertook the exploitation of local mineral and plant resources. The most significant contribution this administration made to land tenure change was the development of the copra industry. Copra is a product of the coconut that has high commercial value, and in order to maximize its production, the Germans set out to individualize tenure of coconut groves. Their reasoning was that if power over land were taken out of the hands of the "dishonorable plutocrats" (Sennft 1906:4) and put in the hands of individuals, productivity would rise. This would give a profit incentive to individuals who planted coconuts and cut and dried their own copra (Hughes and Lingenfelter 1974:10-20). There was never a formal survey or land registry, but the substance of the ruling was enforced by laws demanding every adult man to plant and care for groves of trees and punishing any whose trees were diseased (Kramer 1908, 1926:42).

Even though the German administration lasted only fifteen years and there was no registry of these individual titles, the individualization of coconut groves has proved to be permanent. It was perpetuated less by external legal sanction, than by the momentum of earning individual profit for individual labor investment.

The Germans saw the public lands as unowned and, hence, free for their appropriation. Thus, what had once been public land became German government land. Some of this was devoted to more extensive coconut plantations but the bulk went undeveloped. Traditional uses of the land for firewood, hunting, trapping, and lumbering went effectively unimpeded. At the time, the German public lands policy amounted to little more than a change in nomenclature. It was this change, though, that set the precedent for the Japanese and United States policies later on.

**Japanese Administration**

Japan, like Germany, had ambitions to develop local commercial resources the most important of which was copra. The Japanese, by arriving just ten to twelve years after the implementation of Germany's thrust to plant coconuts, reaped the bulk of the profits. The nascent individualization of ownership of coconut groves was perpetuated and encouraged by the boom in trade.
Probably well before the actual Japanese takeover of Micronesia, Japanese planners had designs on these islands. Their expansionist goals were motivated probably more by the peaceful desire for space for colonists than by strategic interests. And, according to plan, the colonists arrived by the thousands. By 1930, the census lists 5,794 Palauans and 2,978 Japanese. By 1935, it shows 6,013 Palauans and 23,768 Japanese (Useem 1949).

Entrepreneurial settlers moved into the burgeoning little city of Koror turning it into a thriving town of paved roads, electricity, and sturdy buildings in rows. Farmers made up the rest of the colonists, and they set up farms and residences on government-allotted parcels on Babeldaob. The land had been German government land, formerly the village public lands, and had become Japanese government land after 1914. This was in keeping with Article 257 of the Treaty of Versailles which states that "All property ... belonging to the German Empire or the German states ... shall be transferred with the territories to the Mandatory power ..."

The border between government land and private land was never well marked in German times, and, in 1923, as Japan made plans to settle colonists in Palau, the administration began to conduct a formal survey of the public land holdings. Considerable land was falsely appropriated by the Japanese—land that had never been chutem buai and was the property of a clan or lineage. When the chiefs realized the magnitude of the erroneous classification in 1926, they met with authorities from the Japanese government to register their protest. By the end of this meeting, the chiefs were under the impression that the Japanese would rectify their grievances (Tellei 1951). No corrections were ever made, and some of these claims still remain unresolved.

The Japanese administration did not stop with a survey of the public lands. The next task was to survey and register all lands owned by Palauans. They were certainly aware of the gradual rise in disagreements about land tenure with the individualization of labor and profits from copra, and they knew that taking the land out of the authority of nebulously defined clans and putting it into the hands of individuals would help resolve some of the disputes. The Japanese were also aware that buying and selling individual
land involves fewer complications. Disentangling land from the control of nebulously defined kin groups meant that the interests of only the buyer and the seller mattered, and took much of the potential for misunderstanding out of real estate transactions. An added attraction of individual land ownership was that it could be an incentive to increase productivity with individuals making individual investments in labor and capital and reaping individual returns. The survey and registration, called the Tochi Daichio, was conducted between 1938 and 1941. For Melekeok, the registry is extant, but the accompanying maps have been lost.

The results of the Tochi Daichio demonstrate the trend toward individualization. Table 1 shows a breakdown of tenure type by category of land use. The clear preference of individual tenure for coconut groves may be a consequence of the commercialization of the crop. The preference for individual tenure of houses, gardens, taro patches, and idle lands is the result of pressures by Japanese surveyors, the reduction in importance of the clan in many economic matters, and the self-reliance of Palauan individuals who wanted more and more personal control over lands and money.

<table>
<thead>
<tr>
<th></th>
<th>Government</th>
<th>Clan and Lineage</th>
<th>Individual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Houses</td>
<td>4</td>
<td>27</td>
<td>57</td>
</tr>
<tr>
<td>Public Use</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Idle Land</td>
<td>0</td>
<td>14</td>
<td>57</td>
</tr>
<tr>
<td>Coconut Groves</td>
<td>3</td>
<td>36</td>
<td>206</td>
</tr>
<tr>
<td>Taro Patches &amp; Gardens</td>
<td>0</td>
<td>47</td>
<td>270</td>
</tr>
<tr>
<td>TOTALS</td>
<td>17</td>
<td>124</td>
<td>590</td>
</tr>
</tbody>
</table>

Table 1: Tenure Types by Category of Land Use (From Melekeok Tochi Daichio 1938-1941)
Whether these individual lands were "correctly" classified depends on the Palauan concept of justice. The idea of individual ownership never existed traditionally, but its practical manifestation—individual returns for individual investment—was applied to both German and Japanese land policies. Particularly where coconuts had been grown commercially for thirty-six years by individuals, the Tochi Daichio simply codified what was already becoming well accepted. In any case, it acted as a catalyst hastening decisions to individualize land. In retrospect, to label these lands as individual is by Palauan standards "mera'il melemalt" (entirely just).

Occasionally, though, the Japanese surveyors issued individual title to people who were borrowing land owned by a clan other than their own. On other occasions, a chief, pretending to speak for the whole clan, claimed to be the individual owner. Other kinds of abuses took place, but the Tochi Daichio has nevertheless remained the most authoritative source of tenure information for the early 1940's.

The rise of individualism in landownership, the Tochi Daichio which codified these trends, the loss of the public lands, and the gradually increasing population of Palauans, all set the stage for the evolution of a landless class.

United States Administration

The United States administration began with effusive promises to resolve the problems of land tenure, and in 1947, Land Policy Letter P-1 was issued.

The guiding principle of land policy is to safeguard native land rights and land ownership; and, so far as possible, to provide each family with land sufficient for adequate subsistence, and to assure community-wide access to essential land resource [Wright 1947:51].

Public lands were excluded from the customary control, though.

It is realized that rulings by the Germans and Japanese, which treated as public domain those land areas which were not used continuously by
native people, violate some Micronesian concepts of ownership, since the resources of such 'no man's land' were usually recognized by the natives as belonging to some specific community or group. In view of the changes and improvements which have been made in much of the land which was declared to be public domain, it is deemed necessary to continue to regard all such lands, which the German or Japanese governments took physical possession of, or developed or used, as having acquired the status of public lands, which are to be administered for public benefits [Wright '947:52].

And so the Trust territory government took the public lands in trust for the people of Palau.

In 1951, the Palau Congress formally requested the High Commissioner to resolve claims for the land which had been incorrectly called "public" either by the Germans or by the Japanese. But now, more than fifty years after the original offense, few have been settled. In the meantime, the undisputed public land was opened for homesteading. Several ambitious foresters took out homesteads for mahogany plantations and others homesteaded land for commercial farming. An extremely successful example comes from a village adjacent to Melekeok (Kaku 1979).

Finally in 1979 all of the public lands were returned from the Trust Territory government to the Palau government with the ultimate intention that they be administered by the village-states. By passing the lands back, the Trust Territory also washed its hands of the pending disputes. A negative side effect was that homesteading has been discontinued. At least until the boundaries of the villages are surveyed, disputes are resolved, and the new local governments begin to function effectively, homesteading will remain in limbo. While there is abundant land in the interior of Palau, it will continue to be unused for some time to come because of inaccessibility and tenure insecurity.

In spite of its inherent defects, the Japanese Tochi Daichio was a useful registry of private landownership as long as the title owners were alive. As soon as they died,
however, a whole new set of problems arose. Individual land ownership makes some kind of inheritance rule necessary. Tradition dictated an emphasis on the matriline, but at the same time tradition allowed for death payments to a deceased man's children. This flexibility generated conflict. After several controversial attempts, a law governing inheritance of intestate property was passed. It provided for individual land, which had been purchased, to pass to the children of the deceased. The inheritance of land allotted by the clan to one of its members would be decided by the clan. Relatively little land has been bought or sold yet, so most parcels are subject to the latter rule.

As the years went by, as title-holders died one by one, as inheritance of property failed to be resolved decisively, and as people began to voice objections to the errors in the Tochi Daichio, land cases inevitably ended up in the Trust Territory court system. The demand for unbiased extra-clan dispute resolution was obvious, and the Trust Territory government responded by passing the Land Commission Act in 1966 providing for a systematic survey and reregistration of private lands.

Until then only the most pressing cases were brought to court. These were cases in which one claimant was attempting to sell or mortgage the land, or cases which meant very tangible loss to someone. The challenge threshold was surpassed and some external decision was necessary. What took the land registration teams by surprise was that there were so many disputes in suspended animation just waiting for some exogenous circumstance to breathe life into them. The Land Commission Act invited claims in a "speak now or forever hold your peace" forum. People came out of the woodwork from all over Palau, Guam, Hawaii, and the Mainland to press claims they had heretofore ignored (McCutcheon 1983).

For the 253 land parcels in Melekeok that were investigated from 1972 to 1982, 102 were disputed. For the 188 parcels whose Tochi Daichio owner had died or which had otherwise changed hands, 86 were disputed. Some of these involved as many as eight claimants coming from three levels of government (Trust Territory, Palau, village-state), clans, lineages, tenants in common, and individuals. The Land Commission Act unleashed a monster, but it was
perhaps, in the long run, a benevolent one. The process is painfully slow, however; at the time of this writing only one-third of the parcels in Melekeok have been decided. And this new registry is already obsolete since many of the newly confirmed owners, too, have died. Now that the Trusteeship is coming to an end, laws like the Land Commission Act have to be moved from the Trust Territory Code to the Legal Code of the Republic of Palau. The legislature is currently looking at small revisions in the text (Clohessy 1985).

One problem with this procedure of land tenure determination is that it is missing a crucial feature. There are rules, there is a methodical system for determination of ownership, but there is virtually no enforcement. There is no way to force vacation of land loss in a hearing. There is no way to exact payment of debts. Social pressure alone has lost its bite in Palau. Long-time users of land who lose cases in the land hearings need not worry about their investments. Even residents on parcels need not feel that they need to move just because they have lost a claim.

Winning title is what the disputes are really all about. Usufruct of land is essentially undisputed.

LANDLESSNESS TODAY

From a historic low in 1900, the population of Palau has been steadily increasing. By the time of the end of World War II, it was around 6,500 (Useem 1949), and it is now over 12,000 (Levin 1985). The baby boom shows few signs of slowing down with an annual birth rate of about 35 births per 1,000 population. At this rate, the amount of private land per capita is decreasing as the small cohort of landowners born during the time of low population is replaced by a dramatically larger next generation.

Private parcels of land are small and individuals may own several widely scattered ones to meet their residential and agricultural needs. Even now, individual landowners...
usually have more children than pieces of land and the parcels are generally too small to subdivide.

There is a high rate of outmigration of high school graduates in Palau (15 per 1,000 per year) (Levin 1985). Most go to college, and many of these students decide to stay away from Palau for good. Even with this mitigating factor, many of these expatriate Palauans retain their interests in land title.

Inevitably the demographic situation must lead to landlessness, which appears at the moment to be an irreversible trend.

What I have described up to this point, however, is land title or de jure land tenure. When we consider how land is actually used, though, the picture brightens. It is de jure title that is the object of the land disputes, quarrels, jealousies and feuds that plague Palau. Actual land use is, by comparison, relaxed.

The fact of owning land is one indication of the wealth of an individual, and it is at the same time symbolic of a secure status in a village regardless of his or her actual residence. Having an identity as a member of the village can confer some status advantages, among which is the right to register to vote. Traditional villages have been incorporated as states under the new Palau constitution, and these states generally consider landownership one criterion of state citizenship.

In the interclan exchange that endures as long as does the marriage linking the clans, land or money have roles that allow them to be generally interchangeable. Land or money moves from the family of the husband to the family of the wife, while food is traded in the opposite direction. Many things in Palauan culture may have changed since European contact, but this marriage exchange is not one of them. The form of money and the kinds of food are now different, but the basic nature of the trade remains the same (Smith 1983). Land continues to be important.

Land can also be sold and mortgaged and can thus be used to acquire money. Neither of these is a new custom, but both are now used to acquire dollars--a currency with
more uses than Palauan money beads. Land may be bought as an investment if the buyer speculates that its monetary value will grow. Land bought for immediate use is less common.

The importance of title to land accounts for the numerous land disputes that swamp the courts. This also explains why so many contenders scramble to make their claims when land hearings are held. People from far distant villages and even from Guam and the United States materialize even though these people may have no immediate or even long range plans to use the land.

The difference between de jure and de facto land rights is critical. Those who need land for houses, gardens or taro patches have plenty of options. Just as borrowing land was practiced in the old days, it is practiced still today. A garden survey recently conducted (1982-1983) out of 36 gardens surveyed, 31 belong to someone other than the gardener, and 19 belong to someone outside of the gardener's household. With disputes raging about him, the user is often happily oblivious to the judicial decisions as he or she plants and harvests crop after crop. There is one parcel of land whose title has been in dispute for about twenty years. The original disputants have died and a new generation of heirs to the dispute keep the fight alive. In the meantime, the land is being productively used by someone who has no stake in either side and who plans to continue to use it even if the case is finally resolved.

There are several reasons that usufruct is an essentially uncontested right. The most important is demographic. About half of the population of Palau is concentrated in the dense little city of Koror. These people are wage laborers who buy a lot of their vegetable food at the store. Rice is a mainstay of their diet, and bread, canned foods, condiments, desserts, and store-bought beverages supplement the fish they catch. Fresh agricultural produce doesn't constitute a regular part of the diets of most of these urban workers. This leaves only about 6,000 people--about half of whom are school-aged--to share the vast land mass of Babeldaob, Peleliu, and Angaur. Competition for agricultural land is minimal.
Large numbers of Palauans are looking for jobs on Guam and in the United States. Hundreds leave Palau every year for school and many may never return. Those who do will probably not be content with agricultural work and are effectively out of circulation as far as rural land use goes. The net outmigration rate added to the death rate almost neutralize the high birth rate. Actual usufruct demand on land has remained constant while the expatriate Palauans often still retain an interest in the title.

Schools in Palau do not place much emphasis on farming. In a survey of career goals of high school students in the mid-1970s, agriculture ranked close to the bottom of the list of choices. Accounting, business, political science, and education are the most popular areas of study for Palauan students at the University of Guam.

The economy of Palau also permits somewhat extravagant use of agricultural land. Since about 1963, United States expenditures in Micronesia have exploded, and government urban wage labor opportunities have accompanied this growth. As a result, young people are not discouraged from abandoning agriculture as a career choice. At the same time, they are earning incomparably high salaries with which they can buy rice and prepared foods in the store. Green vegetables and fresh fruits are not cognitively important dietary components, so an absence of such commodities is acceptable. Rice and fish or some other protein food constitutes an appropriate everyday meal even though it may be deficient in certain essential nutrients. These values put gardening out of the realm of necessary occupations as non-subsistence wage labor takes over the economy.

These factors leave abundant fertile land available for use by landowners and borrowers alike. While competition for ownership of title to land is intense, usufruct is freely shared and is not subject to any disputes. De jure landlessness exists in Palau while de facto landlessness is not a problem. Disputes over land title plague the legal system of Palau, but these legal problems have little impact on agricultural productivity (McCutcheon 1981).

What the future holds for Palau may reverse some of these trends. The status of free association is being
negotiated between Palau and the United States. This assures revenues consistent with those of recent years, but these moneys may be allocated in a way that will force some people back to the land.

In the past few years, there has been a small revival in interest in agriculture by some rural residents thanks to the examples set by several very successful market gardeners including the paramount chief of Melekeok. These gardeners are experimenting with crops that cater to the Americanized tastes of a growing consumer population in Koror. Melons, eggplant, cabbage, and other fresh fruits and vegetables are growing in popularity (McCutcheon 1985). The farmers are bit by bit surmounting problems of insect and rat pests. If this trend continues, it may, in a small way, stem the tide of young people away from the rural areas.

The terms of the Compact of Free Association provide for some capital infrastructural improvements that are intended to expedite commerce of agricultural produce and encourage more people to pursue a rural agrarian life. The road connecting villages on Babeldaob to Koror will permit cheap and quick transport of perishable produce and of volumes not currently possible by sea.

On the other hand, the Compact for Free Association assures free immigration and work permits to Palauans entering the United States. This is likely to encourage outmigration of people now in school who will want jobs in non-agricultural sectors.

CONCLUSION

Inspired by Malinowski's experiences, I also asked my informants "Who owns the land?" The responses I got gave me insight into the nature of land title in Palau and into the degree of reliance now on a judicial system foreign to Palauan tradition. In most cases my informants gave the name of the clan or individual most recently registered as the title holder. For many parcels, the individual having title had died, but his or her name was still given because
change in formal registration had not taken place. In one case, the title holder had died twenty years ago. Where I got conflicting answers was for parcels currently subject to dispute in hearings or appeals court. A small number of people have title to the land in Melekeok, and considering that many of the accepted title holders are dead, the rate of landlessness is staggering.

To ask, instead, "who has what rights and obligations for how long or under what conditions to what resource" is consoling. It is evident that people borrow land freely from one another for farming, house building, and collecting fruits and wood. Occasionally they don't know exactly who has title to the land they use, but that "it's a relative of my husband" or something equally indefinite. Clearly use rights and titular rights are very nearly independent in Palau. There is no landlessness if only use rights are considered.

Will buying and selling of land become more important in the future? Will production of crops involving a large time investment (such as mahogany) grow in popularity? Will large-scale commercial agriculture take proportionately more private lands out of informal circulation? Will outmigration continue to increase? The future harbors these and other unknowns, any of which may change the picture of landlessness and attitudes toward usufruct in Palau.
BIBLIOGRAPHY

Barnett, Homer G.

Clohessy, Ed

Crocombe, Ronald

Force, Roland and Maryanne Force

Gluckman, Max

Hoebel, E. Adamson

Hughes, Daniel T. and Sherwood G. Lingenfelter (eds.)

Kaku, Hiroki

Kaneshiro, Shigeru
Kaneshiro, Shigeru

Kramer, August
1926 Palau. In Ergebnisse der Sudsee Expedition 1908-1910 (Thilenius ed) II. Ethnographie; B. Micronesien. Band 3 Teilband 3. Hamburg: Friederichsen, de Gruyter. (Translated by anonymous.)

Kubary, J. S.
1873 Die Palau Inseln in der Sudsee. Journal des Museum Godeffroy 1:181-238. Hamburg. (Translated by anonymous.)
1885 Ethnographische Beitrage Zur Kenntnis der Karolinischen Inselgruppe und Nachbarschaft, I; Die Sozialen Einrichlungen der Palauer. Berlin: Asher. (Translated by anonymous.)
1892 Die Industrie der Palau Insulaner. Leiden: Trap. (Translated by anonymous.)

Levin, Michael
1985 Personal Communication. Washington, D.C.

Malinowski, Bronislaw
<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sennft, A.</td>
<td>1906</td>
<td>Die Bewohner der Westkarolinen. Globus XC:279-83. (Translated by anonymous.)</td>
</tr>
<tr>
<td>Tellei, Joseph</td>
<td>1951</td>
<td>Public Lands of Palauan Villages Surveyed by the Japanese. Unpublished Transcript. Palau. (Translated by Margaret Saburo.)</td>
</tr>
</tbody>
</table>
Useem, John

Wright, C. H.
PART THREE
MALAYSIA
CHAPTER THREE

THE FORMATION OF ABORIGINAL RESERVES:
THE EFFECTS OF LAND LOSS AND DEVELOPMENT
ON THE BTSISI'OF PENINSULAR MALAYSIA

Barbara S. Nowak
State University of New York at Buffalo

INTRODUCTION

Orang Asli ("original people"), or aborigines, of Peninsular Malaysia are a heterogeneous grouping of people whom anthropologists broadly classify into three major groups. The Semang, or "Negrito" hunters and gatherers, and the horticultural "Senoi" speak various Austroasiatic languages, while the Proto-Malay speak an Austronesian language (Dentan 1964). The Malaysian government uses the term Orang Asli to avoid the derogatory connotation of the once commonly used Malay word "Sakai," meaning "slave" or "dependent." The term Sakai probably originates from the time when Malays frequently slave raided among Orang Asli (see Endicott 1983).

As is often the case with minority peoples in Southeast Asia (Kunstadter 1967), most Orang Asli live in the remote hills and rain forests. In the 1970s, nearly sixty per cent of all Orang Asli resided in "deep jungle" areas and were still able to follow their traditional ways of life. The remaining Orang Asli, most of whom reside in the southern half of the peninsula where "...civilization ... has caught up to them" (Carey 1976:322), live on aboriginal reserves and in "aboriginal areas." Up to now, government attempts to permanently settle the more isolated Orang Asli fail with Orang Asli retreating back into the rain forests, choosing to continue their traditional way of life.
In this paper I will sketch the history of the reservation policy established by the British colonial government, followed by a description of the Malaysian government's policy toward Orang Asli. This section includes a discussion of the government's stated purposes for resettling Orang Asli along with the less explicitly stated reasons for the regroupment. In the final section of the paper I present a description of the resettlement of Btsisi', one of the Senoi peoples, living on aboriginal reserves in the southern part of the Malay Peninsula. Here I discuss the traditional land tenure system of the Btsisi', loss of land, and how the resultant land scarcity is affecting the socioeconomic life of Btsisi'.

ORANG ASLI RESETTLEMENT AND THE EMERGENCY

After the Japanese defeat in World War II, British colonial rule returned to Malaya. In 1948, in what is called "The Emergency," Communist insurgents began an uprising against colonial rule. Orang Asli, especially those in the northern part of the peninsula, were caught between the two sides. When the British resettled the insurgents' Chinese supporters in "new villages," the Communists turned to Orang Asli for assistance. The colonial government wanted to stop the friendship and sporadic aid Orang Asli gave the Communists. Noting the successes of the Chinese new villages, the British implemented a similar program for Orang Asli, relocating them outside the rain forest. Although the British supplied the Chinese new villages with basic housing and sanitation facilities, they did not provide similar facilities at Orang Asli resettlements (Carey 1976:306, 1979). The lack of basic facilities, the heat of the valley which Orang Asli were unaccustomed to (Endicott 1979:185), dietary changes, and psychological stress were all causes for a high death rate in the Orang Asli resettlements. Government estimates of Orang Asli deaths in the resettlement villages range as high as 7,000 people (Jimin 1983:60).

Many Orang Asli escaped and warned their relatives about the resettlements. Heeding the warnings, Orang Asli near the forest fringe abandoned their villages and fields for the safety of the "deep jungle." The Communists
protected some Orang Asli, but by and large the Communists needed Orang Asli more than Orang Asli needed them (Carey 1976:306, 1979). Orang Asli provided the Communists with food, shelter, acted as jungle guides and also provided the Communists with intelligence reports, although they were usually purposefully outdated. The British resettlement program failed in its aims, scaring Orang Asli into the arms of the Communists.

Realizing they had made a tactical error, the British revised their policy toward Orang Asli, developing one whereby they hoped to befriend rather than terrifyze. The new British aim was to win Orang Asli over as allies. The colonial government settled Orang Asli in strategically important areas around "jungle forts" where Orang Asli could acquire medical care, assistance and manufactured products. It was also around this time that the British established the Department of Aboriginal Affairs, today known as Jabatan Hal Ehwal Orang Asli, or JOA.

MALAYSIAN GOVERNMENT POLICY TOWARDS ORANG ASLI

In August 1957 the Federation of Malaya gained independence from the British, but the "Emergency" continued until 1960. In 1961 Orang Asli became the responsibility of the federal government. The JOA was put under the Ministry of the Interior (today called the Ministry of Home Affairs). The Ministry of the Interior presented the government policy toward the administration of Orang Asli as follows:

... the ultimate integration with the Malay section of the community ... but so far as their social, economic, and cultural conditions prevents them from enjoying the benefits of the laws of the country, special measures should be adopted for the protection of the institutions, customs, mode of life, persons, property and labour of the aboriginal peoples. However such measures of protection should not be used as a means of creating or prolonging a state of segregation and should be continued only so long as there is need
for special protection and only to the extent that protection is necessary [Ministry of the Interior 1961 quoted in Baharon 1973:342, 343].

While a full discussion of this statement would be inappropriate here, a few points require brief clarification. The first phrase, "integration with the Malay section of the community," suggests that the Malaysian government desires that the animistic Orang Asli convert to Islam (Malay, masok Islam). By legal definition, a Malay is someone who habitually speaks Malay, follows Malay customs, and embraces Islam. The national government does not recognize animism as a religion. In the column marked "religion" on government census forms, the census takers' official answer for Orang Asli is tiada, "none."

On the other hand, the Director-General of the Office of Orang Asli Affairs writes that the government policy of integrating Orang Asli does:

... not mean, necessarily, that the Orang Asli have to embrace Islam, and even if they do so on a large scale and thus legally become Malays (assuming that they have adopted the other necessary aspects of Malay culture) they still need to be "integrated" with the rest of the peoples in the nascent national community [Baharon 1972:25].

Nevertheless, the problem is that since Malaysia is officially an Islamic state, and as the administrators in the JOA are almost all Muslim, integration into Malay society is frequently interpreted as "masok Islam," or entering Islam. Thus, Jimin (1983:90-91), Assistant Director of the JOA writes:

All persuasion towards getting the Orang Asli to accept Islam centres on two issues, viz: a) The international brotherhood that is Islam. b) The acceptance of the fact that the indigenous and majority population are Muslims and that religion would be the binding bond in the integration process.
The policy statement quoted above proposes that Orang Asli can keep their culture and traditions but only until the government can "naturally" (Ministry of the Interior 1961 quoted in Baharon 1973:324) replace them with Malay culture and customs (Jones 1968). It is at this time, when Orang Asli are indistinguishable from Malays, according to one high ranking JOA administrator, that the JOA "self-destructs," having completed its task (Anonymous 1981).

Although "recourse to force or coercion ... shall be excluded" (Ministry of the Interior 1961), and there are no organized functional state or federal programs for proselytizing among Orang Asli (Baharon 1976:45), there are covert pressures for Orang Asli to convert. For example, Btsisi' school children say that they will never pass their secondary school exams unless they masok Islam. Among Btsisi', the one person I met attending university did convert. The school system thus plays a central role in the Malayanization of the Orang Asli and in the development of a "national consciousness" (Baharon 1976:42). Children learn to honor national symbols including the Malaysian flag, which contains the crescent symbolizing Islam; to respect the Yang di Pertuan Agong or the Malay king; and to speak Malay, the national language.4

One method of promoting and achieving integration of tribal peoples into the state is for the government to provide services (Kunstadter 1967, I:143).5 In Malaysia, the JOA is the government agency charged with administering official government assistance to Orang Asli. The department's role is to provide for Orang Asli health, education and socioeconomic development (Carey 1976:300). The JOA places special emphasis on development in achieving Orang Asli integration. A JOA document addressing this point says:

For as long as disparity prevails, integration in the real sense will not be realised. It is with this conviction in mind that the Department has been using, and will continue to use socioeconomic development as the main prong in its development plan to achieve its objectives [Jabatan Hal Ehwal Orang Asli, 1975:6, quoted in Jimin 1983:113].

102
In the 1970s, JOA development programs for Orang Asli became intertwined with "regroupment" projects as a political and military strategy to combat the recurrence of Communist insurgency. After a ten-year lull in hostilities following the end of The Emergency, Communist activities began increasing in the early-mid 1970s. As a security measure, the Malaysian government decided to implement a resettlement policy for Orang Asli which was similar to the original British resettlement plan. However, the JOA, while powerless to ignore a directive, proposed a less radical resettlement scheme whereby Orang Asli would not be removed from the rain forest but instead "regrouped" into larger, more accessible villages within their own traditional territories (Carey 1979).

ORANG ASLI RESETTLEMENT AND PLANNED DEVELOPMENT

JOA officials also suggested that regroupment would present a perfect opportunity for the government to initiate a program of socioeconomic development among Orang Asli. The National Planning Committee accepted the JOA proposals. In seeming disbelief, the deputy director of the JOA explains the Malaysian government's National Planning Committee's approval this way:

There can not however, be a firm conclusions as to why ... the government decided as it did. It could of course be that the decision is based on wholly altruistic reasons: that the government feels it should carry out its moral responsibility of uplifting the socio-economic position of the Orang Asli. Another reason may be the government feels the potential danger of subversion by the communists is so great that it can only be countered effectively by a massive development effort [Jimin 1983:54].

Officials from the JOA are quick to note that the Malaysian government's "regroupment program" differs vastly from the British resettlement policy. In the former scheme Orang Asli were forcibly removed from their traditional lands and resettled outside the forests whereas in the JOA
regroupment program Orang Asli are not removed from their traditional lands (see Carey 1979, Jimin 1983). As Carey (1979) mentions, a change in the program's name was important since Orang Asli upon hearing the term "resettlement" would recall bad memories of the earlier British program. The new name, "regroupment," would not, according to JOA officials conjure up the same images (Carey 1979).

As rain forest and hill regions become more accessible to outsiders with the opening of national security areas and advancing modernization in the form of roads, logging, and commercial agriculture, the Orang Asli land base is being threatened. Orang Asli rights to their traditional lands are not recognized by the government. Instead, the government considers those Orang Asli remaining on their land "squatters." Legally, the land Orang Asli traditionally occupy could be sold to outsiders.

Only those Orang Asli living on designated "aboriginal reserves" or "aboriginal areas" have any legal protection. But even here as Hooker (1976:178) points out the:

... [the] area of state land occupied by the (Orang Asli) is public domain and the greatest title which the ... Orang Asli can get, either as an individual or as a group, is tenant at will. There is no power of any ... (Orang Asli) to lease, charge, assign or mortgage such land, although some dealings are possible with the consent of the Protector ... land as such cannot be owned and no one group can claim rights over it as against another group. All that may be owned is the produce of the land both cultivated and [in some cases] wild.

Consequently, Orang Asli living on reserves do not have security of tenure. Although the federally enacted Aboriginal People's Act (1954, revised Laws of Malaysia Act 134, 1974) provides for the establishment of aboriginal reserves and aboriginal areas, the enactment empowers the individual states, and not the federal government, to create or revoke, in whole or in part, Orang Asli reserves.
THE BTSISI' OF CAREY ISLAND

Btsisi', numbering slightly more than 1,200, are the southernmost Austroasiatic speakers on the Malay Peninsula (see map). Scattered along the west coast in the districts of Kelang and Kuala Langat in Selangor State, Btsisi' are geographically isolated from other Austroasiatic speakers by Malays, Chinese, Indians, and the Austronesian speaking Temuan.

At least half of all the Btsisi' either reside on Carey Island or on nearby islands around Carey Island and Port Kelang (Port Swettenham). Deposition of tidal sediment characterizes all the islands in and around Port Kelang. The islands are formed when silt brought down by the Langat River mixes with the sands carried by the Straits of Malacca. As the sediment deposits grow the coastline continually advances, and the landward side of the mangrove begins drying out. This naturally reclaimed land remains above the high tidal level, allowing a different flora to take hold. However, the land has a tendency to flood because of its low, flat gradient, which does not provide for good drainage.

Traditionally, Btsisi' led a semi-nomadic life determined by a seasonal as well as a monthly and daily tidal cycle. Some Bitsisi' live continuously on boats, while others divide their time between boats and inland villages. These semi-permanent villages were built in the upper reaches of the mangrove bordering the forest fringe, where they receive the greatest protection from storms yet had easy access to all the major subsistence zones they regularly exploited. By locating their homes along the mud banks of small tributaries people had immediate and easy access to the river system, the primary means of transport connecting the sea directly with the forest hinterland. Dependent upon the rivers, the Btsisi' did not build their houses too far upstream where their access to the rivers would be hindered (Karim 1981:23). Not wanting to build too far upstream restricted the size of settlements, which ranged from two to about twenty households.

Btsisi' traditional economy was diversified and opportunistic (Nowak n.d.). Resources were freely available in a variety of ecozones including the mangrove forests and
rivers, the sea and adjacent littoral, and inland forest. Traditional forest activities included hunting, gathering, wild fruit collecting, cultivating dry rice and other cultivars on cleared forest land, and also collecting rattan and resins for barter. Fishing and crabbing were the most important mangrove and strand activities, but gathering mollusks and other crustaceans was also important. In the mangrove, Btsisi' fished, crabbed, gathered snails, mud clams, and mussels. Mangrove florae were equally important to Btsisi' in providing wood for houses, boats, tools, wood carvings, and firewood (Nowak n.d.).

To efficiently exploit the diverse resources available, people spent varying amounts of time away from their homes in the mangrove building temporary shelters near their rice swiddens and fruit trees. At other times people resided on their sampans wandering throughout the vast mangrove area, fishing and crabbing (Nowak n.d.).

Btsisi' were highly mobile, moving freely within and between subsistence zones. Karim (1981:23) claims that the villages were not territorial. At this time it is hard to establish whether they were or not, for the Btsisi' traditional relation to their land was destroyed long ago. For over a hundred years the Btsisi' have been constantly on the move north from Johore first as a result of depredations on their villages by Bugis, who were in search of slaves, and then in response to expanding commercial plantations. Two facts suggest that the village may have had some sort of rights over territory, although probably they were very underdeveloped. First, individuals plant fruit trees, and rights to these are devised on all the descendants of the original planter. In time, these can include all the members of a village. Such ownership of permanent fruit tree groves suggest that the village would have had some sort of rights over the area usually exploited by its members. Second, in response to recent land shortages and the development of reserves, the village, as represented by the Council of Elders, rapidly took steps to protect their village rights. As I shall discuss shortly, these two factors would indicate some traditional concept of village land rights. The fact that the Btsisi' were able to move in response to pressure to other locations and survive, however, also suggests that there was not much pressure on resources to produce more than an elementary system of village rights.
LAND RIGHTS: PAST AND PRESENT

In the beginning of the twentieth century, the British in Selangor began clearing forests and planting rubber and coffee. In 1903 the Sultan of Selangor gave Carey, a British planter, a 15,000 acre land grant on the condition that 3,750 acres be planted with rubber in five years. When this condition was met in 1910, the Sultan gave the plantation another 13,000 acres under similar conditions. After these two land grants, the plantation bought another 7,000 acres. Plantation records indicate that they paid Btsisi' compensation totaling R$30,000 (in 1980, approximately US$15,000). In 1981, Btsisi' elders could not recall what became of the money (Nowak 1984) nor do they recall ever receiving any cash compensation. Today, the plantation owns almost 29,000 of the 35,000 acres on Carey Island.

In 1952, the same time the British began the Orang Asli resettlement program in the northern portions of the peninsula, the British colonial government established three aboriginal reserves on Carey Island. The three reserves totaled less than 600 acres. Six hundred acres is an insufficient amount of land for Btsisi' to follow a traditional way of life. Initially however, Btsisi' were still able to continue their traditional subsistence activities, using plantation land for hunting and swiddening. One group of Btsisi' in need of more land expanded their village onto plantation land. In 1946, plantation officials became aware of the "squatters" and agreed to let them remain there until the management wanted the land. In the 1960s Btsisi' began feeling the effects of the plantation's growth. People became fearful the plantation managers would reclaim their land, so the "squatter" village's headman (penghulu') appointed by the JOA requested permanent title to their village land. In 1966 the government agreed with the Btsisi' request, and the JOA asked the plantation managers to surrender the 350 acres of land to expand the reserve (Karim 1977:45).

In the early 1960s, a small group of people from another village, in need of land after the sea reclaimed their settlement, established themselves on land deeded to the plantation. The people knew it was plantation land, but since the plantation did not clear the forest, the people felt they had the right to use it. The plantation managers,
after much discussion, agreed to let Btsisi' stay on the land, but only so long as they continued to reside there and cultivate it, otherwise they would take it back. Btsisi' reserves on Carey Island today total approximately 1,000 acres with approximately another 4,000 acres of forest reserve.

Even though the people who settled the land knew that the plantation "owned" it, they opted to follow the customary laws on usufruct rights to the land. The traditional land tenure system maintains that people have rights to land they clear and plant. However, once they abandon the land for a long enough period of time that it reverts back to forest, anyone could use it upon obtaining permission from the Village Council of Elders. However, a person who cleared forest land did not have the right to dispose of the land; rather, the village under the administrative leadership of the Village Council of Elders, maintained all rights to the land.

Although traditional Btsisi' lacked a concept of land as the alienable to exclusive property of individuals, other than usufruct, today as land becomes scarce it is taking on the character of private property. Although technically all reservation land is communal and administered by the Village Council of Elders, today it is devised from parent to child. Btsisi' parents place a high priority on providing their children with land, so that many people are clearing and planting the little remaining fallow common land, hoping it will be enough for their children and grandchildren. People say they worry their grandchildren will not have enough land for economic security. With land there is always a little money from selling cash crops including coconuts, bananas, fruit, some coffee, and a little oil palm.

The attempts to devolve permanent usufruct on children does not imply that the family gains residual rights over the land, thus alienating it from the communal land base of the village (Karim 1977:61). In fact the traditional custom of usufruct, whereby any village member may cultivate unused land, is in conflict with these new attempts to develop permanent use rights. This is what pushed three brothers to return to land which their father cleared years before but which lay unattended and unproductive. About three years after their father's death, the brothers began to
fear that someone would request use of the land from the Council of Elders. Untended, the land was a prime candidate for reallocation by the Council of Elders. Fearful of losing the land, the brothers jointly decided to move from their mangrove settlement inland to reclear and plant their father's land.

The Village Council of Elders is responding to fellow villagers' fears of land scarcity. The Councils are responsible for allocating unclaimed or unused reserve land. They give use rights to land to any Btsisi asking for some, and they also exclude "outsiders" from ownership (Nowak 1983). Excluding outsiders is becoming more important with a growing population and a limited land base. As recently as the 1970s, when a Btsisi (most often a woman) married an outsider the couple could remain on the reserve. However, the couple's children had no rights to reserve land nor did a non-Aslian widow (Dentan 1975, 1986). One Malay man, in 1980 had to deal with this situation when his Btsisi wife died. In order to remain on his mother-in-law's land, the man married another Btsisi woman. By 1981, the Council of Elders, wary of non-Aslian people's ulterior motives for marrying Btsisi, altered their policy so that today if a Btsisi marries an outsider they may not reside on the reserve.

Whereas land, both traditionally and in the 1980s, was not a commodity Btsisi considered buying or selling, Btsisi have always considered the produce from the land individually owned by the people who cultivated it. Thus, rice grown on the land was individually owned by the cultivator; and trees, including wild forest fruit trees, as well as trees planted or inherited, were individually owned, as among most Aslian peoples (see for example, Benjamin 1966:18, Dentan 1979:80, Endicott 1979:172). Since people held full rights to trees but only usufruct rights to land, it was possible for people to reside and grow orchards and gardens on or by land already planted with trees which were still yielding. The new inhabitants, with usufruct rights to the land, could use the land as they wished, but they had no rights to trees planted by the previous inhabitants. Following customary law, the trees and all produce from the trees remain the planter's property.
Individuals, couples, sibling groups, and theoretically a village can own fruit trees and other cash crops. Any person, man or woman, child or adult, who finds a wild fruit tree has, according to customary law, complete rights over the tree. The same holds true for trees people plant, whether the planting be purposeful or accidental, as the case of many people who told me a particular tree was located in the place they once used for defecating. If people work to clear, burn, plant, harvest and weed by virtue of their labor, they gain ownership rights to the trees. Since Btsisi' conjugal couples typically work cooperatively at the same task (Nowak n.d.), the couple is likely to be hold joint ownership of the crops. In instances in which couples cooperatively plant trees, and then divorce, both the man and woman continue to share rights to the trees. Both male and female children bilaterally inherit rights to their parents' trees. Upon inheriting an orchard, siblings may either divide the trees equally or they may share in the ownership of the trees and the produce. If a sibling group decides to maintain the integrity of the orchard by sharing equal rights, within a few generations there is a possibility that all village members will own rights to such trees. Produce from such fruit trees in which the whole village participates may not be sold (Karim 1977:63).

As in the past, people have complete rights to dispose of their property any way they wish. They have the right to sell the produce from their trees as well as the right to rent or sell their trees. For example, one Btsisi' household seasonally rents one fruit tree to a neighboring Malay household. For a set sum at the beginning of the fruit season the Malay household purchases the rights to all the fruit from a particular tree. For that one season all the fruit belongs to the Malay household to dispose of as they wish. The Btsisi' owners have no rights to pick any fruit from that tree, whether it be for their own consumption or for market. In another case an elderly man in need of money sold his four acres of coconut palms to his "grand-child" (deceased wife's younger sister's son's son). The cash exchange, the older man said, was not for the land, but rather for the improvements he made to the land, including the hard work involved in the initial clearing and burning, as well as the planting, weeding and other basic care he provided through the years.
LIFE ON A BTSISI' RESERVE

By the 1830s the plantation had irreparably altered the ecology of Carey Island. Dry rice swiddening was hindered once plantation workers cleared and planted the forest. Deforestation reduced the animal population, diminishing the importance of hunting. BTSISI' became dependent on store rice and commercially manufactured items.

BTSISI' worry about how they are going to make a living. It is interesting to note that every anthropologist visiting me on Carey Island commented that BTSISI' work harder than the Orang Asli they lived with. BTSISI' in 1980 have a broad repertoire of economic skills. Marine activities, including gill and seine net fishing, barrier fishing, crabbing with traps and hooks, and collecting mollusks produce subsistence as well as goods for sale. Along with marine activities BTSISI' also acquire cash by manufacturing and selling thatch; by extracting mangrove wood for charcoal, which BTSISI' sell to local Chinese; by making wood carvings for a small tourist industry; by working as harvesters on the local oil palm plantation; and as small cash croppers growing fruit, coconuts, coffee, and oil palm (NOWAK n.d.).

The JOA vision of Orang Asli making a living as commercial farmers is impossible for the BTSISI'. The reserve land is both of low quality and insufficient for a growing population. On average, each BTSISI' household has rights to approximately 3.3 acres of land for a house site, fruit orchids, and cash crops. The JOA figures that each household, on average, requires 12 acres of land for cash crops, a small house garden, and a house (Jimin 1983:96).

Not only is reserve acreage insufficient, but also BTSISI' cannot plant all their land. The reserves border the mangrove, and those areas on the mangrove edge flood with the daily brackish salt water tides, making cultivation impossible. Additionally, since parts of Carey Island are just at sea level, and badly drained inland sites frequently flood during monsoon season (see above). Village drainage systems cannot control the flooding, so that many of the cash crops, especially coffee, produce a smaller than normal yield or die.
The JOA, with assistance from federal agencies experienced in setting up commercial agricultural schemes for Malays, are trying to solve some of these problems. The results are modest, at best. For example, individual Btsisi' cleared about 35 acres of land for oil palm seedlings provided by Federal Land Consolidation and Rehabilitation Authority (FELCRA). Btsisi' and JOA workers agreed upon a date for the commencement of plowing. The JOA worker assigned to plow arrived a month late infuriating Btsisi' who had postponed all cash earning work in order to have the fields cleared on time. The JOA worker found the land difficult to plow, and there were fields he couldn't get at to plow. The people with plowed fields planted the oil palm seedlings. Rats killed almost every seedling within four months. Btsisi' blame the rat infestation to the plantation's use of rat poison, which, they say drives the rats onto Btsisi' land. Btsisi' cannot afford to buy the poison; they say that if the government does not provide it, planting is a waste of time and money.

Btsisi' sell their crops at prices well below market value. The reserves' relative inaccessibility translates into a lower price for Btsisi' produce. Btsisi', rather than the middleman or the retailer, bear the transport costs, receiving lower prices for their products. For example, the coffee bean harvest is too large for Btsisi' to transport on their bicycles or motor bikes, so the buyer brings in a truck for transport. When a buyer must use a truck or must come and collect the produce, he pays Btsisi' less for their produce. Similar marketing problems affect prices for Btsisi' fish, prawns, and crabs. Selling their marine produce to a local Chinese storekeeper fetches a lower price than people could get if they were to bring their produce to a mainland market. Btsisi' who no longer regularly fish but instead do wage labor, such as harvesting oil palm on the plantation, must buy not only dry goods but also fresh food. Those who do fish sell their catch to the local storekeeper, who ten minutes later sells the inexpensive, poor quality fish for a profit to the fishermen's relative, while taking the more expensive fish off the island to sell in mainland markets, where he makes a good profit.

Btsisi' have long-term economic relations with a middleman (towkay), who is usually Chinese. Typically, Btsisi' are in debt to one or two middlemen. By borrowing
money, Btsisi' indirectly work for their towkay, paying off the loans. Since Btsisi' cannot break out of their debt cycle and thus cannot break the relationship with their towkay, they have no opportunity to sell their produce on the open market, and receive the fair market value.

The local storekeepers on Carey Island extend Btsisi' credit. The shops, serving Btsisi' and the local Tamil plantation workers, have no competition, hence they are able to maintain a monopoly on local business. Prices are high and people buying on credit pay an even greater price. Credit markup doubles and even triples the cost for an item. For example, a portable radio cassette player selling for M$86 (US$44) in the city cost a Btsisi' youth M$190 on time. On plantation payday the stores are busy with people settling bills. It is not particularly uncommon to see a family's paycheck smaller than their monthly store bill. A few families trying to escape creditors live on boats wandering in the mangrove fishing, crabbing, and snailing. Their nomadic life makes it difficult for a creditor to find them (Nowak n.d.).

On one reserve, Btsisi' tried running their own store, "Sri Btsisi'." The store owners went bankrupt through extending too much credit. Another Btsisi' store which opened after the failure of the first is succeeding in selling dry goods, but the problems of getting fresh produce to market, bringing in commercial goods, and obtaining ice for cold storage remain.

Malay style "patterned settlements" are part of the government's development plans for Orang Asli. Carey (1976:301), a former JOA head, describes the settlements this way:

... the building of new dwelling houses, the provision of a water supply, the planting of land with rubber and fruit trees, the construction of a school and a community hall, and various other facilities including sanitation.

The JOA trains and hires an Orang Asli corps of carpenters (of which the majority are Btsisi') and send them around the country building patterned settlements. Only one Btsisi' village has the JOA housing scheme. The
Council of Elders in the other villages decided against the housing because a condition of acceptance was that no changes could be made for ten years. Villagers felt the houses did not fit their needs and with the condition of no renovations people felt they were better off without the housing. In 1982 however, the plantation began draining the mangrove to expand its oil palm holdings. Because of the resultant decrease in the supply of mangrove wood for house frames and nipa palm for thatching, Btsisi now say they want and need the JOA housing. They will have to wait about ten years. In the village which has JOA housing, as soon as the ten-year moratorium was over, almost every family either expanded their house or began constructing a traditional thatch house for the young couples married during the renovation moratorium.

On each of the two largest Carey Island reserves JOA carpenters constructed a community house, a two-room school, and a house for the (Malay) teachers. The teachers' houses resemble houses built for Btsisi, with one marked exception: the teachers' houses have cement cisterns to collect rainwater running off the zinc roof. In contrast, villagers' JOA built homes lack cisterns, so that people must get their water from the three cisterns collecting runoff from the school and community house. In the rainy season there is plenty of water, and the only hassle is transporting six gallon containers home through the mud. But in the dry season there is a continuous shortage of drinking water. When community cisterns are dry, the closest place to obtain water is at the plantation store, a mile off the reserve.

Btsisi want the government to solve the water shortage problem. On one occasion, the MP representing all the residents of Carey Island (including Indian plantation workers) held a community meeting at a Btsisi village. He asked the villagers what he could do for them, once re-elected. Everyone who spoke echoed the first speaker:

The same thing we asked for the last time you were here—the last time you ran for election. I don't want to have to worry about where my children are going to get their drinking water from. If I want anything for my children I want
good drinking water. This is what I asked for the last time, the last time you were here.

I too found the water problem one of the more worrisome aspects of living on Carey Island. I considered it so problematic that in a conversation with a former plantation manager I suggested the plantation take responsibility for resolving the water problem. The manager responded that a former plantation manager on Carey Island wrote two or three letters to the JOA informing them that the plantation was preparing to lay water pipes across the island and they would install pipes onto the reserves if the JOA paid for the pipes and water. The manager told me they never received a response to the letters.

The water shortage results partly from changes in rainfall patterns due to deforestation and from the loss of important water holding rotans, also an effect of deforestation. When the JOA originally built the cisterns, they probably caught a sufficient amount of water for the villagers. But the reserve population is increasing as more Btsisi' abandon their boat-dwelling, fishing life style and move "inland" onto the reserves. The original three cisterns can no longer supply the villages' increased needs. There was more tension between people about using too much water and using it wastefully, than about anything else while I lived among Btsisi'. What infuriated Btsisi' almost more than anything else was watching JOA workers visit for the day and bathe with drinking water!

When Btsisi' do have enough water in the cisterns, the water is not particularly clean. The cisterns are open on top allowing anything to drop into the water, and the people do not clean them during the dry season. Over half of all Btsisi' infants today are bottle fed. Although mothers boil the water, they rarely boil it long enough to kill any organisms, and once babies are a little older they begin drinking unboiled water. In 1981, nearly eighty per cent of all Btsisi' children in one village had intestinal worms and parasites. Contributing to this high frequency of intestinal worms is not only the unsanitary water supply but also the concentration of a large group of people with inadequate sanitary facilities. Indiscriminate defecation and littering are ideal conditions for soil-transmitted and fecal-oral diseases (Khoo 1979:177). The Medical and Health Division
is one of the oldest sections of the JOA, established by the British during the Emergency. The program is successful in treating Orang Asli in the forests as well as on reserves, but they have not tried to tackle many of the health problems of a settled way of life.

Another medical problem may reflect psychological and social stresses of a settled way of life. Btsisi', who make up less than two per cent of the total Orang Asli population, comprised nearly twenty per cent of all the patients at Gombak Hospital in 1970 who were there for treatment of psychological problems (see Kinzie and Bolton 1973). The disproportionate number of Btsisi treated for mental illness at the JOA Hospital in Gombak is statistically significant. If the stress of a settled way of life and loss of self-sufficiency is causing the high incidence of psychological illness among Btsisi', continuing regroupment of other Orang Asli may have the same effect.

THE BTSISI' FUTURE

In 1980, Btsisi' were aware of their declining quality of life. Middle-aged people were the most verbal about the changes. Their concerns center around future generations' quality of life and the continuation of Btsisi' culture. In particular, people's concerns include: (1) the effects of mass media and of the government's educational system, which stresses Malay culture and language at the expense of Aslian culture and language; (2) the alteration and destruction of their local environment; and lastly (3) an insufficient and threatened land base.

Although a child's first language is still Btsisi and Malay is first introduced with school attendance, parents are noticing and commenting that their children are speaking in Bahasa Melayu more and more among themselves. The Btsisi' spoken by adolescents is often interspersed with Malay, so that today traditional words, including the Btsisi' for "sea," "mother," and "father" are unknown to young people. Btsisi' elders do not blame the children. Unhappily, they are aware that in order for their children to succeed in school they must become fluent in Malay, and so long as
school curricula focus solely on Malay culture and history in Bahasa Melayu to the exclusion of Orang Asli culture and history; their children remain in a bind.

The diversified Btsisi economy has to a large extent buffered the effects of the plantation's expansion and the over-utilization of particular resources by non-Aslian peoples. But the growing expansion of these activities is threatening the Btsisi economy. Btsisi cannot keep Chinese and Malay commercial fishermen from trawling off the coasts around Carey Island; nor can they instruct Indians who come into the mangrove, which is a national forest reserve, on how to catch crabs without destroying the holes for future use by another crab. People know that if all Btsisi seine net fish or crab on a daily basis, the limited resources would rapidly become exhausted. To control overexploitation of resources, Btsisi are careful in appropriating their activities so that not everyone performs the same task at the same time. How long the limited marine resources will last is imponderable, however, especially with present and future mangrove draining projects.

Concern over the loss of mangrove dominates Btsisi thinking. Both the plantation and the federal government are draining large stretches of the wetlands for more plantings and for a Malay reserve village. Loss of the mangrove threatens not only Btsisi access to traditional fishing areas, but also the very existence of a large number of fish species and prawns who spawn in the mangrove rivers. Loss of mangrove also means loss of wood for fires, houses, tools, and animals necessary to pollinate crops, including durian, and major cash crop for all Malaysians.

Btsisi traditionally established their villages along the upper reaches of the rivers, on the border between wetlands and dry lands. Btsisi did not choose the mangrove locations for permanent occupation. Mangrove locations only provided people with easy access to the various ecozones people exploited. When the Malaysian government established the Btsisi reservations on Carey Island, the government declared those areas where Btsisi were residing at that moment as the reserves. The reserve's locations were not chosen for the quality of the land, and as a consequence portions of the land are inappropriate for cash cropping.
In conclusion, not only is much of the land on the reserves marginal for growing cash crops, but there is not enough for the population. The twelve acres the JOA estimates each household needs as a sufficient land base for self-sufficiency is unattainable for Btsisi in the present generation. In another one or two generations, after the land is divided for inheritance, few if any households will be able to subsist on income from what the land produces. As land becomes more and more scarce, Btsisi youth will begin migrating off the reservations in search of work and land. At present, there is sufficient work on the plantation as harvesters, but it is not clear that this situation will last. Will people begin leaving the reserves in search of work? What kinds of stress will this pressure and outmigration put on the community and the people leaving? Where will they go? What will they do?

NOTES

1. This paper is a revised edition of a paper presented at the symposium, "The Anthropology of Reservations," at the 83rd American Anthropological Association Annual Meetings, Denver, Colorado, 1984. I would like to extend my gratitude to George Appell, Eric Hansen, and Robert K. Dentan for their insightful comments. I would also like to express my gratitude to Dr. Baharon Azhar bin Raffie'i, Director General of the Jabatan Hal Ehwal Orang Asli.

2. The insurgents had first fought as the MPAJA (Malayan Peoples' Anti-Japanese Army) against the Japanese in Malaya.

3. See Robert Dentan (1979:80) for an excellent discussion of Semani strategies used to avoid being caught in the middle between Communist and government forces.
4. Btsisi¹ children say they are not allowed to use their own language, Btsisi¹, in the classroom. If they do, the teachers would make derogatory comments about Orang Asli and discipline them, they all said.

5. Kunstadter (1967, I:43) also mentions that governmental control over the type and frequency of interactions of tribal peoples is valuable in achieving their integration. In Malaysia, the JOA has ultimate control over who may and may not enter aboriginal reserves (Malaysia, Aboriginal Peoples Act 1954, revised 1974).

6. Officially, Btsisi¹ are known as Mah Meri (Hma? Meri, Hma? Mrih) which glosses as "first people." Hma? Btsisi¹ (or Besisi) is the term they use to refer to themselves. Hma? in Btsisi¹ means "people" and Geoffrey Benjamin (1985) suggests Btsisi¹ means "edge," which refers to the people's coastal location; thus, Hma? Btsisi¹ might mean "people on the edge."

7. The JOA appoints a village headman (penghulu¹) to represent each Orang Asli village in their relations with the outside world. The JOA appointed penghulu¹ may not necessarily hold a position of traditional "leadership" within the village (Benjamin 1968).

8. Karim (1977:63) mentions trees held "corporately" by the village. These, she argues, are most likely to have been planted by the village's founding ancestor. In the four villages on Carey Island and the mainland, where I did intensive mapping there were no trees held corporately by the village.

9. Tidal gates and bunds constructed by the plantation control the water level on Carey Island.

10. Traditional Btsisi¹ notions about sharing do not necessarily extend to include cash or marketable produce. If fisherfolk can sell their fish they do. Only if they have a large catch do they share it with relatives in other households.
BIBLIOGRAPHY

Anonymous

1981 Personal Correspondence with an Officer in the JOA.

Baharon Azhar bin Raffie'i


Benjamin, Geoffrey


Carey, Iskandar
Carey, Iskandar
1979 The Resettlement of the Orang Asli from a Historical Perspective. Federation Museums Journal 24(n.s.):159-69.

Dentan, Robert Knox
1975 Field Notes on Btsisi Research.
1986 Personal Correspondence.

Endicott, Kirk

Hooker, M. B.


Nowak, Barbara


CHAPTER FOUR

LAND TENURE AND DEVELOPMENT AMONG THE RUNGUS DUSUN OF SABAH, MALAYSIA

G. N. Appell
Brandeis University

Introduction

Part One: The Traditional Sociocultural System of the Rungus

Introduction

The Ecology of the Domestic Family
- Land Tenure in Borneo
- Swidden Rights of the Rungus Domestic Family
- Domestic Family Social System and Developmental Cycle
- The Agricultural Ecosystem
- Wet Rice and Rights Over Wet Rice Fields
- The Cultivation And Ownership of Trees

The Domestic Family and Village as Ritual and Jural Entities
Part Two: Modernization and Its Impact on Land Tenure and Rungus Economy

Introduction

Processes of Incorporating Rungus Society Into the National Economy and World System
- Psychosocial Deprivation and Devaluation
- The Devaluation of the Rungus
- The Structure of Modernization: The Government; The Coastal Muslim; Chinese Towkay Interests; Christianity
- The Development of Political Consciousness

Agricultural Development Schemes

The Rungus Response
- Changes in the Opportunity Structure: The Status of the Rungus Economy in 1986
- The Amount of Landlessness and Attitudes Towards It
- Changes in the Social Structure

Conclusions

Notes

Bibliography
INTRODUCTION

The Rungus are a people of northern Sabah, Malaysia. They live in the Kudat Division and their language is one of the many isoglots of the Dusunic language group (Appell 1968a). In addition to the Rungus, there are thirteen or fourteen other self-conscious, named Dusunic-speaking, ethnic groups in the Kudat Division, each of which is primarily localized in an ethnically homogeneous area.

The Rungus are the most visible and most numerous of these Dusunic groups. I estimated that they numbered about 10,000 people in the early 1960s at the time of our original research. They are found on both peninsulas of the Kudat Division, the Kudat Peninsula and the Melabong Peninsula. This description of Rungus land tenure, however, pertains only to those living on the Kudat Peninsula, with whom we resided. It may, nevertheless, be extrapolated with caution to the Rungus of the Melabong Peninsula on the other side of Marudu Bay.

Research on the traditional Rungus sociocultural system was undertaken by myself and my wife in 1959-60 and 1961-63. During the second part of our original field work the Rungus began to experience increasing pressure on their land and were subjected to social and economic change by forces over which they had little control. The first part of this article will consider the traditional sociocultural system, and I will use the ethnographic present. Then I will consider some of the consequences of both directed and undirected social change that we were able to examine during our brief restudy in the summer of 1986.
PART ONE
THE TRADITIONAL SOCIOCULTURAL SYSTEM
OF THE RUNGUS

Introduction

The Rungus are swidden agriculturalists, and the major social units are the domestic family, the longhouse, and the village. The domestic family is most frequently a conjugal family consisting of a man and his wife—the two founders—and their children.

Each domestic family cultivates its own swidden, and, in addition, raises a number of chickens and pigs. Marriage is essentially monogamous, and residence is uxorilocal. First cousin marriage is considered incestuous and ritually dangerous, but it may occur if the proper ritual payments are made. Cousin kinship terminology is essentially of the Eskimo type, although in certain situations the Hawaiian type may also be used to indicate social solidarity. The terminology for parents' siblings is lineal. A kindred type of social isolate is not present (Appell 1967).

The number of inhabitants of a village can vary from 40 to approximately 400 people. And a village may be composed of one or more longhouses. These may be located together or scattered in various hamlets in the village territory. The longhouse is in essence a condominium, composed of the various apartments built and owned by the domestic families. As there are no nearby sources of ironwood, the posts of the longhouses rapidly rot. Because of this, or the incidence of sickness, or the desire to move closer to new swidden areas, longhouses are subject to frequent changes of member families. They seldom last in one location more than seven to ten years.

The Ecology of the Domestic Family

The domestic family is the primary production and consumption unit of Rungus society. As such it is part of a complex human ecosystem that is composed of three subsystems: the land tenure system; the domestic family social system; and its agricultural system, or agroeconomic system (see Rambo and Sajise 1984; Martin 1986). Thus, to understand the impact that changes in the land tenure...
system and modernization of agriculture have had on Rungus society it is necessary to sketch out the major features of this human ecosystem.

Land Tenure in Borneo. Land tenure is a critical part of the human ecology of the domestic family and integrates the domestic family with the village community along with the institutions of kinship, marriage, and economic exchanges.

There are two basic types of land tenure in Borneo: circulating usufruct and devolvable usufruct (see Appell 1986). In each type the village has residual rights to a territory. Only village members may cultivate in the village territory without permission of the headman. In circulating usufruct, a domestic family cuts its swidden in a new area each year, and no permanent use rights are established by cutting primary or other forms of forest. In devolvable usufruct, a domestic family or individual establishes permanent usufruct over an area by being the first to cut the primary forest (see Appell 1986).

Swidden Rights of the Rungus Domestic Family. In Rungus society, the form of land tenure is circulating usufruct. The domestic family by virtue of its membership in the village has the right to cultivate any area of the village territory, except those planted in fruit trees. Each year, shortly after the last year's rice crop has been harvested and threshed, the male founders of the various domestic families, either singly or in groups, go out to locate new swidden areas for their families for the next agricultural season. When a satisfactory area has been found, each marks his swidden boundaries with a few cuts of his parang. He then informally notifies his fellow longhouse members, or the members of the longhouse nearest his new swidden, as to the location of his prospective swidden.

Rights to use this swidden area lie with the cultivator until his last crops are harvested at the end of the agricultural season. If the cultivator has planted cassava, the period of rights over that area may last for two or three years, until the last cassava has been harvested or abandoned. Then the area reverts back into the control of the village.
This lack of continuity of use over a tract of swidden land by the original cultivator or his descendants is illustrated by the use of land during the 1961 agricultural season in the village where we resided. Out of a sample of 69 families, 63 cut swiddens in areas cultivated by some other family in the previous cycle.

Domestic Family Social System and Developmental Cycle. When a son desires to marry, a substantial bride-price of gongs, brassware, and ceramic ware is provided for him from the accumulated assets of his domestic family. This, as well as the other institutions that lead up to marriage and the eventual foundation of a new domestic family, is justified by the major value premise in Rungus society: all sexual relations, unless they are properly entered into through a marriage, are potentially deleterious to the participants, their families, the village as a whole, the swiddens, and the domestic animals in the village. Because of this value premise, the sexual and reproductive services of the female are highly valued, scarce services, and the explicit, acknowledged purpose of the bride-price is the purchase of rights to the enjoyment of these.

After the wedding the newly married pair resides with the bride's natal domestic family until the next agricultural season. They then build a separate longhouse apartment, ideally onto the longhouse where the bride's natal family resides, and found their own domestic family. This domestic family may also be joined by the parents or widowed parent of one of the two founders on the dissolution of the parental domestic family after the marriage of its last child and when the parents can no longer carry on swidden activities.

All members of the domestic family contribute their labor to the economy of the domestic family. Young girls start imitating the work of their mothers at about the age of three years, and by the time they are around twelve, they are accomplished in all housekeeping tasks. As soon as they can handle the responsibilities of the household, they free their mother for work in the swiddens. Young girls also help in the less arduous tasks in the swiddens. Young
boys do small chores around the household, and by the time they are ten or twelve years old they start helping in the swiddens (see L. W. R. Appell n.d.).

Profits from the household ecology are invested in gongs, brassware, jars, and other ceramic ware. This property is owned corporately by the domestic family and serves as an investment that can be liquidated for food and clothing in times of poor harvests (see Appell 1976, 1978, 1983, 1984). Some of the agricultural surpluses are also sold to Chinese shops to repay debts or for cash. The Rungus are dependent on these shops for sugar, kerosene, cloth, cookware, tinned fish, etc.

The Agricultural Ecosystem. The farming system of the Rungus is a complex, multileveled ecosystem composed of various food crops, fruit trees, plants for raw materials, domestic animals, and wild animals.

After cutting the forest and firing the slash, the domestic family first plants maize. Then rice is planted in a number of different varieties varying their fit to soil and water conditions, vulnerability to environmental perturbations, and in maturation time. After the rice has sprouted, cassava in two or more varieties is grown. A number of vegetables and other plants are also planted. These include long beans, cucumbers, melons, taro, yams, bananas, eggplant, sugar cane, pineapple, etc. In addition, the swidden contains herbs and spices, ritual plants, and, if the female founder of the family weaves, a couple varieties of cotton and dye plants.

The ecosystem of the domestic family also includes its domestic animals. Pigs and chickens scavenge around the longhouse for the bran and broken rice kernels from rice huskings, human excrement, and discarded vegetable matter. They are also fed surplus maize and cassava. Water buffalo are let roam to graze in the forest. The swidden crops and swiddens reverting to forest attract a variety of wild animals including bats, rodents, primates, reptiles, ungulates, etc. These are hunted, and dogs are kept to help in the chase. Wild fruits and roots also form part of the diet of the domestic family.
The domestic animals are sacrificed in various rituals to relieve illness, for marriage, and to promote the fertility of swiddens, family, and village. Thus, they, along with the wild animals hunted, form an integral part of the cycling of nutrients in the domestic family ecosystem.

Around the field house and the apartment of the domestic family papaya, banana, terap, lansat, and other fruit trees are also planted.

Wet Rice and Rights Over Wet Rice Fields. Wet rice plays a part, albeit a minor part, in the human ecology of some of the domestic families. Sometime in the early 1930s, according to our estimate, a Rungus man and his son from the village in which we did our field work visited the wet rice areas to the south. They brought back with them specific details on the cultivation of wet rice and began to plant it in a swampy area within the village boundaries. Over time various other families joined in this effort. However, they were a minority in the village. And not every year have these fields been planted in wet rice. There are several reasons for this.

First, there is insufficient control over the stream that goes through this area. Dams have to be rebuilt each year, which involves considerable labor. Then, if it rains too heavily, the rice can be flooded out. Thus, while the yields are larger than in swiddens, they are more unpredictable.

These rice fields are perceived to be the property of those individuals who constructed the dams and the bunds. Others cannot use these fields without the permission of the owners. When agricultural development became a reality in the area, one of the first requests was for help in building more permanent dams.

The Cultivation And Ownership of Trees. The Rungus plant a variety of fruit and nut trees. These may be planted anywhere in the village reserve, but it is more usual to plant them near a settlement, around the edges of a sacred grove, or in a cemetery site so that they will not be vulnerable to destruction by escaped swidden fires.
The planting of fruit trees implies no rights over the surrounding land, and anyone may cultivate up to and around these trees.

The original planter may divide his fruit trees among his offspring to avoid disputes over who has rights to them after his death. This is becoming, it appears, the more common method. However, trees may be devolved upon all heirs, both male and female, without division.

All rights over cultivated trees are held by individuals and not the category of descendants of the original planter. Consequently, I have concluded that no corporate descent groups exist in Rungus society (see Appell 1983, 1984, 1987).

The Domestic Family and Village as Ritual and Jural Entities

The domestic family engages in economic activities corporately and owns its retained agricultural earnings as a corporate group. This jural corporateness is also mirrored in the ritual realm. The domestic family sacrifices pigs and chickens to various members of the supernatural world to cure illness of members and to ensure the fertility of the swiddens. This establishes a state of goodwill between the spirit world and the domestic family as a corporate entity (see Appell 1976).

Unlike the village, the Rungus longhouse is neither a jural entity nor a ritual entity, with perhaps one minor exception (see Appell 1976, 1983, 1984). Instead, the next larger social entity above the domestic family that is a ritual and jural entity is the village, particularly with respect to the area of land it owns (see Appell 1976, 1983, 1984). The rights of the village over its territory and the rights of residents to use its assets are explicit and define the ritual and jural personality of the village.

The territory of the village, or village reserve, usually encompasses a drainage area of one of the small streams that run out of the height of land forming the backbone of the Kudat Peninsula. The village boundaries thus run along heights of land. This village reserve contains a number of sacred groves with indwelling spirits. These spirits are easily angered if their groves are cut to plant swiddens, and they vent their anger by making the culprit or his family
ill. Certain of these groves may be owned by the village corporately, if the indwelling spirits have been propitiated in a corporate village ceremony.

Each resident domestic family has the right to cut swiddens in the village reserve, while nonresidents may not without the permission of the village headman. The village has no right to limit the size of swiddens that a family may cut. Nor are any rights to use of the village territory lost through the perpetration of a delict. Fruit trees may be planted by village members in any part of the village reserve not already in use, and the village has no control over this as long as fruit tree groves are not established in an area particularly vulnerable to destruction by swidden fires.

During ceremonies held every decade or so to promote the fertility of the village land, crops, domestic animals, and inhabitants, the village boundaries are closed off for a period of time to prevent the intrusion of anyone from outside. Such an intrusion would reduce or nullify the effects of the ceremony, and any intruder is subject to a fine.

Furthermore, no wood can be taken by a nonresident from the village reserve for building a field house or for firewood, as this would result in a ritual delict involving the loss of fertility of the village reserve. Cutting timber for the construction of a longhouse in another village threatens the ritual goodwill of the nearest longhouse in the territory. This brings illness and death to the members of that longhouse.

Nonresidents may use any paths in the village reserve and may hunt and take whatever wild produce they desire as they pass through as long it is for their own use and not for sale. However, the cutting of bark to construct a granary by a nonresident is considered a delict and the culprit must pay a chicken to the headman. Also nonresidents may not plant fruit trees in a village reserve without the village headman's approval.
PART TWO:
MODERNIZATION AND ITS IMPACT ON
LAND TENURE AND THE RUNGUS ECONOMY

Introduction

The process of articulation of the Rungus economy and sociocultural system to the modern world system had just begun during our first period of field work in 1959-1960. It accelerated during our second period of field work in 1961-63. When we returned in the summer of 1986 for a brief visit the process was almost complete. One headman estimated that 60 per cent of Rungus culture had disappeared.

During this period of growing articulation, psychosocial deprivation and devaluation of the Rungus population was a continuing process.

Processes of Incorporating Rungus Society Into the National Economy and World System

Psychosocial Deprivation and Devaluation. The dehumanization of a peripheral population is in the service of the center for its economic gain. It is a universal process (see Appell 1980, n.d.a, and the Introduction of this volume). Those populations that own resources, including labor service, that the economic center wants for its own expansion are portrayed in less than human terms. And this provides the justification for the representatives of the center to introduce social change and secure control over the populations and their resources.

The Devaluation of the Rungus. Like other peripheral populations, the Rungus were perceived by many in the colonial government as "dumb." One Englishman said that they sat around town with their mouths hanging open.

"Dirty" was another frequently used term for them. But it was not only used by the governing elites, it was also used by Dusunic speakers who had been converted to Christianity or who had had some education. For example, a visiting dresser from another Dusunic group refused to sleep in our Rungus village but chose to sleep in a distant Chinese shop as the village was "dirty."
A Chinese agricultural officer visited our field station located close by a longhouse of 98 people in a village of 356 people. He asked us how we liked living down there away from "human beings."

Another form of dehumanization occurs when a group is ascribed characteristics of personality or culture that they do not in fact have. An example of this appeared in an editorial of a newspaper that was then controlled by the head of the Kadazan Cultural Association. This association was formed to forward the interests of Dusunic speakers around the capital of the country, but the term "Kadazan" was being extended to all Dusunic speakers to enlarge the potential membership for the association. The editorial read:

"New wet padi areas in Kudat" said a small headline last Thursday. But the six words are full of meaning ... to the people of the kampongs [villages] the words mean new hope; the hope of having their stomachs filled regularly, of the possibility of having rice in their rice stores throughout the year instead of having to go out into the jungle to forage for food ... 

In the Kudat area are some thirty thousand Rungus Kadazans [Dusunic speakers] whose agricultural methods are among the most primitive in the country ... One of the greatest need in the work of helping the Rungus ... is to make them change some of their habits, some of their customs. There are those who would prefer to see the Rungus remain as they are, primitive, often half starved, devoid of leadership by their own people--a living specimen of what they prefer to think are the aborigines of Sabah a human prey to all other peoples who live near them. But these people have been steeped too long in their initiative destroying adat and must be shown new ways of life, better ways of living.

Wet padi has a great stabilising influence among the people; those who practise shifting cultivation live a nomadic life, primitive and quite unimaginable by those who are accustomed to live
in settled communities. Wet padi has made them stay in one place, develop the areas they live in, plant fruit trees, keep poultry, pigs and buffaloes and improve their lot to the extent where modern civilisation can be absorbed without much difficulty.

If the Rungus are to be helped they must also be helped to settle, maybe even to break up their long houses to give them more initiative and individuality. We have always felt that the baby "communes" of the longhouses both in Sarawak and North Borneo have been in no small measure responsible for the slow advance of the people who live in them. It is only by living in settled conditions that the people can receive the benefit of educating their children, of receiving medical attention of which they are in great need, of being able to live better, civilised lives [North Borneo News and Sabah Times 1962:2].

It is hard to counter such nonsense and misinterpretations of reality as these because they are the myths that are critical for organizing the world view of those at the center or of those who wish to be associated with the values and rewards of the center. However, the truth is that lack of food was not a problem among the Rungus we knew. They were less nomadic than I suspect Americans are. Fruit tree groves were everywhere within the village territory. There were areas set aside for cemeteries. And each locale in the village reserve was known and named. Furthermore, the Rungus were first-rate capitalists. Property was owned by the individual as a result of inheritance, or by the domestic family as a corporate grouping. Agricultural surpluses were invested in gongs, antique jars, brassware, and the like. Some families owned property that in total was worth approximately US$10,000 to US$15,000. And the village was close in form to the land-holding corporations chartered by the government (see Appell 1983, 1984), while the longhouse was in fact a condominium, not even slightly resembling a "commune" in jural and social organization.

Government officers shared these same attitudes. The Rungus, not only condemned as "dirty," were also charged
with being "lazy," with not using their land properly, with having a religion that interfered with their labor output. It was stated that they should spend more time in agricultural pursuits. And this should be done even at the expense of their weavng, which incidently produced beautiful cloth that was a good source of income. The charge of laziness reflected the fact that their work schedules did not correspond to those of the English. Rungus frequently worked late into the night when it was cooler. In fact the Rungus were extraordinarily hard working and enterprising. And their religion not only paced their consumption of protein, which is necessary to a healthy population, but prohibited the over-use of alcoholic beverages (see Appell n.d.b).

The failure to recognize a group's own social identity is another symptom of psychosocial deprivation and devaluation. There are thirteen or fourteen named ethnic and linguistic groups of Dusunic speakers in the Kudat region, each with a different adat--customary law. In some instances the variation in culture and language is so great that the Rungus isoglot and those of other Dusunic groups are not mutually intelligible. However, as the Rungus were the most visible ethnic group in the region, the English government officials and local individuals from the metropolitan areas in Sabah would refer to all the Dusunic speakers as "Rungus."

A school was established during the time of our original field work at the nearby Chinese shop area, located at the head of the estuary of the river draining the region. This brought further aspects of dehumanization. The teacher required that the young boys cut off their long hair as it was "unclean." The Rungus custom was for young men not to cut their hair until they had their first child. Yet there was no restriction on the custom of wearing of long hair by the girls.

The Chinese shopkeepers also told the Rungus that their children could not wear their traditional clothing to school, as the teacher would laugh at them. This consisted of shirts and trousers with flared legs for men, and for women, a sarong and an underskirt, which was frequently handwoven. The Rungus were told to purchase shirts and shorts and dresses from the shops. Also, they were told they would be laughed at if they used their usual carrying
baskets for school. They would have to purchase school bags. This integrated the Rungus closer into the national economy, as they would have to find cash to meet the expenses of goods manufactured beyond their area.

Psychosocial deprivation and devaluation has many faces. It appears not only in linguistic contexts but in behavioral contexts during which the individual or group is treated as less human than others. One example is that of a missionary group giving out second-hand clothing gathered from donors in Europe. This began to replace the Rungus traditional dress, and as a result, this simple act had many symbolic ramifications. The Rungus became charity cases. Their traditional clothing was marked by the white man as inappropriate. And with the wearing of pieces of discarded clothing, the Rungus symbolized their status of being integrated into the national society at the lowest social level.

Psychosocial deprivation and devaluation had begun to have its impact on the Rungus at the time of our original field work and before the establishment of the school, so that their self-esteem was already under threat. This was illustrated in the constant theme of cultural, social, and racial inferiority that arose in discourse with Rungus. For example, it was common to hear statements such as white skin is "good," or "beautiful"; Rungus skin is "no good"; "we are no good because we are poor."

This dehumanization of the Rungus population has continued to the present even though the colonial government was replaced over two decades ago. In a sense, external colonialism has been replaced with internal colonialism (see Alatas 1977 for a discussion of some of the implications of the new elites accepting the stereotypes and thinking of the colonial elites). For example, the department of agriculture runs extension courses to make the Rungus "modern." One of these is to teach young housewives "modern" sewing and crafts. Yet the Rungus women have always made intricate embroidery to decorate their sarongs. And their weaving is highly developed and extraordinarily beautiful. Handwoven skirts and jackets now sell from US$40 to US$200. Yet in one of the extension courses the young married women were taught to make tacky little dogs of synthetic yarn which was teased to
produce a "pekingese" of no intrinsic value, beauty, or use. And none of these younger housewives, many with babies and young children, know how to do the traditional weaving, which is now dying out.

The Rungus traditional housing is also perceived as inadequate, and government funds have been provided for the purchase of metal roofing and planks for walls. The metal roofing causes the houses to be so hot as to constitute a health hazard.

At one level the Rungus accept this peripherization and devaluation of their traditional culture. The course in which the "craft" of making yarn dogs was taught was considered highly successful by the community. One woman, who had been to America with her husband while he attended university, was so pleased with her effort that she had it ensconced in a eye-catching place in her house in its own glass protective case. Thus, the use of the symbols of the center, no matter how inappropriate or tacky, is an attempt to obtain a status that removes one from the category of the socially disadvantaged, from the peripherization and stereotyping that goes on in the processes of psychosocial deprivation and devaluation.

However, the Rungus have in general not responded to psychosocial deprivation and devaluation as expected. Perhaps the Rungus child rearing, which is still in tact, creates an adult that has basically a strong self-worth that can stand such stresses. For children are cuddled, responded to, wanted, and deeply loved. Certainly the Rungus, rather than accepting the situation as hopeless and retreating into apathy, rather than accepting the dehumanization as unchangeable and becoming demoralized, have responded to the challenge presented in the peripherization and devaluation. And they have fought back to gain control over their economic and social futures, over the newly developing social world. This search for control is a sign of positive community health.

One method for obtaining control has been to encourage their children to get as much schooling as possible so that they can get jobs that are well paid and positions in the government that have power. And the children have largely responded to the opportunity.
The Structure of Modernization. The Rungus believed in the 1960s that their political and economic futures lay in the hands of others. They were deeply concerned that they would lose control over their land and end up laboring for the Chinese economic interests and come under the political control of the Coastal Muslims. This was their interpretation of the highly complex social situation that confronted them as the region was becoming modernized and integrated more closely to the national economy and foreign markets.

There were a number of change agents that were attempting to integrate the Rungus into the country's socioeconomic center and were contending for control over their labor, their land, or clientage. These agents included the government, Christian missions, the Coastal Muslims, and Chinese economic interests. In the later phases of our original field work political parties were permitted to be formed, and they attempted to represent the growing political interests of the Dusunic speakers in contending for their votes.

The Government. Our original field work covered two phases. In the first phase, 1959-60, the government was not involved in the problems of transfer of power to Malaysia. The country was still the Colony of North Borneo. During our second field work session, the processes leading to the incorporation of the colony, now to be called Sabah, as a state in the new country of Malaysia were in flood tide. However, during both periods the administrative positions of District Officer, Officer in Charge of Police in the District (OCPD), and the Medical Officer were filled by British or Europeans. Only towards the conclusion of our original field work was the OCPD a Dusunic speaker, but from another ethnic group than the Rungus and a different district.

Administrative positions under these levels were occupied by Chinese, Coastal Muslim, and occasionally Dusunic speakers from other districts where educational opportunities had been available for some time. However, the clerks in the district office and the native chiefs were primarily Coastal Muslim. This category included various ethnic groups from the southern Philippines, who had been in the country for generations, and Brunei Malay.
In late 1961 political parties were permitted to be formed. Then, in 1962 the Brunei rebellion broke out and subsequently the border war with Indonesia. At the same time the Philippines were contesting the formation of Malaysia on the grounds of their old claims to Sabah. It was in this context that the government, from the governor on down, believed that rapid development was necessary to prevent subversion within and counter threats from without. There was not time in their view to consider development from the bottom up.

However, this was in reality only an intensification of their past policy. The government was uninformed, frequently misinformed, about Rungus culture. And most members of government seemed uninterested in informing themselves. Instead they worked largely with the stereotypes, common at that time, about the Rungus which dehumanized them. Psychosocial deprivation and devaluation has also the function of simplifying reality so that the dehumanized population can be manipulated in the service of the goals of the power holders. Consequently, there was no interest in what the land tenure system of the Rungus might be. The view of those in power was that the land could simply be put to better use—for the interests of the central government, of course.

What is unusual is that the emerging indigenous political elite recruited largely from urban areas or areas long Christianized also held similar stereotypes (see Alatas 1977 and the section above).

The Coastal Muslim. Prior to the British, the Coastal Muslim leaders were frequently the court of last resort to resolve disputes among the Rungus. However, to what degree they actually organized a government in the district is not known. Whatever the case, the British perceived them as being organizers of political relations and largely worked through them in dealing with the Rungus. Thus, the Rungus perceived that politically they were under the control of Coastal Muslim who did not always represent their legitimate interests. In fact, the Rungus were wary of the Coastal Muslim and frequently scared of those that worked in lower level government positions. Few Rungus spoke Malay, the lingua franca, and they were continually browbeaten by the clerks in the district office. As a
result, they frequently turned to the Chinese shopkeepers to fill out any government forms that were necessary.

**Chinese Towkay Interests.** The Chinese largely controlled the economic life of the district through their shops, their plantations, and their export-import firms. The Chinese towkay—businessmen—were very interested in obtaining government title to land for plantations on the Kudat Peninsula. They wanted to situate these near Rungus villages because of the potential labor supply. It is interesting that on the other peninsula across the bay there was ample land, while on the Kudat Peninsula the land situation was very tight. But they were not as interested in this other area because of the scarcity of labor.

There were Chinese towkay in the district capital and at the head of many of the estuaries of the rivers, where they operated small shops and plantations. These rural towkay were frequently of mixed parentage and referred to as Sino-Dusun. All manufactured products purchased by the Rungus came from these Chinese shops. And they controlled the transportation from the rural areas to the district capital by the boats they owned. Rungus were permitted to travel on these Chinese owned boats for a fee, and if they wanted to transport agricultural products to the capital for sale at better prices they had to hire these boats.

The Rungus were deeply concerned over the economic domination of the Chinese. They maintained that they could not get accurate weights of their agricultural products from the Chinese. The Chinese knew well that their domination was based on their control of the information flow to the Rungus. One shop owner always turned off his radio when Rungus arrived, so that they would not hear the commodity prices and news. The Rungus in turn were seen hanging around Chinese shops, which was interpreted by the government as being lazy. What they were doing was learning, by observation and listening, as much as they could about the outside world.

In the rural areas the government frequently went through the local head of the Chinese community at the shop areas to send messages to the Rungus. As a result, the Rungus were never sure whether a command by a Chinese was from the government or not, and the Chinese
used this to get free labor. One government officer said that the Chinese formed the "government" in the country areas. The leader of the local Chinese community took advantage of this. He would get gangs of Rungus laborers for "local community projects" at the shop area under the guise that he was carrying out the orders of the district officer. And he would threaten to report the Rungus headmen to the district officer unless they cooperated.

Thus, the Rungus were put in a subordinate position as the Chinese controlled both access to markets and the sources of information on government and economic affairs. And it was harder for the Rungus to make sound economic decisions, such as whether they would maximize their profits by selling their agricultural surpluses at the district capital or at the local, rural Chinese shops.

Christianity. The Rungus were subject to proselytization primarily from the Basel missionaries from Switzerland and Germany. They ran a dispensary at which they handed out second-hand European clothes to the Rungus, supplanting the native dress. The success of missions is measured by their governing bodies in terms of the number of conversions achieved.

In the beginning the Rungus perceived that conversion to Christianity would prevent them from becoming ill and make them wealthier. Christianity would protect them from the irascible and aggressive spirits who cause illness when offended. Many reside in wet places, springs, and other unusual natural phenomena; and they respond by causing illness when the groves of trees around such places are cut in preparing swiddens. The Rungus also believed, however, that if these were cut the country would become drier. But the missionaries reasoned that by becoming Christian the Rungus could cut these groves with impunity and plant them with rice. Being fertile places, they would reap a good harvest for sale. In 1986 when we returned few of these ritual groves were in existence, and the environment was markedly drier (see Appell n.d.b).

With the support and encouragement of the British colonial government, the Basel Mission established an agricultural school in the middle of the Rungus territory. The Rungus were anxious to learn how to read and write so
as to be able to compete with the literate Chinese and Coastal Muslim in the political and economic sectors, and they were anxious to learn new agricultural practices to compete with the Chinese plantation owners. Unfortunately, the first principal of the school knew nothing of Rungus agricultural methods. He believed that they had to be taught how to plant fruit trees, since he thought they had none, and he was unable to identify the Rungus cultivars. Eventually this school provided subsidies, supplementary to those of the government, for planting land in coconuts.

After the formation of Malaysia, conversion to Christianity was perceived to have another benefit. It offered opposition to the political party that was being formed by the Coastal Muslim and which the Rungus believed would be inimical to their interests. Some converted to Christianity at that time. However, others converted to Islam in the supposition that they would get preferred treatment in the distribution of titles to land and to development resources.

The Development of Political Consciousness. The initiation of change by the top level of administration in any social system to the lower or local level can create inequities either in the basic policy itself or in its implementation. The system must have a feedback channel whereby these inequities and inefficiencies may be corrected (see Appell 1966a). Without such a channel the local-level population may become either apathetic or experience a rise in aggressive behavior. In a constitutional democracy this function of feedback is filled by political parties.

However, the colonial government of Sabah (then the Colony of North Borneo) had set in motion processes of change for the Rungus long before they permitted the formation of political parties in 1961 as part of the decolonization process. And this had created a need among the Rungus for feedback to the government hierarchy to reestablish some control over these development processes and their own future. However, the only opportunity of help appeared to be in the Kadazan Cultural Association, a quasi-political party that the government had permitted to be organized in the early 1950s to forward the interests, primarily cultural, of the Kadazan people.
The term "Kadazan" originally referred to one of the Dusunic linguistic and ethnic groups found in the area close to the capital of the country. The Kadazan had been converted to Catholicism before World War II and also had had the advantages of schools. As the Kadazan Cultural Association progressed it tended to use the term "Kadazan" for all Dusunic speakers. And when a political party was formed on the base of the Kadazan leadership, the use of the term continued in this extended sense in order to incorporate more Dusunic speakers into a party of common interest.

However, the Rungus when they were first approached by members of the Kadazan Cultural Association were uncomfortable being grouped under that ethnic label. They believed it represented primarily the interests of the Kadazan people, an ethnic group they viewed with some suspicion as many years before they had raided the Rungus villages for property. This had ceased, however, even before the arrival of the British.

On the other hand the Kadazan Cultural Association took positions that appealed to the Rungus. One Rungus who had attended a meeting of the association in the capital of the country opened up his report of what he had learned at the meeting with the following statements: (1) Do not sell land to the Chinese as it desecrates the bodies of your ancestors; (2) at the capital of the country and in the surrounding towns the government people are mostly Dusunic speakers, not Chinese; (3) there are shops owned and run by Dusunic speakers, not Chinese; (4) there are lots of schools there and the teachers are Dusunic speakers not Chinese. His report of the meeting included the exhortation from the head of the association to establish local cooperative societies to run shops and to buy and sell all their goods at such a shops.

Furthermore, and it is not clear whether this represented the views of the Kadazan Cultural Association or that of the Rungus visitor, he said that they were told not to work for the Chinese if they had enough food. He also said that the Dusunic speakers are today the slaves of the Chinese, so buy from Kadazan shops, go to school, learn to use the Chinese scales so that you will be no longer cheated by the Chinese, and do not sell to the Chinese. They were
also told to buy sewing machines and make their own pants and shirts, so as not to have to buy them from the Chinese, and continue to weave cloth for women's skirts. Finally, the Rungus visitor said he asked the members of the Kadazan Cultural Association how long they had been wealthy. And they reported that about 40 years ago they had become Kadazan and for the past 25 years they have been wealthy.

Other meetings of the Kadazan Cultural Association were held locally. And it was again emphasized that if the Chinese were giving any trouble, they should tell the leader of the Kadazan Cultural Association.

Agricultural Development Schemes

Land development schemes for rural populations are purported to improve the economic status of such populations. But if they result in monoculture, they can also make such populations more vulnerable to external economic conditions and therefore less able to adapt. This may be exacerbated if in the process the adaptive resources of the indigenous culture are lost through educational policies that ignore local resources and through various attempts to reorient the local population towards the values and objectives of the center. Not only can this lead to a crisis of identity and a sense of loss, producing social bereavement and what I have termed "the social separation syndrome" (see Appell n.d.a), but also this can result in the affected rural populations becoming economically deprived during periods of economic recession if they have lost their old adaptive skills.

But land development schemes have other functions that perhaps provide stronger motivating forces for government intervention. They redirect the labor and reorganize the local resources for the benefit of the national economy and the support of a growing government bureaucracy. In sum, they capture some, if not all, of the surplus value of labor for the benefit of the government hierarchy and economic interests in the center to the loss of the rural populations. It is in this light we must analyze the various land development schemes that were designed for the Rungus.
The British government, for some time prior to our first field work, had tried to get the Rungus to take up title to land under the government system of land tenure and to plant coconuts or put in wet rice fields. There was some agricultural support for both plans in terms of subsidized coconut seedlings and help for dam building. Then, in 1959 the District Officer in charge of the Rungus area mistakenly perceived that there were vast amounts of jungle not being used by the Rungus. And this would become available to agricultural development because of a road to be put through the Rungus territory. The District Officer did not understand the Rungus system of land tenure. And he was not knowledgeable enough to see that most of the forest was secondary jungle regenerating after being used for swiddens (see Appell 1966a). In fact, the Rungus had just about reached the peak of utilization of their ecosystem without starting degradation of it.

However, the District Officer planned to open up the areas along the new road for Chinese settlement both for economic development and to "shock the Rungus into change," he said. The Rungus, according to his stereotypes—the standard ones of colonial society—were lazy, not motivated by economic interest, improvident in their expenditures for their ceremonies, hampered in their economy by their traditional religion, and backward. An inversion of reality.

The Rungus were greatly concerned about the loss of their land. They had seen this happening in the areas around the district headquarters and were experiencing this locally as the Chinese attempted to obtain land for plantations, spreading out from their small settlements at the heads of estuaries where they also operated small shops. The administration would not accept any applications for land near a Rungus village without the headman signing it as an indication of the community's approval in order to prevent the incursion of Chinese interests. However, it was common knowledge that some headmen would take bribes to sign land applications for Chinese without telling the community.

When the government permitted the formation of political parties, the leader of the Dusunic speaking party objected to the government about the growing economic
power of the Chinese vis-à-vis the Rungus and particularly their growing control over Rungus land. Thus, when a new District Officer came in charge in 1961 who was more educated, open, and sensitive to these issues, this complaint, along with my representation of the Rungus land tenure system, resulted in a change of the agricultural development project along the road. It was now to be open only to the Rungus, and agricultural subsidies were provided for planting coconuts and housing.

However, during our survey in 1986 we found that only a few villages had taken advantage of the government plantation scheme along the road. And many of those individuals who had originally taken part in it had subsequently withdrawn. There were various reasons for not participating in the scheme. First, in some villages the plans to develop plantation plots along the road interfered with the allocation of land to individuals that had been done informally within the village. Second, the plots were long and narrow to provide as many as possible with road frontage. This form was not believed to be efficient use of the land by some Rungus, which caused them not to enter the scheme. Furthermore, the land selected was not particularly good for coconuts, and the Rungus who did not join argued that the acreage allotted could not provide sufficient income to support a family. Also people were supposed to build individual houses on these plots. But these houses were not popular, partly because they were isolated, and partly because this land development scheme did not easily permit the Rungus to practice fully the human ecology of their domestic family system.

A second type of agricultural development program began in the mid-1970s. Three contiguous plots were chosen as a site for starting an oil palm plantation and cooperative. Some of these villages did not want to go into it, but they were pressured into it by the government. The government built a large resettlement area in which they constructed individual houses on small plots. The houses are a considerable distance from water, and a limited amount of water is trucked in. Each family is given a daily allocation which is insufficient for its household needs.

The members of this scheme were paid to plant and cultivate the oil palms with the idea that when they fruited
in six years or so the land would be divided up into plots of ten acres for each of the resident families. This never came to pass. Also, employment on the scheme changed from full time to part time after the palms had begun to fruit, which did not provide enough income to adequately support a family. Many members of the scheme have moved out, and a large number of the houses are now vacant. Even more so than in the previous scheme, this development interfered with the human ecology of the Rungus domestic family. The house plots are both too small and the soil too infertile to do any useful gardening. And the rules of the scheme prevent the planting of any fruit trees, even bananas. This form of a monoculture economy conflicts with the experience of the Rungus who traditionally practice a diverse agroecology. And this diversity provides a safeguard against disaster if any one of their sources of subsistence fail. Consequently, when the oil palm scheme failed to provide income in the face of seasonal fruiting and price fluctuation, the traditional household agroecosystem was validated as more adaptive in their eyes.

In the late 1970s another government scheme was developed to provide employment for the Rungus. This involved the planting of fast growing species of trees which in eight to ten years were to be harvested for pulp. Another goal of the project was to reforest land that had become marginally productive in agricultural terms. Again only some villages agreed to the scheme. Most villages refused to join the scheme because of their fear that they would lose control over their land. The tree planting program involved the employment of the villagers in preparing the land, planting, and caring for the trees afterwards. But, again, once the trees were growing well, employment fell off so that the workers were only employed for about a third of the month, and their cash income was not enough to support a family.

Many Rungus commented on these schemes to the effect that those villages involved had no land left for their own people.

The failure of all three of these agricultural development schemes to come to full fruition was, in my opinion, because they did not include in their design means for the Rungus to practice their traditional household ecology in
which diversity of economic opportunities is critical. This is more adaptive in the face of fluctuations in commodity prices beyond local control than is monoculture (also see Eder in this volume).

There is now considerable discontent in those villages that went into the oil palm scheme because the income of the members has dropped, and there has not been a distribution of land as promised. It is believed that the new government that was voted in in 1985, which included a Rungus representative to the state legislature, will correct these perceived inequities.

The Rungus Response

As I have pointed out, the response of the Rungus population to their psychological deprivation and devaluation was not to fall into apathy or develop a flawed personality organization. Nor did they draw back from the challenges that increased in the early 1960s with development and the possibility that they would lose control over their economic futures. Instead, they took realistic action. Rungus families sought out as much education as possible for their children. They perceived that they would be able to right the political and economic imbalances through education and the job opportunities that would open up. And they wished to get Rungus representatives into the higher echelons of government service and in good paying jobs in the private sector.

Thus, while land had been of great importance to the Rungus, and still is, they realized that power came from political position and access to cash income. Under the old method of subsistence agriculture, cash had been in short supply, and the value of cash, such as that obtained from a job, came to have a higher value than its actual monetary value. To achieve these goals the Rungus family gladly gave up the labor of their children in the fields so that they could attend elementary and secondary school. Furthermore, they searched for the funds to support their children in residential schools in the major towns, even those this cut the family income by over 60 percent, according to one estimate.
By 1986 the Rungus not only had their own representative in the state legislature. There were also Rungus individuals holding important jobs in government and in the private sector. Thus, the building of a school in the area in 1961 and the various new economic opportunities that arose as education and development progressed have radically altered the opportunity structure of Rungus society.

**Changes in the Opportunity Structure: The Status of the Rungus Economy in 1986.** In the coconut development scheme and in the tree planting scheme, the Rungus are still largely able to control their economy, which is not the case in the oil palm scheme. This account of the present status of the Rungus economy does not apply to the oil palm scheme, and it primarily depends on data from our research village, which did not participate in any of the development schemes.

The population of the research village has grown from 356 to 681 individuals in a 23 year period (1963-1986). In addition to resident families, this includes children away at school, unmarried children working away, and married individuals working away but keeping a house in the village. And the number of domestic families resident there has grown from 71 to 111.

Village membership has markedly changed. With increased travel for education and job opportunities, the number of intervillage marriages has increased, extending the tendency already beginning before 1963 (see Table Three). Intervillage marriage now also involves members of other ethnic groups, a situation that had not arisen during our original field work. In our sample of 156 marriages from our research village there were 20 marriages to members of other ethnic groups: Chinese, Sino-Dusun, Coastal Muslim, and members of various other Dusunic speaking groups. About half of these resulted in residence in our research village so that the membership now includes 9 non-Rungus individuals. The village also has living within its old boundaries four Chinese and Sino-Dusun families as a result of land alienation.
TABLE ONE

CHANGES IN PERCENTAGE OF INTERVILLAGE AND INTRAVILLAGE MARRIAGESa

<table>
<thead>
<tr>
<th>Marriages</th>
<th>Intravillage</th>
<th>Intervillage</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior to 1953:</td>
<td>69%</td>
<td>31%</td>
<td>100%</td>
</tr>
<tr>
<td>Between 1953 &amp; 1963:</td>
<td>43%</td>
<td>57%</td>
<td>100%</td>
</tr>
<tr>
<td>Between 1963 &amp; 1986:</td>
<td>38%</td>
<td>62%</td>
<td>100%</td>
</tr>
</tbody>
</table>

aSize of Sample: "prior to 1953" = 68; between 1953 and 1963 = 53; 1963 and 1986 = 156. For census data up to the beginning of 1963 see Appel (1966b). The time period "prior to 1953" was selected as it represented a ten-year period prior to the final census.

Residence has also changed. Traditionally, residence was uxorilocal. However, it was stated in 1962 and 1963, in response to questions on how the change in land tenure would affect residence choice, that residence would in the future be virilocal. Although there were other alternatives of solving this conflict between residence and land ownership (see Appell 1968b), Table Two illustrates that this has indeed become the tendency.

TABLE TWO

RESIDENCE IN INTERVILLAGE MARRIAGE

<table>
<thead>
<tr>
<th>Per cent of Marriages</th>
<th>1963</th>
<th>1963-1986</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uxorilocal</td>
<td>90%</td>
<td>39%</td>
</tr>
<tr>
<td>Virilocal</td>
<td>10%</td>
<td>54%</td>
</tr>
<tr>
<td>Neolocal</td>
<td>--</td>
<td>7%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>
The residence patterns of those who are employed have also contributed to the change in village organization. Whereas before all families resident in the village lived and worked there making swiddens, this is not the case for those who hold jobs. Some work in the village and its environs; some work in nearby towns or government facilities, commuting to work daily; and others work in distant towns so that they have to reside there (see Table Three). These keep a house in the village and may leave their families in their village house, visiting them on the weekends. Or they may take their families with them for short or extended stays where they are working. Sometimes their wives also find jobs there. Four families who work outside the region and who have no house in the village are not included in this sample.

### TABLE THREE

**EMPLOYMENT AND RESIDENCE**

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residing and Working Outside Village But Owning House in Village</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unmarried:</td>
<td>14</td>
<td>10</td>
</tr>
<tr>
<td>Married:</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Residing in Village and Working in Its Environs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unmarried:</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>Married:</td>
<td>12</td>
<td>2</td>
</tr>
<tr>
<td>Residing in Village and Commuting to Work</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unmarried:</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Married:</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Residing in Village and Run Own Business</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unmarried:</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Married:</td>
<td>3</td>
<td>--</td>
</tr>
<tr>
<td>Totals:</td>
<td>51</td>
<td>16</td>
</tr>
</tbody>
</table>

* The sample is taken from the total population of Matunggong of 681 individuals, of which 182 males and 169 females are in the work force either employed or cultivating plantations and swiddens.
Thus, while the population increase has put additional pressure on the land base, this has been partially alleviated by the fact that not all families are now dependent on swidden agriculture (see Table Four). However, many working in the labor market full time and residing in the village depend on small-scale farming on the side to supplement their income.

### TABLE FOUR

**TYPES OF EMPLOYMENT CURRENTLY HELDb**

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th>Females</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laborers (G and NG)b</td>
<td>28</td>
<td>3</td>
<td>31</td>
</tr>
<tr>
<td>Semi-skilled Laborers (G and NG):</td>
<td>7</td>
<td>--</td>
<td>7</td>
</tr>
<tr>
<td>Office Messenger (G):</td>
<td>--</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Telephone Operator (G):</td>
<td>--</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Carpenter (G):</td>
<td>1</td>
<td>--</td>
<td>1</td>
</tr>
<tr>
<td>Police (G):</td>
<td>--</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Nurse's Aid (G):</td>
<td>--</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Hospital Attendant (G):</td>
<td>1</td>
<td>--</td>
<td>1</td>
</tr>
<tr>
<td>Office Manager (G):</td>
<td>1</td>
<td>--</td>
<td>1</td>
</tr>
<tr>
<td>Teacher (G):</td>
<td>--</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Agricultural Field Officer (G):</td>
<td>2</td>
<td>--</td>
<td>2</td>
</tr>
<tr>
<td>Community Development Officer (G):</td>
<td>1</td>
<td>--</td>
<td>1</td>
</tr>
<tr>
<td>Nurse (G):</td>
<td>--</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Nurse (NG):</td>
<td>--</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Pharmacy Attendant (G):</td>
<td>--</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Dresser (G):</td>
<td>2</td>
<td>--</td>
<td>2</td>
</tr>
<tr>
<td>Administrator (G):</td>
<td>2</td>
<td>--</td>
<td>2</td>
</tr>
<tr>
<td>Assistant Native Chief (G):</td>
<td>1</td>
<td>--</td>
<td>1</td>
</tr>
<tr>
<td>Small Store Owner (NG):</td>
<td>1</td>
<td>--</td>
<td>1</td>
</tr>
<tr>
<td>Entrepreneur in Transportation (NG):</td>
<td>2</td>
<td>--</td>
<td>2</td>
</tr>
<tr>
<td>Part-time Church Workers (NG):</td>
<td>2</td>
<td>--</td>
<td>2</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>51</td>
<td>16</td>
<td>67</td>
</tr>
</tbody>
</table>

---

*Based on a working population of 183 males and 169 females.*

*G = Government; NG = Non-government employment.*

Laborers: G = 20 males, 2 females; NG = 8 males, 1 female.

Semi-skilled laborers: G = 5 males; NG = 2 males.
Some argue that wage labor provides more cash than farming with less effort and greater security of income. But the opportunities for employment in the village are limited largely to jobs working for the government on the road, in the agriculture department, or the department of medical services (see Table Five). In the village of our research, two individuals work in the district capital about 33 miles way and return at night to their homes in the village, commuting by bus or motorcycle.

**TABLE FIVE**

EMPLOYMENT IN GOVERNMENT AND NON-GOVERNMENT ECONOMIC SECTORS

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th>Females</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government Employment</td>
<td>36</td>
<td>14</td>
<td>50</td>
</tr>
<tr>
<td>Non-government Employment</td>
<td>15</td>
<td>2</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>51</td>
<td>16</td>
<td>67</td>
</tr>
</tbody>
</table>

a Derived from Table Four.

Many, however, dislike being laborers, particularly the older Rungus who are accustomed to their independent entrepreneurial livelihood based on agricultural activities and the trading of gongs, brassware, and ceramic ware. Thus, most still find their livelihood in agriculture: swiddening, wet rice farming, selling copra from their coconut plantations, part-time market gardening, raising and selling pigs, chickens, and water buffaloes, supplemented with occasional income from sporadic, short-term government employment in village improvement projects. Many are now putting in rubber with the help of government subsidies. Cash income is also supplemented not only by such agricultural subsidies but also by old age assistance and by support to widows with children and to the needy. Some parents are supported partially by income coming from their children working away.
There are also many Rungus entrepreneurs in the new economic sectors. A few have borrowed money to buy lorries or pickups to go into the transportation business either full time or part time. Several individuals in one village have learned how to make gongs out of culvert and water tank metal, and these have become a fast selling item throughout the country. Others have gone extensively into part-time trading with other ethnic groups, traveling all over the country to make a profit selling and buying beads, brass rings and bracelets, brassware, gongs, etc.

However, the growing economic prosperity of the Rungus and the increase in availability of cash has not resulted in improvidence such as a splurge of consumer spending and material display. Television sets are common in the village, but they are relatively cheap. There are a few motorbikes, but these are used to take people to work in other villages or at the main town of the district. Cars, pickups, or lorries when bought are usually used for commercial purposes. And considerable funds go into financing the education of their children, since those who wish to complete secondary education have to go to the main town in the district and board there.

Furthermore, when the Rungus do have extra cash they are apt to put it in a savings account in the bank. I believe that this is an extension of their traditional economy into the modern one. Traditionally, the Rungus would invest their agricultural surpluses in gongs, jars, brassware, etc. These then served as the basis for bride-price, or if there was a bad agricultural year, they could be converted back into rice. Now bride-prices include cash payments.

The Amount of Landlessness and Attitudes Toward It.
The ownership of permanent crop land has not as predicted fallen largely into the hands of men (see Appell 1968b). Women also own land, although not to the same degree. During the period of our original field work, applications for land for coconut plantations or wet rice fields were primarily being made by men. Since that time, women have been applying for land or inheriting it from their fathers. Native title, which carries with it a lower land payment, is limited to fifteen acres per individual. When a husband has
applied for fifteen acres, any additional land is frequently now applied for by the female headman.

There is a deep rooted attitude among the Rungus that they must maintain their land base. The degree of this varies from village to village. But in our research village and the ones surrounding it, the feeling is incredibly strong. For example, there is a primary forest reserve lying between several villages. Many years ago the headmen of the concerned villages agreed this must never be cut. It is the source of raw materials for building and, being at the head of the catchment basins for the area, it is the source of the water supply for these villages. However, in 1980 through various political maneuvers, a Chinese firm got rights to log this primary forest. This set up an unprecedented uproar in the villages. It was said that people began sharpening their parangs for warfare. The Chinese workers were physically threatened as was the government figure responsible for the decision. The threat of physical force up till that point was an unprecedented behavior in Rungus culture (see Appell 1966a). Eventually, the government backed down and the reserve stood. But deep seated feelings had been aroused, which were still being expressed in 1986 when we were there.

The problem of selling land to outsiders is also a highly charged emotional issue. When a Rungus makes an application for land, it must carry the signature of the headman. However, when the individual receives his title, he can sell the land to whomsoever he wishes—Chinese, someone from another village, etc.—without the approval of the headman. Therefore, when titles have been obtained, the residual rights of the village over the use of its land ceases. As a result of sales of land being made to non-village residents, the village moot has decided that in the future if an individual does sell title to his land he will not be permitted to apply again for land in the village reserve.

However, the amount of land available for application varies between the villages. Some have little left. It was estimated that approximately 90 per cent of the land in the territory of our research village has been applied for or spoken for. However, not all has yet been put into permanent crops such as coconuts or rubber. And some individuals have no title to land, having sold their land to
others. These individuals, like many of the village members, still cut swiddens. And swiddening proceeds on land that has been applied for or spoken for but which has not yet been put into permanent crops.

It is stated that there will be enough land for those now coming of age, but there will be insufficient land for the next generation. But the real status of land scarcity depends on a number of interactive factors.

First, some prefer wage labor to farming, arguing that they can make more money that way than by full-time agriculture. Then there are a number of the younger generation that are getting well paid jobs with the government and have no need to continue any agriculture, even part time. Consequently, the demand for land may lessen as more of the population moves into the labor force. And as the amount of land left for swiddening or for plantations dwindles and becomes less fertile, it may force more individuals into the labor market.

Then, the amount of land needed to support a family varies with the price of the commodities being raised and the fertility of the land. There appears to be no input from the agricultural department to those who are deciding land policies as to what amount of land is required to support a family. Furthermore, most of the land now in plantations could be made more productive, but whether the effort will be made to do this depends on the price of the agricultural commodities.

However, the home village to the Rungus is more than just land. It is a close network of kin, and it is a source of support when outside sources for a livelihood fail. This is illustrated by the manner in which individuals in the labor market manage their residence (see Table Three above). Even though they have employment in other areas of the country, their primary residence is their home village.

In sum, as land has become scarcer and as other economic opportunities have arisen, swiddening has become less important. The range of economic activities has vastly increased. But those that depend solely on monoculture or wage labor leave the individual more vulnerable to economic
vicissitudes that are beyond his control, being driven by events outside the village and even the country. Such individuals may be less able to cope with economic change. And this goes against the stance that the Rungus take towards their opportunity system. They are what might be called optionizers, if I may coin this term. That is, they want to keep all their options open so that if they have a bad experience in one aspect of their economic activity, they have others to fall back on. And this is why the land development schemes which depend on monoculture and do not consider the human ecology of the Rungus domestic family are not popular.

The importance of having multiple paths for making a livelihood rather than being dependent on one source of income is further illustrated by the recent drop in the price of copra. Processing the coconuts from their plantations into copra provided income to many up until the price drop in late 1985. Now coconuts lie unprocessed on the ground where they fall. And this has had a multiplier effect. Land that would have been available for swiddening has been taken out of circulation by plantations. Such land could have provided an income, certainly at least subsistence. But now these lands are economically fallow, which puts added pressures on the remaining land resources.

Changes in the Social Structure. The social structure may be conceived as consisting of the jural realm. The opportunity structure is defined by the social structure, but it in turn helps determine changes in the social structure (see Appell 1987). The British colonial government, by changing the structure of opportunity with regard to land ownership, initiated a chain of events that has had ramifications in the Rungus social structure.

Individual ownership of land introduced a new scarce object into the property system, but not a new jural entity. Traditionally, individuals could hold assets, through the inheritance of durables such as jars, gongs, and brassware. The consequence of individual ownership of land, however, was to undermine the jural personality of the village and that of the family.

Previously, any scarce good created by the family was held as a corporate asset of the family. Now, coconut and
rubber plantations and wet rice fields are held by the individuals who hold title to them. This moves out of the control of the family a critical productive asset, whereas the traditional family assets were not productive. Consequently, I would suspect that in the long run the concept of corporate family assets (indopuan do nongkob) will wither away in place of property owned by individuals or perhaps the married couple jointly. Specifically the ownership of retained farming earnings by the married couple rather than the family as a whole is encouraged by the fact that now children and young, unmarried adults do not put much energy into the running of the domestic family agroecosystem, leaving much of the work to their parents. Children are at school, traveling, or at jobs outside the village area. The capacity to earn cash on their own is also leading to sons providing a large part of the cash used for their bride-prices, where before the bride-price came from domestic family assets.

With young unmarried children away in school or at jobs, the corporateness of the family, which was a major part of the symbolism of ceremonies for the family—both in terms of health and the success of the swiddens, is no longer possible to achieve in symbolic action. The traditional rules required at times of ceremonies that the whole family be present. The fact that this is no longer possible is sometimes given as an excuse for not holding these rituals anymore. And these rituals were supported by the jural system, for if a delict was committed against any of the prohibitions by an outsider, he could be sued. So this part of the social structure is eroding away through disuse.

The jural personality of the village is being eroded and at the same time strengthened by new rights, although the net sum of this is in fact a diminution of the village jural personality. New entities are being established by the government in the village, such as the Village Security and Development Committee, which is allocated a certain amount of funds to spend each year. This adds to the jural personality of the village.

But as I have pointed out, the shift of land ownership to individuals has removed land from the control of the headman and village. Once title has been secured, the owner can sell it to anyone without any approval of the
village. Thus, the village as a jural unit, which originally controlled the use of land in its reserve, has suffered an erosion of its capacities. The village has tried to exercise new rights to reassert control, by the village moot deciding not to permit anyone who has sold land ever to reapply for land in the village territory. But this is almost an empty threat, since there is so little land left unapplied for.

The jural personality of the village has also been eroded by other changes in the opportunity structure. A dispensary has been built at the edges of the village territory, as well as an elementary school for the region. Also, a kindergarten has been established within the village and several churches to service particular hamlets. A road has been built through the area, and there are new roads to each hamlet of the village. As a result, strangers are in and out of the village every day for work or on commercial vehicles. Before, when the village wanted to hold a ceremony to ritually validate its corporateness, the boundaries of the village had to be shut off to foreign visitors for several days and the inhabitants themselves were enjoined from selling certain products to outsiders. It is no longer possible to enforce these injunctions on movements or on Christian members who refuse to join in, so that corporate rituals for the village have ceased.

The village moots may yet complain to the government in order to establish a right to approve any sale of land to nonresidents. This would reverse somewhat the flow of rights away from the village to the individual, and would permit the village to maintain some control over its future. But this has not yet happened, even though the government has recently shown some concern over the land situation with regard to the village. Individual application for land has resulted in almost no land left in the village for housing areas. Thus, those families who want to live in a small hamlet rather than dispersed on their own land must do so on land that an individual owns. This is tending to encourage the development of patrilocal family clusters of a father and his sons situated on the land of the father.

However, the long and short of these changes is that the village is vulnerable to the loss of land to outside interests, and this includes the purchase of land by commercial interests, which possibly could lead to some of the
villagers being transformed from independent farmers into semi-landless plantation workers.

CONCLUSIONS

The Rungus have experienced a shortage of land which is growing worse partly because of the increase in population, partly because of the loss of land to Chinese entrepreneurs, partly because of the government's schemes for land development which have moved land out from under their control, and partially by the planting of land, under government insistence, in coconuts, which are no longer profitable to harvest due to the drop in commodity prices.

However, the economic squeeze that they have experienced, and which has increased as they were brought more into the national and world economic system, has been relieved by several factors. First, the opportunity to obtain schooling, which has opened up opportunities in the government and private economic sector, has been an important release valve. Second, the economy has been expanding as the government develops more and more rural services so that jobs have been available in the rural labor market.

Third, the conversion to Christianity has been a factor which may have alleviated the situation for several reasons. It has provided a source of support against the encroachment of Muslim interests, although at times a very weak source of support. The church also provided opportunity for schooling before the government school system was fully developed, and afterwards has provided hostels for students studying away from home. And it has provided scholarships for post secondary education for a few.

But Christianity, I suspect, was also important in that it provided a means of dealing with these momentous changes. Because it offered an alternative, which at least cast doubt on their own religion, it permitted the Rungus to ignore the rituals of their religion, many of which were specific to swidden agriculture. And this has allowed them to expand out of their localized world view into a more
regional and national one. But it has also caused ecological deterioration in that it has encouraged the Rungus to give up those rituals which supported ecological conservation (see Appell n.d.c). The Rungus have largely cut down their ritual groves around springs or shading the river pools that protected the water supply. And as a result the ecosystem has become drier. And there may eventually be health consequences, since Christianity does not respect the old rituals which provided support to psychogenic diseases. In a sense the conversion to Christianity has gone too far in that the missionaries have not attempted to integrate into the new culture either useful or health promoting aspects of the old culture. This is especially true in the relations between the sexes, as prostitution and illicit sexual liaisons are on the rise with their associated diseases.

A major feature of the current response to growing land shortage is the fact that the government has been relatively unauthoritarian in comparison to the Indonesian government. It has not forced people to resettlement areas by military force. If individuals want to leave these agricultural development schemes, they do, and there is no punishment. With the new government, which represents the interests of the Rungus much better than previously, there is the belief that problems arising from bad development planning and land shortage will be corrected.

Furthermore, rather than moving villages to services, which causes major social dislocation, the government has brought services to the villages. And it has provided good medical service and schooling that prepares the Rungus pupils for good job opportunities. It is my judgement that the Rungus experience, at least with the current status of the economy, does not conform with the argument of Hopkins, Wallerstein et al (1982) that part-time proletarians are worse off than full-time subsistence agriculturalists.

Thus, growing land shortage while causing problems has not yet resulted in social disaster. However, if there is an economic recession, and there are not funds to continue the support of education, opportunities in government service, and rural services and improvement, and if opportunities in the private sector contract, then the land shortage among the Rungus will become a major focus for social unrest, as they will have to turn back to the land for a livelihood.
Finally, the Rungus have lost much of their traditional culture. But a crisis of ethnic identity has not yet been reached, largely I believe because of the hope for a better future and the opportunity to move out of their devalued psychosocial position. But if this hope fails, if a better future does not become available, the Rungus will have to deal with this loss. And then social problems and health impairments—behavioral, psychological, and physiological—may rise precipitously as a consequence.

NOTES

1. I have coined the term "isoglot" to refer to the speech of a group of people who consider their language or dialect to be significantly different from neighboring communities and thus have an indigenous term by which to identify it (Appell 1968a:13). An isoglot refers, in other words, to that speech of a self-conscious, named speech community.

2. Our original field work among the Rungus was conducted under the auspices of the Department of Anthropology and Sociology, Research School of Pacific Studies, the Australian National University. I would like to express my thanks to the Australian National University for support of this research and the preliminary analysis of my data. I also want to express my thanks to: the National Science Foundation (Grant GS-923) and the ACLS-SSRC, which have supported the analysis and the writing up of my field data; and in particular the Halcyon Fund has been very generous in its support of my research over the years. To my wife, Laura W. R. Appell, I owe a special debt because of our unusual relationship. She has always participated fully in my research and the analysis and writing up of our data. Religion among the Rungus, with the exception of certain agricultural ceremonies,
lies in the hands of Rungus females. Without Laura's help it would have been impossible to gather data in this realm, for which she was primarily responsible (see L.W.R. Appell n.d.). I also owe a very special debt to my supervisor and friend, Professor Derek Freeman, who guided my field research.

Our recent field work has been supported by the Halcyon Fund.

3. The lack of interest by the British government in the indigenous system of land tenure was extraordinary. I tried to explain it to the District Officer, but I got no response. A consultant was brought in about this time from New Zealand to introduce the Torrens system of land titles, and I wrote him about the indigenous system but got no reply.

BIBLIOGRAPHY

Alatas, Syed Hussein

Appell, G. N.

Appell, G. N.


Appell, G. N.


n.d.c The Ecological and Social Consequences of Conversion to Christianity Among the Rungus Dusun of Sabah, Malaysia. Submitted for publication.

Appell, Laura W. R.


CHAPTER FIVE

THE KANTU' SYSTEM OF LAND TENURE: THE EVOLUTION OF TRIBAL LAND RIGHTS IN BORNEO

Michael R. Dove
International Agricultural Development Service

I. INTRODUCTION

The Melaban Kantu' are an Ibanic group of longhouse dwelling, swidden agriculturalists. They live at the juncture of the Empanang and Kantu' Rivers in West Kalimantan.1 Their economy is largely one of subsistence, based upon the swidden cultivation of dry rice and more recently swamp rice.2

There are two major, discrete social groupings in Kantu' society, the bilek "household" and the rumah "longhouse." The household is partially defined as the group that makes common residence in one section of the longhouse: each longhouse section is built and maintained by a single household. In addition to being a unit of residence, the household is the primary unit of production and consumption. Labor from within each household is used to perform most of the work in the household's swiddens. Similarly, while one household may give rice to another in loan or as a wage payment, it will never share its rice with another: shared consumption occurs only within the household.

The longhouse is the second major grouping in Kantu's society. The most obvious function of the longhouse has to do with settlement. It is a unit of residence, and not merely a de facto unit but a de jure unit: the residence of individual households in the longhouse is subject to certain constraints imposed by all the households acting together.
However, each household owns and maintains its individual section of the longhouse: the longhouse is not, therefore, a "communal" residence (Dove 1982).

II. THE KANTU' SYSTEM OF LAND TENURE

The Kantu' currently possess a system of land tenure that is very similar to that of the Iban, as described by Freeman (1970). Thus, land rights are established by the first felling of the primary forest on that land. These rights reside in the household of the talar(s). This household continues to hold rights to that land, even after its primary forest swidden has been abandoned and the land has reverted to secondary forest. In fact, once established, these land rights are potentially unlimited in duration, given also that the household itself, as Appell (1971:18) aptly put it, "exists jurally in perpetuity, through the incorporation of one child and his/her spouse to each generation." When the household undergoes partition, its land rights are not divided, but simply continue to be shared equally among the siblings involved in the partition. While land rights are held by the household, residual rights are held by the longhouse. These latter rights are activated in the event that a household from another longhouse tries to clear land within the longhouse territory, or in the event that a household from within the longhouse wishes to move out and away. The most important feature of Kantu' land tenure, within the context of the debate on land tenure and ecology, is that cultivation rights are potentially "unlimited" in duration, as among the Iban, Land Dayak, Ma'anyan, and Maloh, as opposed to "limited," as among the Rungus.

The unlimited duration of Kantu' cultivation rights can be attributed to several different factors, among them ecological factors. The pattern of rainfall is arguably the most important of the several ecological factors that have been introduced in the debate on ecological determinants of land tenure. Patterns of rainfall vary considerably through the interior of Borneo, and this variation can be an important determinant of variation in social phenomena. Weinstock dismisses the importance of this variation on the basis that all of the tribal groups in question (Rungus, Ma'anyan,
Land Dayak, Iban, and Maloh) receive at least 2,286 mm. (viz., 90 inches) of rain per year, and hence all have "udic moisture regimes" (1979:8). The fact that all of these groups have udic moisture regimes is not questioned here. What is questioned is Weinstock's conclusion that, because this label applies to all cases, any variation among the cases is not important. The range of variation in annual rainfall among these five groups totals almost 80 inches per year. This is shown in Table 1, to which rainfall data for the Kantu have also been added.

TABLE ONE

COMPARATIVE RAINFALL DATA FOR SIX BORNEAN GROUPS

<table>
<thead>
<tr>
<th></th>
<th>Land</th>
<th>Ranjus</th>
<th>Mainyan</th>
<th>Dayak</th>
<th>Iban</th>
<th>Kantu</th>
<th>Maloh</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Annual Rainfall (mm.)</td>
<td>2311</td>
<td>2332</td>
<td>3368</td>
<td>3698</td>
<td>4290</td>
<td>4308</td>
<td></td>
</tr>
<tr>
<td>Total Rainfall During July, August, and September (mm.)</td>
<td>330</td>
<td>236</td>
<td>706</td>
<td>770</td>
<td>1293</td>
<td>762</td>
<td></td>
</tr>
</tbody>
</table>

Of greatest importance is the variation not in annual rainfall, but in rainfall during the months in which the swiddens are normally burned, namely July, August, and September. Table 1 shows that the range in variation is over 500 per cent, namely between the Ma'anyan (236 mm.) and the Kantu' (1293 mm.). The significance of this considerable variation is that certain groups (viz., the Land Dayak, Iban, Kantu', and Maloh, each of which receives an average of 883 mm. of rainfall during the burn months) will clearly have a more difficult time (cet. par.) burning their swiddens than certain other groups (viz., the Rungus or Ma'anyan, each of which receives an average of only 283 mm. of rain during the burn months).
For the Kantu' and other high rainfall groups, the greater difficulty in burning the swiddens causes them to place a greater value on secondary forest than would otherwise be the case. Because the average secondary forest tree is smaller than the average primary forest tree, the former type of forest will dry out quicker than the latter type. Hence, secondary forest swiddens can be successfully burned after a shorter period of drought (and following a greater amount of rainfall) than can primary forest swiddens, one consequence of which is that the burns are usually better in the former than in the latter. The author has data on eighteen swiddens burned by the Kantu' longhouse, Tikul Batu, in 1975. When the data are examined in a two-by-two table, a statistically significant association is found between forest type and burn success, as shown in Table 2. The difference in burn success between primary and secondary forest swiddens is reflected in a difference in rice yields (although other factors are involved as well). Among the Kantu', rice yields average 1213 liters of threshed and husked rice per hectare in secondary forest swiddens, while averaging just 737 liters/hectare in primary forest swidden. With respect to the association between yields, the burn, and the heavy rainfall that they receive, the Kantu' properly value secondary forest over primary forest. This valuation is reversed, however, with respect to a second major swidden problem, that of weed growth.

Both primary and secondary forest, after being cleared for swiddens, succeed to a complex of herbaceous and ligneous matter that the Kantu' term, and treat, as rumput "weeds." However, there is a critical difference between the two forest types in the timing of this succession. In secondary forest swiddens, the succession begins sufficiently early to pose a threat to the growing rice plants, while in primary forest swiddens it does not. This difference is reflected in the fact that swiddens cut from secondary forest are always weeded by the Kantu' (usually just once), whereas those cut from primary forest are almost never weeded (Table 3). The need to weed (or not) a swidden is important to the Kantu' because of the great amount of labor involved. An average of 49 workdays are required to weed one hectare (in a secondary forest swidden), representing a total of 130 workdays for the average-sized swidden. With regard to the weeding burden, therefore, the Kantu' value primary forest over secondary forest.
### TABLE TWO

**FOREST TYPE AND THE SUCCESS OF THE SWIDDEN BURN**

<table>
<thead>
<tr>
<th>Swidden Cut Primarily From:</th>
<th>Primary Forest</th>
<th>Secondary Forest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of Swidden: &lt; 90%</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Consumed in the burning: &gt; 90%</td>
<td>4</td>
<td>7</td>
</tr>
</tbody>
</table>

N = 15 swiddens in 1976 (none located in either swampland or the valley's flood zone).

90% = mean percentage of swidden that burned in this sample.

P = .05 (using Fisher's Exact Test)

### TABLE THREE

<table>
<thead>
<tr>
<th>Swidden Cut Primarily From:</th>
<th>Primary Forest</th>
<th>Secondary Forest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swidden: no</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Weeded: yes</td>
<td>1</td>
<td>24</td>
</tr>
</tbody>
</table>

N = 35 1976 swiddens

"Weeding" here refers to the removal of any regrowth in the swidden, with the exception of regrowth from the stumps of previously slashed or felled trees (which more often poses a problem in primary forest than secondary forest swiddens, but is rare even in these).

P = .0001 (using Fisher's Exact Test)
Thus, there are costs and benefits to the farming of both primary and secondary forest. There tends to be a problem with the burn in the former but not the latter, whereas there is a problem with weed growth in the latter but not the former. This is not to say that either forest type is equally desirable, however. It is important to note that the major problem in farming primary forest, namely a poor burn, cannot be remedied by additional labor inputs (the great mass of the timber involved prohibits the performance of any remedial measures, such as stacking and reburning, following a poor burn). In contrast, the major problem in farming secondary forest, namely weed growth, can be remedied through the input of additional labor, in weeding.

In terms of local ecological factors, therefore, the relative desirability of secondary forest is sufficiently great to explain why rights to secondary forest are not relinquished to the community after its use but are held (potentially) in perpetuity by the user, the household. The relative desirability of farming secondary forest is reflected in the fact that, during the swidden years 1974-1975 and 1975-1976, 71 per cent of the households at Tikul Batu made at least one (dryland) secondary forest swidden each year. During the same years, 69 per cent of the households made at least one (dryland) primary forest swidden each year. The ecological value of secondary forest is here counterbalanced by the desire to establish land rights by felling primary forest. In the absence of this latter consideration, the percentages of households making at least one primary or secondary forest swidden would be somewhat lower and higher, respectively.

This case therefore appears to support Appell's (1971) hypothesis relating the permanency of household rights to the value of secondary forest, which in turn is related to high amounts of rainfall and the difficulty of burning the swidden. In the past, critics of Appell’s hypothesis have questioned such support on the grounds: first, this same pattern of rainfall and the same system of land rights are not invariably associated elsewhere in contemporary Borneo; and second, the two were not always associated in Kantu' history. In order to understand why these criticisms are not valid as well as to appreciate more fully the role of the ecological factors in the land tenure system, it is necessary
to place the contemporary Kantu' situations in historical perspective.

III. THE HISTORICAL DEVELOPMENT OF KANTU' LAND TENURE

The system of land tenure described earlier is of comparatively recent origin. Up until the end of the nineteenth century, the Kantu' system of land tenure was quite different. The longhouse seems to have had a delimited territory then as now, but individual households did not hold exclusive rights to given sections of forest within this territory. That is, neither by pioneer cultivation nor by any other means was an individual household able to establish exclusive rights to sections of secondary (or primary) forest. The first change in this system consisted in longhouse recognition of a household's rights of mudas. If a burong bisa "potent omen" was observed during the planting of a primary forest swidden, the household making that swidden was later required to make a mudas "offering" of one or more pigs. The making of this offering then gave that household the prior right to farm that particular section of land once more, at a time of its own choosing, before the land became a free good, available for farming to all households in the longhouse. A further dramatic change occurred in the first decades of this century, when the Kantu' consciously and systematically adopted the fundamental tenet of their present system of land tenure: the clearing of primary forest confers upon the household that does the clearing exclusive rights, potentially unlimited in duration, to the secondary forest that succeeds on that site.

Among the Kantu', therefore, the existence of household rights to land is the product of at most the past one hundred years. The change, from no recognition of household land rights to recognition, cannot be attributed to any changes in ecological factors. The historical records do not point to any change in the rainfall pattern in the Empanang River Basin during the period in question. In addition, it is known that the Kantu' were settled in this valley long before the turn of the century, and so the
change in their system of land tenure cannot be attributed to moving into a new and different environment. In any case, before the Kantu settled along the Empanang River, they lived in (and practiced the same system of swidden agriculture in) a very similar environment, further to the east and south but also within the greater Kapuas River Basin, in the vicinity of the current town of Sanggau. Thus, the relevant ecological factors were constant.

Certain nonecological factors were not constant, however. Perhaps most important were the changes, beginning in the last part of the nineteenth century and continuing on into this century, attendant upon the gradual cessation of large-scale warfare between the Kantu and the Sarawak Iban.

As long as warfare was still endemic, there was little pressure for the development of household rights to secondary forest. The Kantu themselves cite several reasons for this. First, chronic warfare, with the recurrent need to flee or advance against enemy forces, necessitated a semi-migratory settlement system, based upon rudimentary, short-lived, and easily abandoned longhouses (dampa—see Dove 1982:40). This settlement pattern mitigated against the development of rights to specific sections of secondary forest, given the possibility that a group would not remain in one area long enough to farm both the primary forest and the secondary forest that would succeed it. In addition, the exigencies of wartime obliged all the households in the longhouse to farm near one another, making their swiddens in a cluster as opposed to in separate corners of the longhouse territory. This particular land-use pattern also mitigated against the development of household rights to secondary forest, since the existence of such rights would have made this pattern more difficult to achieve, by putting the claims of individual households before the overall needs of the longhouse as a whole.

Finally, and of greatest importance, individual rights to secondary forest did not develop at this time because the exigencies of warfare placed a premium on primary forest, not secondary forest (Dove 1983). The farming of secondary forest was generally undesirable in wartime, because of the need for such swiddens (unlike primary forest swiddens) to be weeded, which heightened the defensive burden at the
same time that it limited offensive capabilities. During this historical period of warfare, therefore, both secondary forest itself and household rights to this forest were of little value. This is not to say that the ecological factor; rainfall, which today makes the existence of rights to secondary forest attractive, was not operable then. It is merely to say that the influence of this variable was largely offset by the overweening importance of other variables, which placed an opposing value on the absence of rights and on the value of primary forest.

As large-scale warfare between Kantu' and Iban gradually diminished, the force of these several factors favoring the absence of rights and the use of primary forest also began to diminish. As this occurred, the relative value of secondary forest (given its higher yields, as well as the rainfall-burn problem with primary forest) began to increase, and pressure began to build for the recognition of rights to this forest. In addition to the change in the military circumstances of the Kantu', however, at least two other factors were involved in this trend, both of which are mentioned explicitly by the Kantu'. These factors bear not upon the differential valuation of primary versus secondary forest, but upon a general increase in the valuation of forest or land of any type. First, the cessation of warfare and the consequence removal of the pressures against sedentarism enabled the Kantu' to start planting rubber groves, a useless endeavor unless a group can remain in the same area for two generations or more. Any land that is planted in rubber is permanently removed from the swidden cycle (with rare exceptions). In addition, its value is greatly heightened, which historically led to the first sale of land. For these reasons, the Kantu' say that the development of rubber cultivation generated pressure for the recognition of household rights to individual sections of secondary forest.

The secondary factor creating pressure for the recognition of household rights to secondary forest was following the cessation of active warfare, the negotiated settlement of Sarawak Iban on three sides of the Melaban Kantu' territory. Shortly thereafter, the Kantu' became aware that the Iban themselves recognized such rights, and they (the Kantu') say that they followed suit because they feared that otherwise they would be disadvantaged in land
disputes with the Iban. This is not to say that the current land tenure system of the Kantu' was simply copied from the Iban. It must be remembered that the Kantu' also speak of other factors that contributed to their recognition of household rights to secondary forest, as well as of factors that mitigated against this recognition prior to their peacemaking with the Iban. Moreover, it is unclear when the Iban themselves first began to recognize such rights. It is possible that they also did not recognize such rights prior to the peacemaking—for reasons similar to those mentioned for the Kantu'—and that they modified their system of land tenure at approximately the same time as the Kantu', and for similar reasons; in which case it cannot be said that one group "copied" the other. The mere arrival of the Iban in the Empanang Valley may have contributed to this pressure for the recognition of household rights to secondary forest, because it practically eliminated any possibility for the expansion of the Kantu' (or Iban) territory. This contributed to a new image of the forest within that territory as finite and hence scarce.

Given the new finiteness of the Kantu' territory, population growth became a third factor in the development of forest rights. Due to the cessation of warfare, among other factors, the Kantu' population in the Empanang Valley has expanded rapidly this century. With the cessation of warfare, of course, there was a decrease in warfare-related fatalities. There may also have been an indirect effect on population growth. Endemic warfare exacted an economic toll on the Kantu' by making the farming of swiddens more costly (Dove 1983). With the cessation of warfare and the elimination of these added costs, the Kantu' level of subsistence increased. Such an increase will have contributed (cet. par.) to population increases. During the twenty-one months for which the author has records, the Kantu' population (of the longhouse Tikul Batu) grew at an annual rate of 4 per cent.

This growth has slowly but surely pushed population/land pressure close to critical limits. For example, in September of 1974, the population of the longhouse Tikul Batu was 115 persons. During the 1974-1975 swidden year, this population cleared a total of 69.5 hectares of swiddens, yield an average of 0.6 hectare/person. The amount of arable land in the longhouse's territory is approximately 750
hectares (out of a total of about 1,000 hectares). Given a minimal fallow period of seven years, the territory will support (at the 1974-1975 level of exploitation) a maximum of 156 persons. Given the Kantu' population continues to grow at the rate of 2.7 per cent per year (an illustrative if perhaps unlikely assumption), it will have passed the critical population size of 1,000 persons, or 15.6 persons/square kilometer (counting the arable as well as nonarable land in the territory), by 1982.

This palpable increase in population/land pressure, in addition to the other changes more directly related to the cessation of headhunting, has stimulated further developments in Kantu' land tenure beyond the initial recognition of household rights to secondary forest based on clearing the original primary forest. One major development was an adat "law" ruling that household rights had to be forfeited upon departure from the longhouse. That is, any household that moved out of the longhouse was required to forfeit any and all rights to secondary forest within the longhouse territory. In the spirit of this ruling, any household that announced its intention to move out of the longhouse was thereafter forbidden to sell any of its land rights. Accordingly, any household that began to sell off substantial amounts of its land rights would quickly be interrogated by the other longhouse members as to whether or not it planned to move. In the event of an affirmative answer, any further sales were forbidden.

When this adat was first promulgated, the land to which a departed household had held rights reverted to the status essentially, of primary forest. That is, rights to that land were eventually given to whichever household first used it (viz., by making a swidden there). With the further passage of time, however, and as land became increasingly scarce and more valuable, this treatment of the rights of a departed household led to too many disputes among the longhouse's households. As a result, the longhouse headmen began to take all such rights unto themselves, holding and employing them for personal use. With the still further passage of time, and again with the increasing valuation of land, the other inhabitants of the longhouse came to resent this privileged action by the headmen. Ultimately, the adat was again changed, this time so that the headmen took over, not the land rights of departed households, but only
the administration of these rights. Under the headman’s administration today, all of the households in the longhouse ideally farm, in rotation, the forest sections covered by these rights.

IV. CURRENT AND FUTURE DEVELOPMENTS IN KANTU’ LAND TENURE

The variables discussed above, namely the increasing value and scarcity of land, assume more extreme values with the passage of each year, and this is producing further changes in Kantu’ land tenure. One such change concerns hunting rights. Up to the present time, rights to secondary forest have not been interpreted as including exclusive hunting rights. Thus, the owner of a section of secondary forest had no claim over game killed in that forest by someone else. Indeed, game taken in secondary forest was seen as belonging, in some sense, to neither the forest owner nor the hunter, but the entire community (viz., the longhouse). This principle was embodied in a pantang jani’ "pig taboo," according to which no longhouse member could kill a bearded pig (or sambar deer) within the longhouse territory without dividing the animal up amongst all of the households of the longhouse.

This situation has started to change within the past decade. Many longhouses have abandoned the pig taboo and now recognize a hunter’s exclusive claim to game taken by his own hand. In addition, the members of one of the five Kantu’ longhouses along the Empanang River have formulated a rule regarding the killing of game in the vicinity of either singkenyang urang "someone’s singkenyang" or ubi pangan "a friend’s ubi." Singkenyang (probably Eurycles amboinensis [L.] Loud.) is a cultigen of ritual and divinatory importance, while ubi, "cassava" (Manihot esenlenta Crantz.), is the most important tuber cultivated by the Kantu’. Both are planted in swiddens with the rice crop, and may survive for 1-3 years in the regrowth that begins to cover the swidden following the rice harvest. If game is slain in regrowth or forest in the vicinity of either plant, by anyone other than the members of the household that
holds rights to that forest, then it must be divided equally with this latter household.

A rationale for this division is implicit in the Kantu' philosophy of cassava cultivation. The Kantu' plant cassava, an important relish, but they regret losses to animal pests, usually the bearded pig. However, they do not regret the presence of the pigs per se. This is because the attraction of the pigs to the cassava crop presents the Kantu' with their best opportunities for hunting. At least one-half of the wild pigs taken by the Kantu' are taken (with trap, spear, or firearm) in or near stands of cassava, in past or present swiddens. The promulgation of adat, in which game killed near growing cassava is divided with the owner of that cassava, constitutes cultural recognition of this link between hunting and agriculture in cassava cultivation (cf. Linares 1976). By mid-1976 (when the author departed from Tikul Batu), this increase in the scope of land rights had not spread to any of the four other Kantu' longhouses on the Empanang. It was likely that these latter would soon follow suit, if only (as the Kantu' once did in adopting the Iban recognition of permanent land rights), to redress this imbalance among the longhouses in hunting and land rights (viz., which allows the inhabitants of the first longhouse to take game with total freedom in the swiddens of the other four longhouses, but does not permit the inhabitants of the latter the same freedom in the former's own swiddens).

Potentially more important than this change in hunting rights is a concurrent change in the devolution of land rights. This change also can be attributed to the increasing pressure on land within the Kantu' territory, in particular to the gradual disappearance of primary forest. By 1976, within the territory of the longhouse Tikul Batu, there remained only twenty-three separate sections of primary forest (for a total of approximately eighty hectares). This near-replacement of primary forest by secondary forest within the territory has far-reaching implications, because the Kantu' land tenure system is based on the pioneer cultivation of primary forest. As discussed earlier, a household can only establish rights to secondary forest by first clearing the primary forest on that same land. For households that do not have access to primary forest, such rights are difficult to acquire.
Rights arising from the clearing of primary forest must usually remain in the household that did the clearing. If this household eventually undergoes partition between two or more members of a sibling set, these land rights will be the only property that are not divided among the siblings involved. The Kantu say, Memudai na' tau' dipedua' "(rights to) secondary forest cannot be divided." Rather they will be kuntsi "shared" between the senior and junior households created by the partition. If one or more of these partners eventually undergoes partition, itself, however, the aforementioned rights cannot be further shared with the resulting junior household(s). The Kantu note that the sharing of rights to secondary forest is limited to simpang suti' "one branch." As illustrated in Figure 1, therefore, rights to land that is first cleared (as primary forest) by household (A) must be shared with households (B1 and B2), created by the partitioning of (A) among siblings; but these rights cannot be further shared (at least not to the same degree) with any of the households (C1-4) created by partitioning among the sibling sets of (B1) or (B2).

Given this pattern of devolution of land rights, the exhaustion of primary forest within the longhouse territory will have one consequence of overweening importance. Assume, for example, that household (A) in Figure 1 is the last generation with the opportunity to clear primary forest. The land rights based on this clearing can then be extended only to the first descending generation, household (B1) and (B2), and not to the second descending generation, households (C1-4). These latter households will consequently be landless (this state being mitigated only by whatever land they can obtain through purchase or gift). There are indications that the Kantu have recognized this problem and are further modifying their system of land tenure to deal with it. Thus, in one or two instances land rights that initially were shared among two or more households (e.g., by household (A) with (B1) and (B2) in Figure 1) following the partitioning of a single household, have later been divided among the households involved for the explicit purpose of enabling them to be shared with households produced from a new generation of partitioning (e.g., by household B1, with C1, and C2). If this practice becomes common, it will enable all households to acquire some land rights, even after it is no longer possible to fell primary forest (c.f. Padoch 1979:79-80, 89-91).
Figure One

Household Partition Among the Kantu$^{14}$
V. SUMMARY AND CONCLUSION

Several conclusions can be drawn from this analysis of historical developments in the Kantu' system of land tenure. First, it is now clear that ecological factors—specifically the pattern of rainfall—played an important role in this development. Other scholars have questioned this role based on comparative cases in which this posited association between the ecological factor and the type of land tenure does not hold for some other group, or historical cases in which the system of land tenure has undergone change while the ecological factors have been constant (Dixon 1974, King 1975, Weinstock 1979). With regard to the latter argument, note that among the Kantu' much of the pressure for the development of household rights to secondary forest built up historically, as the result of changes in critical political, legal, and economic factors. As these changes took place, the absolute values of the ecological variable admittedly did not change—but its relative value or importance did. That is, changes took place in the various sociocultural variables, the relative importance of their role in the land tenure system decreased and that of the ecological variable increased. This is why the pattern of rainfall can exert a greater influence over the pattern of land tenure today than it did historically. This example suggests that historical reconstruction of land tenure systems is as fruitful as some scholars have suspected (Dixon 1974:14), but not as problematic as others have feared (King 1975:15-16). With regard to instances of noncorrelation between the ecological factor and the land tenure system: this analysis of the Kantu' data shows that the pattern of rainfall became an important determinant of the land tenure system within a specific socioeconomic context. It follows that the pattern of rainfall is likely to be an important determinant in a similar context in any other area and among any other groups. That is, ceteris paribus a pattern of rainfall similar to that of the Kantu' will create pressure for a system of land tenure that is also similar to that of the Kantu'. This posited association between rainfall and land tenure is not invalidated by cases in which one of these variables is the same as, while the other variable differs from, the Kantu' case, unless the aforementioned socioeconomic context can be held constant for the two cases (which no Bornean scholar has as yet been able to do).
A second conclusion that can be drawn from this analysis concerns the direction of the development of the Kantu' system of land tenure. There has been some confusion in the literature as regards the development of "limited" as opposed to "unlimited" land rights, the former purportedly referred to the situation in which permanent rights reside in the longhouse while the household is accorded only temporary use rights, and the latter referring to the situation in which permanent rights reside in the household with the longhouse holding at most residual rights. Scholars (viz., Appell, Dixon, King, and Weinstock) have debated at some length as to whether increasing population/land pressure will produce limited or unlimited rights (as these are defined above). This debate has suffered from an oversimplification of both the loci of land rights and of the evolutionary process within which such rights develop or change. For example, in the development of Kantu' land rights as discussed earlier and as summarized in Table 4 following, it is apparent that different aspects of these rights were divided between the household and the longhouse, and, further, that the nature of this division varied through time.

The most important conclusion to be drawn from Table 4 is that the historical change in the strength and locus of Kantu' land rights is nonunilinear. There is no observed tendency for land rights to become increasingly strong and increasingly focused on the household. Instead, the observed pattern of historical changes suggests a certain fluidity in the development of land rights, which in turn is a response to the ever-changing mix of relevant social, political, and economic determinants of land tenure. The significance of this finding is twofold. First, it is clearly too simplistic, at least in the Kantu' case, to posit a lineal development of more or limited (or alternatively, less limited) land rights as a simple function of increasing population/land pressure. Other determinants are also involved, and together they produce much more complex responses in the system of land tenure over time. These data also illustrate just not the fluidity but more accurately the responsiveness of the land tenure system. Dixon (1974:12-13) and King (1975:15) respectively question the ability of traditional land tenure systems to adapt to the introduction of cash crops or to increases in population/land pressure. The Kantu' data indicate that traditional systems are well capable of such
TABLE FOUR

THE EVOLUTION OF HOUSEHOLD VS. LONGHOUSE RIGHTS TO LAND

<table>
<thead>
<tr>
<th>Historical Developments</th>
<th>Strength of Household Rights</th>
<th>Strength of Longhouse Rights</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Earliest oral history</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>(2) Limited rights awarded to the household that performs mudas offering</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>(3) Permanent rights awarded to the household that fells the primary forest</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>(4) Rights taken away from a household moving out of longhouse</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>(5) Rights of hunting awarded to households owning young secondary forest in which cassava or <em>Eurycles amboinensis</em> still growing</td>
<td>+</td>
<td>-</td>
</tr>
</tbody>
</table>

NOTE: The change in sign (+) or (-) from one historical period to the next indicates a relative strengthening or weakening, respectively, of the rights held by the unit in question (viz., household or longhouse).
adaptation and, further, that this adaptation may be carried out at a relatively conscious level by the society as a whole.

This study reveals traditional land tenure as a means whereby society can respond or adapt to the changing needs of man/land relationships. Such adaptation is indeed the primary function of the land tenure system. This function is not seen if land tenure is viewed as a static, autonomous, jural artifact, a view too often taken by development planners. This latter view is a misappreciation and underestimation of the true role and function of traditional land tenure. If, based on this mistaken view, the traditional system is altered or eliminated, the effects on the society involved, which is suddenly deprived of this important tool of adaptation, can be deleterious indeed.

NOTES

The author's field study of the Kantu' was carried out between August 1974 and June 1976, under the sponsorship of the Indonesian Institute of Sciences (LIPI) and with the support of a training grant from the National Institute of General Medical Sciences, and research funds from the Center for Research in International Studies (Stanford University) and the National Science Foundation (Grant #CS-42605). An earlier version was first published in the Borneo Research Bulletin 12, 1:3-18, 1980.

See Dove (1985) for an extended analysis of Kantu' agriculture.

The phrase "land rights" will be used in this paper, in conformity to usage in the Bornean literature under examination here. However, in the case of the Kantu', as among some other groups, it might be equally accurate to say that they hold and exercise rights to trees, not land.
4. This summary analysis of Kantu' land tenure benefits not only from Freeman's (1970) data on the Iban, but also from Appell's (1971 and n.d.) analyses of that data.

5. It is possible that variation in soils will prove to be as important as variation in rainfall, but the data to substantiate this do not yet exist. Weinstock's (1979) attempt to use the extant, inadequate soil data in his attempt to refute Appell's initial hypothesis has been rightly criticized by Burrough (1979).

6. This table is compiled from published data for all groups except the Kantu', the figures for which are based on the author's daily measurements of rainfall over a period of twenty-one months. All figures not originally given in millimeters have been converted to millimeters.

7. The rainfall total for the burn months for the Kantu' may be unusually high because of exceptionally heavy rains during part of the period in which measurements were made. However, the validity of the author's Kantu' data is supported by the similarity of the Kantu' and the Maloh annual totals, given that both groups live along the northwest rim of the greater Kapuas River Valley. In any case, it is clear that the Kantu' typically must deal with more rainfall (even if not 1,293 mm.) during their burn season, compared (e.g.) to the Rungus of Ma'anyan.

8. The author's spot measurements within the Kantu' territory yield average diameters of 24.5 and 12.2 centimeters for single trees in primary and secondary forest, respectively. Based on these measurements, the trunk of the average primary forest tree has a volume approximately four times as great as the volume of the average secondary forest tree, and hence contains approximately four times as much moisture.

9. Rice is measured throughout this report in liters of threshed and unhusked grain. One liter of such rice (by volume) is equal to 620 grams (by weight).

10. The relative costs and benefits of the two types of forest are directly associated with the length of the fallow period. In terms of the difficulty with weeds, a short fallow period is bad, while in terms of the difficulty with
the burn, a short fallow period is good. In neither case is the amount of biomass in the forest a consideration. Weinstock (1979:8-9) suggests that the length of the fallow period is important only because it determines the amount of biomass in the forest, and that even this ceases to be a factor after 7-8 years, when 90 per cent of maximum biomass has been attained. I agree that the amount of biomass is an important factor among swidden groups forced to farm after short fallow periods (e.g., less than 7-8 years). However, among swidden groups such as the Kantu', who typically farm only after fallow periods longer than 7-8 years, this question of biomass is (as yet) irrelevant; yet the length of the fallow period is not irrelevant, as I have already pointed out. Between a fallow period of ten years and one of one hundred years, there may be little difference in the amount of biomass, but there is a considerable difference in the composition of the biomass (viz., in the number of herbaceous plants present), and this is associated with a critical difference in the severity of the weed problem. Similarly, while there is little difference in the amount of biomass between a ten-year fallow and a one hundred-year fallow, there is a great difference in the distribution of this mass. In primary forest a given amount of biomass is concentrated in fewer and larger flora than in secondary forest, and this distinction is associated with a critical difference in the difficulty of drying and burning it.

11. The current occupation of the Empanang Valley by the Kantu' dates just from 1888. However, this represented a reoccupation, following their warfare-related flight from the valley in 1882. Oral lore suggests a considerable time-depth to their pre-1882 occupation of the valley.

12. This carrying capacity is derived from the standard formula for calculating the critical population in any given human territory. This formula is as follows (from Brush 1975:801):

\[ Ps = \frac{D \times A}{C \times (A+B)} \]

Where:

- \( Ps \) = critical population size
- \( C \) = cultivation period
- \( A \) = minimum fallow period
- \( B \) = fallow period

190
\[ C = \text{amount of land needed per capita to provide average subsistence} \]

\[ D = \text{total amount of arable land available} \]

13. As the population of the territory approaches or passes the 156 person mark, it is likely that the Kantu will relieve the increasing population/land pressure by intensifying some aspects of their agricultural system, so as to reduce the per capita demand for land. As this occurs, the actual carrying capacity of the territory, defined as the number of people that it can support without resulting in environmental degradation, may rise well beyond the figure of 15.6 persons/square kilometer.

14. Note that this diagram analyzes only those children of each household who marry nato-locally. Those children who marry outside of the household (and they will comprise 50 per cent of the total in the average household) must relinquish all or most of their shares in the household's land rights; and so they are not included in this diagram.

**BIBLIOGRAPHY**

Appell, G. N.


Brush, Stephen B.

Burrough, P. A.

Dixon, Gale

Dova, Michael R.


Freeman, J. D.

Linares, Oiga F.

King, Victor

Padoch, Christine
Weinstock, Joseph B.
CHAPTER SIX

THE BULUSU' OF EAST KALIMANTAN

THE CONSEQUENCES OF RESETTLEMENT

G. N. Appell
Brandeis University

PART ONE: INTRODUCTION

PART TWO: TRADITIONAL BULUSU' SOCIETY

Prenuptial Customs, Bride-Price, Marriage, and Post-Nuptial Residence

Domestic Family Cycle: The Patrilocal Extended Family and the Nuclear Family

The Bulusu' Village

The Bulusu' System of Land Tenure: Village Rights to Land and Rights to Swiddens

Fruit Tree Groves and Their Ownership

Forest Products

Moveable Property

Entombment Houses

Religion And the Propitiation of Spirits

Domestic Animals

Trading with the Coastal Muslim

183  194
PART III: RESettlement and SOCioeconomic change

Introduction
Psychosocial Deprivation and Devaluation
Resettlement
Settlement Pattern of the Respen
Management of the Respen
Respen Boundaries, Timber Companies, and the Use of the Forest
"Mengajar": Teaching the Bulusu'
Shops, Traders, and Entrepreneurs
Health Services: The Dispensary and the Dresser
Schooling
Religious Conversion

PART IV: SOCIocultural changes and their consequences

Health Impairments As a Result of Changes in Cultural Ecology
Health Impairments From Demand Overload
 Impaired Self-Esteem
 Impaired Social Identity
 Role Conflict and Ambiguity
PART IV: (Cont'd.)

Further Psychological Impairment--Loss of Meaning, Motivation, and Belief

Physiological Impairments

Behavioral Impairments: Deviance and Antisocial Acts in the Response

Erosion of Support Mechanisms

Structure Changes in the Periphery-Center Relationship

PART V: CONCLUSIONS

NOTES

BIBLIOGRAPHY
THE BULUSU' OF EAST KALIMANTAN

THE CONSEQUENCES OF RESETTLEMENT

G. H. Appell
Brandeis University

PART ONE: INTRODUCTION

The Bulusu' are a self-conscious ethnic group of East Kalimantan. Traditionally they inhabited the lower and middle reaches of the Sekatak, Bengara, and Batayau Rivers and their tributaries. A few Bulusu' villages can be found on the right bank of the Mentarang River as well as some of its southern tributaries.

In the upper reaches of these rivers and on the height of land between water sheds, in the area I have referred to as the Punan highlands, are found a number of Punan, who were originally hunters and gatherers. They now grow some crops and have intermarried with the Bulusu', usually Punan men marrying Bulusu' women as part of the process of their learning agriculture and becoming Bulusu'.

Scattered Coastal Muslim settlements are also found along the estuaries of these rivers, but primarily at the height of tidal influences. The Coastal Muslim population is composed of members of both the Tidung and Bulungan ethnic groups as well as a few descendants of Arab traders. The Tidung and Bulungan languages are not mutually intelligible and are in fact highly divergent. At one time both these ethnic groups were organized in contending sultanates. However, these two groups are now heavily intermarried.

At the mouth of the rivers inhabited by the Bulusu' lies a large island on which is located the oil and port town of Tarakan, the major economic center for the region.

The Bulusu' are also known as "Berusu" or "Brusu." Their preferred autonym is, however, Bulusu'. They state
that their closest linguistic affiliation is with the Tidung language.

Traditionally the Bulusu' are longhouse dwellers and swidden agriculturalists. They grow rice, cassava, taro, sweet potato, sago, and a variety of vegetables. If it is a year that there is a good fruit tree crop, the swidden will also be planted with fruit trees. As a result the Bulusu' own extensive fruit tree groves. Travel to the fields and to other villages is by canoe, and the Bulusu' are skilled in navigating the various rapids that are found on their rivers. A considerable amount of time is devoted to fishing and the gathering of forest products for trading to the coast.

In the 1970s the Indonesian government spent considerable effort to move the Bulusu' into several resettlement centers located along the upper reaches of the estuaries of the rivers inhabited by the Bulusu'. In these centers they have been prevented from carrying on their traditional agricultural activities, family life, and rituals.

I will first discuss "traditional" Bulusu' society. This does not infer that Bulusu' society was unchanging prior to resettlement. There were small changes as a result of the imposition of Dutch colonial rule, such as the cessation of headhunting. And there was the tendency to assimilate certain cultural traits from the Islamic sultanates along the coast and the Coastal Muslim populations, in addition to trading with them for products manufactured outside the region and various consumer goods. I will discuss this in my synopsis of traditional Bulusu' society. However, by and large Bulusu' society was in a state of moving equilibrium with its ecosystem. This equilibrium was rent asunder by the Indonesian government resettlement program and the attempts to integrate the Bulusu' more closely into the national economy.
PART TWO: TRADITIONAL BULUSU' SOCIETY

Prenuptial Customs, Bride-Price, Marriage, and Post-nuptial Residence

Before marriage a young man will moi dandu', literally "go to (visit) a girl." It is very close to what in the English speaking world is called "a date," except there is no place to go but to the longhouse apartment of the girl's family. A boy usually arranges with the girl to call on her one evening. He brings small gifts, such as soap, perfume, etc., and she may reciprocate by preparing special leaves to insert into holes in his ear lobes. They talk, laugh, and giggle way into the night. If things progress, the boy may join the girl in her sleeping sarong. Sexual foreplay may go on. If it leads to intercourse, the girl is supposed to tell her father. This, or if they are discovered in the act, will result in jural action by the father. The father receives a fine of several jars and a small pig from the boy's family. The ear of the pig is slit and the members of the longhouse, with the exception of the girl, are wiped with the blood of the pig to eradicate the ritual jeopardy. Even if the two marry, there is still a fine of property and a pig, but the fine is smaller.

Fornication and particularly adultery will cause the village to become "dirty" (rusam). There will be floods, people will become sick with colds, and crops will be destroyed by forest animals. Some say that the woman becomes "hot" as a result of fornication. Occasionally a woman after marriage will tell her husband of previous fornication, and this requires a larger fine. She will do this if she fears ritual danger. However, in many cases of fornication it is said that neither party will mention it. After a girl is engaged, with the proper jar being given to her father as an earnest of intentions, intercourse during moi dandu' does not precipitate a jural action or fine.

Marriage is normally monogamous. Rarely a wealthy man will have two or three wives. Traditionally, post-nuptial residence was usually uxorilocal for one to three years, followed by virilocal residence. Since Indonesian independence and the spread of Islam, temporary uxorilocal residence has become rare in the Sekatak river system. In other river systems it is reported that there is still
temporary post-nuptial residence in the bride's village until there are children. Residence is then moved to the groom's village.

Virilocal residence is justified by the bride-price (bumbung) paid. It is denied that the bride-price is to pay for the sexual and reproductive services of the female. Yet the bride-price is lower for older women, women who can no longer produce children, or who have been divorced and have children. When asked what the purpose for bride-price, it was also stated that intercourse would be fornication if a bride-price were not paid. The bride-price will not vary according to the skills, industriousness, or beauty of the bride, or wealth of the father of the groom and father of the bride, as it does among the Rungus of Sabah.

Bride-price is measured in terms of jars (tampaiyan). Originally, all bride-prices were "thirty jars." Then after the Japanese occupation during World War II, some families in the lower reaches of the Sekatak River began asking for "forty jars." And the number of jars that can be asked for a daughter follows the amount that was paid for her mother. As a result, there have evolved two classes of families based on the female descent line: those who ask for "forty jars" and those who ask for "thirty."

The use of the term "jars" to indicate the size of a bride-price is a metaphor for the classes of property paid. That is, a bride-price is made up of gongs, cannon, brass-ware, and of course jars. A gong may equal one "jar." Also, some jars are so valuable as to count as the equivalent of "five jars."

The arguments over bride-prices are not over the number of "jars," but rather what is to constitute the thirty or forty items. A jar with a chipped rim may be rejected for a similar jar with no imperfections.

Bride-prices in Borneo may be divided into two types: corporate and redistributive. In Rungus society the bride-price is made up from the assets of the domestic family of the groom and paid to the domestic family of the bride, which adds the gongs and jars to its corporately held assets. This is what I have termed the "corporate" type. The Bulusu' is of the redistributive type. A man putting
together a bride-price for the wife of his son gets help from his network of kin. Each kinsman who can offers to provide a jar, or gong, or a piece of brassware. This is repaid by the father at a later point when those who helped him need help for a similar prestation. The father of the bride takes the “jars” and redistributes them among his network of kin according to the help they have given him in the past and the help that they have provided in the form of provisions for the wedding feast. Those who receive items from the bride-price then give to the bride a small gift of housewares, such as a plate or cooking pot, etc.

As a result Bulusu’s society is composed of a vast, intricate network of debts and credits. And these may be recognized by descendants even though they were incurred three generations ago.

It is said that before it was more usual to pay the full bride-price at the time of the wedding. Now the bride-price may be paid in three or four installments, each of which calls for a feast. If the father of the groom dies before the bride-price is paid off, the husband himself will be expected to pay. If the groom or bride dies before the bride-price is paid, the remaining balance is canceled.

Bride service (tumulow) is occasionally substituted for the bride-price.

Domestic Family Cycle: The Patrilocal Extended Family and the Nuclear Family

Following marriage the couple resides in the longhouse apartment (lamin) of the groom’s father. They may stay there until they have several children; this longhouse domestic unit may include more than one married sibling with children. On the other hand, some couples want to build their own longhouse apartment shortly after marriage.

Even if the son and his new wife join the apartment of his father, they still make their own swidden and swidden field house. The field house provides a place where the newly married couple can carry on their domestic life, if they wish. When they are sleeping and eating in the apartment of the husband’s father, the cooking and provid-
ing of meals in this extended family apartment is in charge of the husband's mother, the senior female. Each nuclear family provides from their own swidden the necessary food stuffs to make a joint meal. But each nuclear family uses its swidden profits to buy its household necessities and invest in jars and other forms of nondepreciable property (gama').

A son and his father, living in the same apartment, frequently will have adjoining swiddens, and may share the same ritual structure and plot (punsu bon), straddling the boundary between their swiddens, to ensure a good harvest.

Certainly by the time the second generation's children have reached marriageable age, the son of the founder of the apartment will have built his own separate apartment onto the longhouse of his father. However, the youngest son is expected to remain in the parental apartment to take care of his aged parents. If a widow has only daughters, and they marry into distant villages, the widow may stay with her siblings, keeping a separate apartment and swidden with the help of her brothers.

The Bulusu' Village

Village organization is not complex. There is a village headman appointed by the government, and more recently the government has instituted the position of a village head of adat--customary law. There are no hereditary social classes, such as are found among the Kayan and Kenyah. There are a number of female and male shaman (qantu'), who are employed for curing illness.

The inhabitants of a village live in one or more longhouses. The number of longhouses in a village depends on the developmental cycle of the village and whether the village is located near the coast or up in the interior. One informant from the lower reaches of the Sekatak River said that it was more usual to have one longhouse per village, although there were occasionally one or two more. An informant from upriver said that it was more usual to have two or three longhouses per village. And if a village is growing and splitting up into two, there may be two or more longhouses as part of this process.
In addition, those cultivating swiddens far away from the village longhouse may construct a smaller version of the longhouse structure to live during the agricultural season and while they are using that area for swiddens.

**The Bulusu' System of Land Tenure: Village Rights to Land and Rights to Swiddens**

The land tenure system of the Bulusu' is similar to that of the Rungus. It is what I have termed "circulating usufruct." That is, once a swidden area has had all of its crops removed and it begins to revert to jungle, anyone else in the village may use that area again for a swidden. It reverts back to the village reserve, or what the Dutch adat law scholars called "the area of disposal" of the village. Thus, no permanent usufruct rights are established by clearing the forest, as occurs among the Iban, the Land Dayak, the Kayan, the Kenyah, and the Kantu' Dayak. As permanent rights so established among these groups may be devolved on others, through inheritance or through the partition of the bilek as among the Iban, I have called this system "devolvable usufruct."

However, if the swidden area is planted with fruit trees at the end of the swidden cycle, this removes that area from circulating usufruct. Rights over these fruit trees are usually devised on all the heirs of the planter.

Village boundaries are marked by natural phenomena along a river, such as rapids, mouths of tributaries, or a large tree, and at the height of land between two river systems. Prior to the arrival of the Dutch boundaries were not well defined. However, if a stranger came into a village territory and took any produce from the forest or from the swiddens, he was liable to be killed. Therefore, it was customary when traveling to stop at each longhouse village and ask permission of the village headman to proceed. And it is still considered to be good form and a wise precaution against trouble to do so.

There are no rules on the sharing of forest products gathered by nonvillage members with village members. This includes animals killed, honey gathered, fish taken, etc., as well as commercial products such as damar, rattan, etc. Nor is the village territory closed off at any point during
ceremonies to increase its ritual goodwill. The longhouse that holds such a ceremony may be closed to outsiders visiting it, but not the village territory itself, contrary to the situation among the Rungus.

An individual may cut a swidden in a village area in which he is not resident as long as he notifies the village headman and gets his permission. He is not required to relocate his residence to that village. He also may plant the swidden with fruit trees at the end of the agricultural year, establishing a claim of long duration, without any jural liabilities. Seldom does a headman deny a nonresident the request to cut a swidden, unless he is known as a troublemaker. But when an individual wants to cut a swidden in another village it is usually because he or his spouse have relatives in that village, and they wish to join their swidden group.

Villages are interlinked by a network of kin, and as a result an individual may have rights to fruit trees in a number of closely related villages. Furthermore, population pressure on the land has not developed and land, therefore, is not scarce, certainly not as scarce as among the Rungus of Sabah. As a result, boundaries have not become as clearly delineated. The Dutch intervention did not produce any pressure on land in the Bulusu' area, and as a result it never became necessary to define more precisely village rights over specified tracts of land.

There is one exception to this, however. Two or three villages located up two small tributaries near the estuary of the Sekatak River are separated by a slight height of land, which could be easily crossed. And one village became worried that outsiders from other villages might canoe up one river, cross over by foot to that part of its territory not reachable by canoe from its own river, and collect forest products for sale. As a result this village established clearly its boundaries, identifying them by carving a hornbill-headed man or a crocodile on felled tree trunks. This was probably in response to a temporary increase in the value of rattan, damar, and other forest products. It was not adopted by any of the villages upcountry, and it apparently fell into disuse shortly afterwards. This is not generally known by our informants in the younger generation.
Thus, there has been little pressure on the resources of the village reserve to produce a further development of the jural personality of the village with regard to its assets. In fact the defining feature of the jural personality of the village is not so much its relation to property as to the services of the headman in resolving disputes. One headman said that boundaries between villages represented in fact the division between the authority and power (kuasa--B.I.) of headmen, and that the actual boundaries were very rough until the Dutch came.4

The impression is that the village was both a nexus of kin relations and a center of the power of an individual leader, who then, with the coming of the government, became the official village headman, rather than being an explicit, well-defined territorial entity. The Bulusu' village thus represents the lower end of a continuum where the territorial nature of the village is ill-defined and which is found usually in remote areas. On the upper end of this continuum are found the well-developed jural personality of Borneo villages, such as among the Rungus and Kantu' Dayak, that arose in response to growing scarcity in order to protect both their resources and their ritual goodwill.

**Fruit Tree Groves and Their Ownership**

Fruit is a major foodstuff of the Bulusu' and an important source of income. It is regularly sold at the oil and port town of Tarakan. When there is a major fruiting season, once every four or five years or more, everyone gorges themselves on fruit. Swiddening activities may in fact cease at that time, while the fruit is enjoyed.

Once an area is planted in fruit trees as part of the swiddening process, it remains in the hands of the owner and his descendants, and the fruit trees may not be intruded upon by others without incurring a fine. Such groves may last for as long as eight to ten generations, and when the fruit trees are no longer bearing well, they are cut, a swidden is made, and the grove is replanted. Fruit tree groves are not planted every year but usually when there has been a good fruiting year.

Rights to the fruit trees and their yield are devised on all the children of the original planter. This set of kin is
in essence a cognatic descent isolate (see Appell 1983a, 1984). It is not corporate, as the rights are held by the individual members. The eldest son, as in all matters, tends to organize affairs with regard to the grove. Because of his, his rights may be considered to be more firm and somewhat more extensive, particularly if it is he who cultivates the trees. Each year the brush around the trees should be cleared. And in fruiting years, greater amounts of clearing are necessary to protect the fruit from depredations by animals. The individual who clears around the trees gets the right to enjoy the first fruits. He is then responsible for calling all other members of the cognatic descent isolate to participate. Members living in far away villages may not be called, unless it is a heavy fruiting year. The right to clear may be shared between the male members, so that each has a chance to enjoy the first fruits. Women's rights are somewhat less strong than men's, and they might not get a similar share if the fruit is sold or the grove is sold.

Rights over fruit trees are a source of conflict. There is always the problem of establishing entitlement to the grove or the fruit after several generations. And there are arguments over whose turn it is to cultivate the grove. If a right-holder, even a privileged right-holder, sells the fruit without notifying his coright-holders, this is a major source of argument. It is stated that first cousins would not dispute over fruit tree rights. At the second cousin range, disputes begin; and at the third cousin range, there are considerable arguments over fruit trees. At that point the groves can be divided up among the coright-holders, or one of the members can buy out the others' rights.

**Forest Products**

In addition to their swidden activities, the Bulusu' gather a variety of forest products for trading to the coast. These include rattan of various varieties, resins, aloes-wood, etc. This forest gathering constitutes a substantial part of their economy.

**Moveable Property**

The Bulusu' invest their agricultural profits and their return from the sale of forest products in a variety of
moveable property. This includes beads, beaded headbands, ankle bracelets, all of which are woman's jewelry; and brassware, gongs, cannon, old swords, etc., which fall into the class of property referred to as gama. There is a tendency for women's jewelry to be given to daughters and swords to sons. But this is not absolute. Rights to a very expensive piece of gama are usually split among all children. Each child then gives his right to his own children until there exists a large set of kinsmen each of whom owns a right in the jar. This, like fruit trees, eventually becomes a source of dispute so that the jar is sold with the proceeds split among the right-holders. The person who has been taking care of the jar gets a larger portion than the others. Or, the person who is taking care of the jar will buy out the other right-holders.

Entombment Houses

When an individual dies, his body is placed in a coffin carved out of a tree trunk and then stored in the longhouse until the final ceremony for his entombment is organized. It frequently takes several years for the family to gather all the necessary supplies of food and drink for this large gathering and ritual that accompanies cleansing the village of all ghosts and spirits and sending the soul of the dead to the afterworld with the proper accouterments. During the final part of the ceremony the coffin is moved to the entombment house, the baloi-patoi.

The baloi-patoi is a raised platform with roof and side walls. Carvings frequently are found on the posts, supports, and other timbers. The construction of a baloi-patoi is expensive and requires considerable labor. An individual will gather together sufficient food and drink to sponsor a work party to construct the house. The house then becomes the property of the sponsor and his descendants. Sometimes it may be the joint effort of several domestic families so that the house becomes in essence the property of all the members of a village.

Those who are entombed in these houses are the male descendants of the person who constructed it, female descendants who have married within the village and are therefore resident there, and all affines of descendants living in the village.
If a baloi-patoi is not available, a single coffin can quickly be erected on a couple of posts without the house. In one small river system the coffins are put in a cave as the cost of a baloi-patoi was felt to be too high.

A new form of entombment began a decade or so ago. This involves making a baloi-patoi underground. A large hole is dug, and it is lined and covered with wood planks. A roof is erected over the grave and a fence is built around it. It would appear that this new form was derived from Christian burials. It was brought in from a distant Bulusu' village and so the origin is not precisely known. My informant stated, however, it is not derived from a Christian concept. Its one advantage is that it is difficult for the coffins to be bothered by bears.

Religion and the Propitiation of Spirits

The Bulusu' have a complex religion with a creator god, a variety of spirits usually of place, and a complex afterworld consisting of a number of layers. Illness is the result of soul loss, and spirit mediums go into trance to negotiate the return of souls lost to spirits who have been offended. Traditionally, the Bulusu' raised pigs and chickens to sacrifice to these spirits and to cleanse a village after incest, and for rituals associated with headhunting.

Sometime, either right before or after the Japanese occupation, a number of people living in scattered villages—headmen and spirit mediums primarily—had a dream that the blood of sacrificed pigs would attract the spirits to Bulusu' dwellings and a number of people would die. At that time the sacrifice of pigs ceased and the killing of chickens in these ceremonies may have dropped off. Traditionally a pig was also sacrificed at marriage. But this ceased at least in the lower reaches of the Bulusu' region either at this time or before.

Chickens are presented to the spirits at ceremonies, but they are let go afterwards. Where pigs once were sacrificed, an effigy of a pig is made of rice paste flavored with sesame which is consumed during the ceremony. For cleansing a village of incest, a pig is used. Its ear is slit to obtain the necessary blood, but it is not killed.
Domestic Animals

Pigs are kept in Bulusu' villages for sale in Tarakan and to the Chinese, but not for their own consumption. Chickens are also raised for sale, for use in the ceremonies, and for eggs. The Bulusu' will eat pig meat if killed and cooked by some other ethnic group. They still kill and eat wild pig.

This prohibition on the killing of pigs appears to be confined to the river system where we did our field work. In another, smaller river system which is close by, Bulusu' still kill pigs for adultery and incest, according to an informant from that area.

Trading with the Coastal Muslim

Prior to World War II, it was the Coastal Muslim that traded with the Bulusu', exchanging local products for manufactured goods. They bought rattan, damar, and other products from the forest as well as rice and various farm produce, such as fruit, cassava, etc., in exchange for cloth, cannon, salt, cooking pots, brassware, plates, gongs, and various manufactured products. And they made a market in jars, beads, and gongs.

The Coastal Muslim are made up primarily of three ethnic groups: Arabs, Tidung, and Bulungan. The Bulungan and Tidung both were organized on the basis of sultanates, and during the early Dutch period, if not before, there was continual strife between the two sultanates for control over the region. Apparently Bulungan in the late nineteenth century achieved dominance.

Prior to 1900 the Dutch had only nominal influence in the region. Then in 1909 Bulungan was "brought under the virtually open-ended provisions of the 'Short Declaration'" (Black 1985:282). The provisions included the "territory to be part of the Netherlands East Indies, forbade diplomatic connections with foreign powers, and accepted obedience to any orders of the Dutch government" (Black 1985:282).

Arabs and their descendants married locally into the Tidung and Bulungan groups. Although the Tidung and
Bulungan languages are not closely related, there has been considerable intermarriage between these two ethnic groups.

The Coastal Muslim live primarily in villages at the head of the river estuaries. A few individual family houses of the Coastal Muslim are also scattered here and there along the estuaries, frequently by their small coconut plantations. In the Coastal Muslim villages there can be found a few shops with little to sell except kerosene, cookies, sugar, salt, a few tinned goods, gasoline, batteries, flashlights, cloth, and clothing, etc. Rarely there are shops owned by Chinese, a few of whom have settled in these Coastal Muslim villages. It is my impression that they came later, after the villages were fully established.

Following World War II, the monopoly on trade held by the Coastal Muslim, both traveling traders and the local shopkeepers, was broken. Around 1950, in the lower reaches of the rivers and later in the upper reaches, the Bulusu' began going to Tarakan themselves to sell their produce and purchase supplies. However, shops still exist in the villages of the Coastal Muslim, and these are patronized by the Bulusu' for small purchases and times when a full longboat cargo has not been organized for sale in Tarakan. Bulusu' originally did not like the long trip to Tarakan. They were afraid of being raided, and they were also not skilled in selling there so that they were frequently cheated, it is stated. However, with the availability of outboard motors, ten to fifteen years prior to our field work, the situation in this regard began to change. Rather than being one, two, or three days away, Tarakan then became only six hours from the lower reaches and ten to twelve hours from the upriver country.

The Bulusu' also trade agricultural products for fish with the men working the coastal fish weirs. These are out in the bays and inlets along the coast on the route to Tarakan.
PART III: RESETTLEMENT AND SOCIOECONOMIC CHANGE

Introduction

We have described the traditional social organization of the Bulusu and their socioeconomic system. As a result of the arrival of the Dutch, later to be supplanted by the Japanese, and then finally with the coming of Independence, the Bulusu were subjected to increasing contact with the world economic system. But this did not introduce any major changes in their life with the exception of the cessation of headhunting. However, the administration of the Dutch and the cessation of headhunting did permit greater travel in the interior so that there was more opportunity for gathering forest products. But the fear of being attacked by headhunters is still abroad and constrains behavior.

The headman's position was also redefined with growing control by the government over the region. Certain of his traditional rights were taken away from him in the sense he could no longer organize force to deal with disputes and physical violence. Other duties were given to him, such as being a representative for the implementation of government policy.

Also following Independence the Bulusu were affected by a growing commercialization as the nearby port and oil town of Tarakan grew. It became the center for the purchase of consumer goods and for trading agricultural produce, and the dependence on the Coastal Muslim for commercial goods was diminished.

All these changes were in a sense evolutionary. That is, they did not require major adaptations by the Bulusu nor did they come too fast so as to overwhelm the Bulusu capacity for adaptation. This is not true for the resettlement program or respen, an acronym for Resetelmen Penduduk (B.I.), literally "resettlement of inhabitants." This is to make the Dayak populations more accessible to the government administration, to bring to them a variety of government services, including schools and health facilities, and to free up the forest for exploitation by timber companies. These changes are revolutionary. The major
contours of Bulusu culture are being redefined and the demands for adaptation to these rapid changes are such as to threaten the Bulusu's capacity for adaptation.

This is the last major step in the integration of the Bulusu into the world economic system which started when Islam spread along the coasts and the Coastal Muslim then served as intermediaries in the trade of the interior people with the economic centers.

Psychosocial Deprivation and Devaluation

The population of the region is divided into two major status groups: the Muslim and the Dayak, those without religion. The upper status group is further elaborated with the addition of Christianized Dayaks who have had further education. Those who are not a member of a world religion and who have not gone to school, i.e., cannot read and write, are perceived in highly pejorative terms. And since resettlement the term "Dayak" is now viewed as inappropriately retrograde, as it indicates a people without religion and without the benefits of desa (B. I.) life, i.e., "village" life organized on a Javanese model. We were told not to use the term "Dayak" but that the preferred term for the indigenous peoples is now orang pedalaman (B. I.), "people of the interior." Bulusu informants said they were no longer "Dayak," as they had been converted to religion.

The Coastal Muslim have a long history of reforming to the indigenous population such as the Bulusu in dehumanized terms. They refer to the Bulusu as "dumb" (bodok--B. I.), which sometimes means they haven't had any schooling and at other times means that they lack the normal capacities for thinking. They are "dirty" (kotor--B. I.). They "smell like pigs." Their food is disgusting, as is their alcoholic beverage made with rice and/or cassava and their potted meat. They ridicule the Bulusu traditional clothing and their burial customs. It is believed that they have a lot of sickness and a high mortality. It is claimed that they don't have soap. The Coastal Muslim laugh uproariously at the thought that the Bulusu might have a religion. In sum, the Bulusu are not maju (B. I.), they are not "progressive," or "developed." Specifications as to exactly what maju consisted of were impossible to elicit.
The majority of the government personnel are Muslim and therefore share these values. There are a few Christians, but they also have the attitude that the Dayak are objectionable and derisible. For example, several Christian government officials, who were originally Dayak, said that the Dayak longhouses were unhealthy. This ignored the fact that the housing in the labor lines for the timber companies were equivalent in design to longhouses and in fact appeared from the distance to be longhouses. Yet nothing was said about these being unhealthy.

The major concern of the government and the elites within the Coastal Muslim community is bangun (B.I.), the "waking up," or "development" of the Dayak populations, and maju, or "progress." These terms were in constant use, and the Bulusu' are definitely not maju, but backward.

When the Bulusu' would go to Tarakan in their loincloths, prior to resettlement and the loss of their traditional clothing, they were harassed by the police. I was told that the police would grab their testicles. In the resettlement area one Bulusu' was put to "dry out" in the sun, that is to stand in the midday sun, for wearing a loincloth. At one point all the men were lined up and their loincloths were removed by government personnel of the respen, who were then Javanese. The loincloths were thrown into a barrel, and they were issued shorts. Even Jockey briefs are perceived as being an acceptable substitute for loincloths. Some government personnel told the Bulusu' that foreigners would be made "ashamed," "embarrassed" (malu--B.I.), if they saw them in loincloths. And we were asked if we were not embarrassed to see the "unclothed" Bulusu'. It was also a frequent statement by government personnel that the Bulusu' only ate cassava, indicating how backward they were as they did not even eat rice. For example, the commandant of police of the regency said, after the government had shown a film on birth control, "All the Bulusu' do is work a few hours in their gardens, come back and eat cassava, and make children." This attitude ignores the fact that not only did the Bulusu' eat rice but before the resettlement had sufficient quantities to sell surplus to Tarakan.

It is impossible to give the full flavor of the attitudes held toward the Bulusu' and the treatment that they receive by means of recounting only the statements by Coastal
Muslim and members of government. There is a pervasive feeling of dehumanization and intimidation that is communicated in various ways. This appears in kinesics, tone of voice, and the manner by which a Bulusu' is frequently treated. He is barely tolerated and often ignored as if he were a second-rate citizen. Thus, the Coastal Muslim and the government at every chance intimidate the Bulusu'. He is ordered about as if he were an indentured servant. He is constantly bullied, threatened, hectored, and harassed. He is ridiculed to his face as to his demeanor, his intelligence, his way of life.6 Further examples of the treatment of the Bulusu' as less than human, as inferior beings, will be given in the history of the development of the resettlement site.

The Resettlement

In the middle to late 1960s--we have been unable to establish the exact date--the government began a policy of moving the interior Dayak populations to resettlement centers on the lower reaches of the various river systems. The stated purpose of this was to provide government services to these indigenous peoples, to make them more accessible to the government officials, and to raise their standard of living. It was believed that these people were not living as an organized group, and the idea was to develop village life similar to that found in the Javanese desa--"village" (see Appell-Warren 1985). This involved providing "proper" housing, clothing, food, and employment. Critical to this was also to "give" them a religion. The members of each group were given the opportunity to choose from the five recognized religions.

The Pancasila, "The Five Principles," is a formal statement of the basic values and norms that the Indonesian people have determined to live by and that form the basis of Indonesian government (Isman n.d.). The first principle states the belief in One Supreme God. Those belief systems that do not include the concept of One Supreme God are not considered as "religions." And individuals without religion are feared to be Communists. Therefore, as it is thought that the Dayak are primarily animists without the belief in a supreme being, it was critical that these peoples be given a religion. Thus, the Bulusu' were gathered together and were told to choose a religion. One district
officer, who participated in this with regard to a neighboring group, referred to this process as "giving them a religion," and he was extremely proud of his part in what might be called "civilizing" these people.

Less overtly stated was another reason for resettlement, which may have in fact been one of the prime motivations. By resettling the interior peoples it would free up the jungle for exploitation by timber companies. In other words, this resource of the Bulusu' was taken over by the government, and the government then sold timber concessions to foreign companies. These provided income for the government, but it also provided jobs for a number of individuals in the national employment pool--i.e., the non-agricultural population--as well as the opportunity to profit from graft.

The Bulusu' were not at all receptive to the idea of giving up their traditional village territories and moving to several central locations. It meant that they would be far removed from their fruit tree groves, their fields, and their grave sites and cultural symbols. It involved a drastic redesign of their economic life. And while most Bulusu' had built houses at the respen, their permanent relocation there was not complete at the time of our field work.

The Bulusu' find the respen to be a threatening, confusing situation. Punan, Tidung, Bulungan, and Bulusu' are all resident in the same respen. The Bulusu' live in much more crowded conditions than they are used to in their own villages. Fights have broken out between the ethnic groups, and this has tended to drive the Bulusu' back to their longhouses. The respen is hot, as all the trees were removed in preparing the site. This even involved destroying several fruit tree groves. The soil is not as good for agriculture as they are used to in their villages. And as yet they have no fruit trees to provide food.

The most difficult aspect of life in the respen is being at the mercy of government representatives and their surrogates. They are constantly being ordered to do things, and are used as labor for the economic benefit of the government officials. The commandant of police of the regency said that the Bulusu' were brought here so that they could be watched and told what to do, and they will
do it. When government representatives are not in residence, several Coastal Muslims have taken the responsibility of running the respen, ordering the Bulusu' around, using them badly. To enforce their wishes, government officials constantly use negative sanctions, such as threatening the Bulusu' that the government will become angered, will jail them, or will fine them.

All government officials are addressed as "bapak" or "pak" (B.1.), literally "father" or "protector." It is a common term of respect in Indonesia. But it encourages the attitude that the Bulusu' are "children," or their clients, rather than that they have a responsibility of representing the interests of the Bulusu'.

As the Bulusu' delayed in moving to the respen, various methods were used and were still in use while we were there to bring them in. They were threatened with various punishments. A district officer in our presence told the residents of one longhouse that he would burn it down if they did not move to the respen. In some cases the Bulusu' were told they would be arrested. In other instances, the army went into a village and forced all the men to get into the river, and then fired over their heads. In one village they shot their guns up through the roof of the longhouse before they forced the men into the river. Bulusu' were beaten, slapped around, and sometimes physically forced under the water to coerce them.

This authoritarian behavior has continued while they are in the respen, which again makes it a place to avoid. But the critical point is that the Bulusu' cannot make a living there. They have to go back to their village areas to cut swiddens, and they are being constantly called into the respen when government officers come for a visit. As such it is difficult to carry on their farming activities, particularly since much of their labor is required in the respen to build the required housing and to keep the respen well-groomed.

**Settlement Pattern of the Respen**

Respen have been created along the lower reaches of the rivers in the region inhabited by the Bulusu'. Some
river systems have only one. The river system in which we lived has three, two primarily for the Bulusu' and Punan, and one which includes the Coastal Muslim village and a few Bulusu' families. There are a few Coastal Muslim families living in the Bulusu'-Punan respen in houses built along the river bank. A few representatives of other ethnic groups also live in these respen. For example in Lansat—the pseudonym we have given to the respen in which we lived—there is a Javanese schoolteacher, a Christian minister from the Tunjung ethnic group, several Timorese who have married Bulusu' women, and a group of Bugis carpenters rebuilding the school.

The Lansat respen contains about 870 people from nine Bulusu' and Punan villages, along with the various Coastal Muslim of Tidung or Bulungan derivation.

Back from the landing at the respen of Lansat is a flat open area which includes a playing field. Around this are a number of government houses. First there is the house of the liaison officer from the district office, who visits the respen from time to time from his home in the regency capital about a day's journey away. Next to the house for the liaison officer on the one side is the house of the dresser, and on the other side is a large house that was used as mess and bunk house for the respen workers had brought in to open up the respen. It is now vacant and shuttered up. Beside it is the respen office, which was at that time only open when the liaison officer visited. Next to this is also a small wooden structure used for the jail, too small to lie down in and very hot. There is also a small building housing a rice mill. This was under the charge of the schoolteacher, and its use was available for a portion of the rice hulled. Finally, there is a mosque behind the respen office. It was closed and unused except during Ramadan.

Behind this flat strip along the bank of the river the ground rises, and on this rise can be found the school, which was being rebuilt after having been burned down, and the dispensary, which was closed. The dresser dispensed medicines from his respen house, when he was in residence. He preferred to spend most of his time at his own house, which was located a mile or two upriver in the Coastal Muslim village.
On this rise of ground begin the Bulusu' and Punan village areas. Each village is segregated in the respen so that the Bulusu' and Punan houses are not intermixed. Each village area has an office for its headman. The houses of the Bulusu' are made of sawn timber. They are clapboard with metal roofs. In aspect the houses and settlement plan in the respen closely resemble the government housing provided the Indians on various Canadian reservations we have visited.

The Bulusu' were given nails, sawn boards, beams, metal roofing, and some cash for the building of these houses (Appell-Warren 1985:18). However, they maintained that they never received as much as what was promised to them for making their houses. It is rumored that the cash allotted to purchase housing materials was embezzled by the local government officials. As a result, the Bulusu' had to sell some of their jars to get the funds to complete their houses.

At the time of our research, there were some permanent Bulusu' residents of the respen. Others had not yet fully finished their houses. The majority of Bulusu' were only intermittent residents, coming to the respen when they were called in by government officials or at times of government visits, or when swidden activities were not pressing. Many still had apartments in longhouses up the river and its tributaries, but many of these were rapidly falling into disrepair.

As the respen is devoid of trees, it is perceived by the Bulusu' as being a hot place to live. This is exacerbated by the use of metal roofing which make their houses unbearably hot. The river is used for a latrine, for bathing, for washing clothes, and also as a source of drinking water. There were times when taking a bath you had to have someone watch out for feces, as they would interfere with bathing activities. The problem is that too many people in too small an area are using the river for defecating, and at the same time the fish, which perform some cleaning functions, have been fished out. The situation is ripe for a disastrous epidemic.
Management of the Respen

Many government plans for the respen and modernization of the Bulusu' never seemed to jell. It was at first decided to have several respen for each of the major tributary systems of the Sekatak River. One was established near the mouth of the river, buildings were begun, and each village got a grant for the purchase of an outboard motor. Then it was decided that it would be better if there was only one large respen for all the villages on that river system, and this was to be at Lansat. By the time one village had moved there, the decision was again changed, and it was decided to have three respen, two above the Lansat location at the height of the tidal influence. To prepare the Lansat location a number of coconut and fruit trees belonging to the Coastal Muslim were cut down, but the owners of these plantations were never reimbursed for their losses as they had been promised.

Apparently there were a number of Javanese who were brought in to open Lansat. They were the ones who lined up the Bulusu' to remove their loincloths. For a while there was an assistant district office (wakil camat--B.I.) who was in residence to make sure that the Bulusu' moved in and the respen was organized properly. Then he was replaced by a "liaison officer" (penghubung camat--B.I.) from the district office, who shifted his residence back and forth between the capital of the regency and Lansat.

He was notorious for threatening the Bulusu', for commanding Bulusu' to do what he wanted them to, and for skimming off funds designated for the respen and villages. Each village was allotted so much per year for development purposes. One year the villages used their funds to buy chain saws, the purchase of which the liaison officer arranged. We were able to check the price at the store where they were bought and compare it with the price he had said he had paid. He told the village headmen that each had cost 400,000 rupiah (approximately US$667 at that time) when he was able to purchase them at roughly 300,000 rupiah (approximately US$500).

The commandant of police for the regency was not someone you could turn to in dealing with embezzlement or bribes. He visited the respen during a celebration and saw...
an old cannon that a Coastal Muslim trader had in his house. He demanded it, and said that if it was delivered to him at his home he would look out for the trader's affairs in the future. And the trader seemed to feel that he had no choice.

The dispensary was never open while we were there. It contained a lot of different medicines that were out of date and which in any event the dresser did not know how to use.

The school was being rebuilt, after some young boys accidentally set it on fire. The teacher was a Javanese who was married to a local Bulungan woman, both being Muslim. It was reported that the government was going to send someone to the respen to teach the pupils how to make baskets and sew clothing. The general thrust of this enculturation was towards a Javanese model.

The liaison officer organized night guards for the respen. The head night guard was a Bulusu' who was promised a salary for his work. He quit after almost seven years when he had received no salary. There were two unsalaried night guards, a Bulusu' (or Punan) and a Coastal Muslim who held the duty for three nights. And all male respen members were eligible for this duty. When an individual was on the duty roster, he had to come in from wherever he was living or working, as, for example, one man had to come up from the mouth of the river where he had established a camp for fishing, several hours away by longboat and outboard motor. This activity of respen guarding tended to fall into abeyance when things were quiet and the liaison officer was not present, as those who had the duty found it burdensome.

For national holidays or visiting government personnel the liaison officer would organize the Bulusu' to provide a celebration with food, drink, dancing, and speeches. The Bulusu' were supposed to contribute cash, and/or rice, and their alcoholic beverage made of cassava. The Bulusu' found the cost of these celebrations burdensome. Those who did not participate were threatened with the fine of a jar. It is interesting that the Coastal Muslim maintained that the Bulusu' funeral and wedding celebrations were a waste of money and should be stopped.
One Bulusu' was overheard muttering that when the liaison officer says eat, we eat; when he says drink, we drink; when he says we are to have a celebration, we celebrate; we cannot do those things for ourselves.

Thus, the liaison officer ran the respen in an unnecessarily authoritarian manner. Bulusu' were periodically ordered to clear all the grass from around their houses so that the ground was bare. Everyone was supposed to do it at the same time, and a bell was rung to call the respen residents to work. No explanation was given, and the Bulusu' did not know the reason for it. A Coastal Muslim told me it was for mosquito control. In one instance a Bulusu' who had become Muslim was planning a traditional Bulusu' wedding. The liaison officer called the couple to his office and required them to have an Islamic ceremony first.

The boundaries of the respen presented a major problem, as from time to time the Bulusu' were warned that they would not be able to cut the forest beyond the respen boundaries in the future. However, where these boundaries lay was difficult to ascertain. We were given a variety of contradictory answers. And the answer given to us by the liaison officer did not coincide with the boundaries that were laid out on a map.

Respen Boundaries, Timber Companies, and Use of the Forest

When the government began the resettlement of the Bulusu', the Bulusu' heard that they were no longer permitted to cut the primary forest for swiddens. But like a lot of regulations of the government, it "did not come about"—tak jadi (B.I.).

One of my informants was the kepala adat (B.I.)—"head of the customary law"—of his village. This was a newly appointed government position as of about two years previously. The kepala adat is the authority on customary law and is consulted in settling disputes. He summarized his understanding of the respen situation as follows. He said that if a Bulusu' has finished his house in the respen, he could go upcountry to his traditional village to cut his swidden. He himself planned to make the traditional
swidden longhouse used when cultivating far from one's home base. But if the government would not permit that form of housing, he would make a field house and live in that.

However, at a celebration and feast organized by the liaison officer and attended by many government officials, the liaison officer gave a long speech and told the Bulusu' that they were not to make their swiddens any longer in their village territories. How could they get medicine if they lived far away, he argued. Then a military man in uniform stood up and told them that they were not allowed to make their swiddens away from the respen.

About a month later the liaison officer told the headmen that they were supposed to cut primary forest this year to plant cloves. This may have referred only to the primary forest within the respen boundary, as the district officer during a visit said essentially the same thing, but he stated that it referred just to the respen.

The liaison officer informed the Bulusu' that they were to be given clove trees to plant at a small cost. And that is why the government had told each village to buy a chainsaw. Thereafter, if anyone cut primary forest, there would be a fine of 100,000 rupiah per hectare, as the government wanted the trees. However, they would be permitted to cut secondary forest. The problem is, some Bulusu' said, that most of the secondary forest has already been planted in fruit tree groves. And since the clove trees will not start bearing for six years and will not be fully mature for ten years, how will they make a living?

There is insufficient land in the respen area to support the agricultural activities of the Bulusu' population. Furthermore, the soil is much less fertile so that yields have been considerably less than in the traditional Bulusu' areas. One informant said, to illustrate that the soil was bad for all crops including fruit trees, that rice yields are one-third to one-quarter what they were upcountry.

Even before this new ruling, there was a great deal of concern among the Bulusu' as to how they were going to make a living in their own traditional areas. One informant said that they had already lost half of their land to the
timber companies, and without any consultation with the Bulusu'.

Even part of the respen had been lumbered about ten years previously. The use of heavy equipment to remove the trees had caused considerable disturbance of the surface soil, bringing up the infertile layer below. After ten years one could see deep tractor tire marks, and most of the soil still supported no vegetation. The Bulusu' say that the timber operations are ruining the soil as it makes it infertile, it "dissolves."

"Mengajar": Teaching the Bulusu'

The government personnel and the Coastal Muslim took the position that the Bulusu' had to be taught—mengajar (B.I.). And so at various times the Bulusu' were brought together to be lectured to, usually at times of celebrations, but also sometimes more informally when a few were present.

When the respen was opened up and the Bulusu' were given religion, they were told that the men could not wear their hair long. They had to wear clothes. That is they had to stop wearing loincloths and the women had to wear blouses. Bare breasts encouraged fornication. Also westerners and Japanese if they saw the Bulusu' in loincloths would think that there was not enough cloth in the country.

The burial customs of the Bulusu' conflicted with Islamic law. The Muslim found them disgusting, and it was argued that the government wanted them stopped because they would spread disease. Bodies were not to be kept in coffins until such times as sufficient supplies for a funeral feast had been collected, nor where they to be put in the raised entombment houses. They were to be put in the ground immediately. This caused considerable conflict with the Bulusu' as in their religion if the dead are not properly cared for, their souls will not reach the afterworld but will wander among the living and cause disease and disaster.

The liaison officer forced one Bulusu' family who had lost a child to bury him in the respen burying ground,
which had not really been opened up. The area contained a Punan grave. According to Bulusu' tradition, burying a body with those from another village puts the villages in ritual jeopardy. As a result the Bulusu' family was unable to carry out its own funeral ritual and complete its mourning. They quickly departed to their old village as soon as their son was buried.

The Bulusu' were absolutely convinced that any discussion of headhunting was forbidden by the government, and if they knew that we were being told about the customary law of headhunting and how it occurred in the old days, the government would be angry and arrest them.

The raising of pigs is absolutely forbidden in the respen, and the liaison officer harangued the Bulusu' if pig tracks were found near the respen.

Visiting girlfriends--moi dandu'--was also forbidden. The reason given by the liaison officer was that one never knows what someone wants when he comes visiting after dark. He might be coming to steal, to rob you, to take your head, to kill you.

The liaison officer also instructed the Bulusu' that they were not any longer allowed to purchase qama'--jars, brassware, gongs, etc.--in which the Bulusu' invested their agricultural surpluses. They were to purchase mosquito nets, beds, mattresses, dressers for clothing, modern kitchen supplies, plates, and bowls. (They already had plates, bowls, mosquito nets, and storage trunks for clothes!) They were not to make large swiddens any longer but to make small gardens for food only and to look for wage labor. They were also to make plantations and sell the yield to Tarakan. (But this they had been doing all along!)

The Bulusu' were told not to make their alcoholic beverage. Yet at other times, such as the celebrations the liaison officer organized, he ordered them to make it. One member of the local parliament visiting during a celebration said that the government would not tell this generation to stop drinking, but it would tell their children not to drink.
In the beginning the Bulusu were forbidden to build longhouses in the respen. Then about two years previous to our research, it was reported they were told they could. In one respen, a longhouse was built behind the row of separate houses, and entrance to the longhouse was through the back doors of the various houses. The Bulusu did not like the individual housing that they were required to build because, for one reason, the separate houses were too small to hold any of their traditional ceremonies and feasts.

Shops, Traders, and Entrepreneurs

There were two shops in the respen. One had been organized by a Bulusu, but he had closed down because he was unable to get the Bulusu who bought on credit to repay.

The other store was owned by the eldest son of a prominent Coastal Muslim family. I will call him Kasim. It might be concluded that he represented a unique character except that his personality type and his behavior are in fact common to most resettlement situations. The opportunities presented by the structure of resettlement permit such a personality type to thrive (see Appell 1985a).

Kasim had taken on the additional responsibility of seeing that the government's wishes, as translated through the liaison officer, were carried out when there were no government officers in residence. He was constantly telling the Bulusu what to do, ordering them about. At times he used a bullhorn to communicate to the respen inhabitants. For example, when the liaison officer was returning for a visit he called out Bulusu with his bullhorn to help unload the officer's boat of his belongings and carry them to the respen office.

He solved the problem of debt repayment by going to the individual's house and seizing the personal property of the Bulusu who owed him money. He intruded himself into any dispute in the respen and took over the mediation of it. At the same time he entered into various disputes himself, losing his temper frequently. He became so angered with his younger brother that he would throw stones at him whenever he saw him.
In dealing with cases such as stealing, it was said that he kept the fines for himself. He was able to intrude himself into such cases because the Bulusu' were more afraid that he would report them to the government. Also the fact that he was the assistant head of adat--customary law--for the nearby Coastal Muslim village lent him some authority.

He started an enterprise to sell rock to Tarakan for road building. He hired Bulusu' to gather rock along the banks of the river in their boats, and he transported this cargo to Tarakan by boat. The Bulusu' who worked for him were never paid, and the enterprise itself went bankrupt.

He was obsequious to us and arrogant and authoritarian to the Bulusu'. While criticizing the Bulusu' custom of visiting girlfriends and trying to stop it, he availed himself of the services of the Bulusu'-Punan women who appeared to be prostitutes.

Health Services: The Dispensary and the Dresser

One of the arguments for bringing the Bulusu' into the respen was so that they would have medical facilities available. However, the medical facilities were at best inadequate and in fact were dangerous in that the procedures being used could spread disease.

The dresser never boiled the needles he used. He was treating several people for TB, but he used only one drug rather than the two required to cure and prevent the development of resistant strains. He maintained that he did not have any medicine for TB, although he had INH, the second drug, in his medicine cabinet.

He stated that the dispensary, which was locked up, had medicines for diseases not found here but that he had a hard time getting medicines for the diseases which did occur in the respen. He had to buy them himself when he went to the regency capital to get his salary and his rice allotment. He was planning to take payments from the Bulusu' and buy some the next trip. He stated that BCG was for cholera; that there was no medicine for fever--it could come from malaria or influenza; there was no medicine
for leprosy (several cases of leprosy were in the respen upriver); eye sickness comes from the evening mists; etc. And he had a son that had died of blackwater fever.

The dresser would not charge for shots when given at his house in the respen. But when he was at his home in the Coastal Muslim village a half hour away, he charged 500 rupiah. He never traveled to the other respen, or to villages upriver where Bulusu' were living during the rice-growing season. And his eldest son would brush his teeth in the river, the river that was at times loaded with feces. The Javanese schoolteacher did the same.

At one of the celebrations a government representative told the Bulusu' that if they were not feeling well to go and have a shot. In sum the general knowledge of medicine and hygiene was limited and in fact dangerous even among those who were supposed to know better. I raised the question with a member of the regency parliament of inoculations for childhood diseases that were particularly traumatic among the Bulusu'. They had lost almost one third of the children in one river system as a result of a measles epidemic shortly before our field work. But the member was completely uninterested in this.

Schooling

It was presumed that those who went to school would be working for the government or with the timber or oil companies. They would not be following their fathers in farming. "What use is it going to school if you end up working in the jungle," one informant said. Several Punan and Bulusu' families had sent their children out to Tarakan or the regency capital to obtain schooling. But some had returned to work in the swiddens.

Frequently antisocial behavior, or unusual behavior, was explained on the basis that the individuals had not had enough schooling where they would have learned "to think." With regard to a case where some Bugis carpenters beat up a youth, I asked whether that was permissible under customary law. And the reply was that the Bugis had not had enough schooling. However, they had had more schooling than the Bulusu'.
It was also perceived that when the Bulusu' had had schooling they would not be cheated by the storekeepers in Tarakan; and they would not have to take the abuse and follow the orders of government personnel.

The teacher, a Javanese Muslim, complained how backward it was in the respen. We were unable to see the schooling in progress, as the rebuilding of the school was completed just before we left the field. At that time few Bulusu' were in attendance. Some felt that they needed their children at home for work, and others were afraid to let their children too far out of their sight to attend school. As a result, and as it was Ramadan, the teacher turned the school into an Islamic religion class.

Religious Conversion

Catholic and KINGMI missionaries had visited the Bulusu' region long before resettlement. KINGMI, the Kemah Injil Gereja Masehi Indonesia (B.1.), or "The Gospel Tabernacle Christian Church of Indonesia," is primarily fundamentalist. Visiting Catholic missionaries from the Italian staffed mission in Tarakan had established a small Catholic Church just below the respen, but it had fallen into disuse sometime before our field work. One village had converted to Christianity prior to resettlement, and the spirit mediums there "threw away" their guardian spirits. Then two years afterwards there was a serious illness and many people, both adults and children, had died. The spirit mediums called back their guardian spirits, and those who were sick recovered.

The government, when the resettlement program began, told the Bulusu' that they must have a religion. If they convert to a religion they had no "brains," and furthermore, it was argued, the Indonesian Communists had no religion. As a result, Bulusu' chose either Islam or one of the two versions of Christianity.

Some Bulusu' had slowly been acculturating to Tidung society in terms of dress, and there had been some inter-marriage with Tidung men. Therefore, it appeared to be less difficult for them to choose Islam when given the choice. Also the government urged the Bulusu' to become
Muslim. It was reported the government did not like Christianity. To enter Islam they merely had to learn the Profession of Faith and tell the Imam that they wanted to convert. However, in the census of the respen all those not listed as having a religion were simply entered as Muslim.

Many Bulusu became Christian because there were no food tabus and they could drink. However, if you became a Christian you were not supposed to use spirit mediums. The Muslim, on the other hand, did employ their own spirit mediums for illness. A visiting pastor (B.I.), a native priest or minister, told the Bulusu that now that they were Christian they did not have to follow any of their omens that kept them from their field work; they could now really get down to work.

One convert to catholicism said that if you genuflected before meals and before you went to bed you would not get sick. A pastor would be asked to participate in a Bulusu wedding if the couple were really strong in their belief, and this involved a Christian marriage and a blessing. The Catholic missionaries appeared to be somewhat more tolerant of native customs than those of the Muslim or KINGMI, and allowed a mingling of them with Catholic ritual.

There was some changing of religion back and forth between the Christian denominations. But Christianity like Islam seemed to rest lightly on the Bulusu. At one celebration a very drunk Bulusu kept telling me over and over that he had gotten "reigion." He became bothersome, and so I asked him what religion. "Don't know", he replied.

My informant who was the kepala adat, "head of customary law," in his village said that you cannot throw away your adat if you enter Islam or become a Christian. Then he said, "Our religion is our adat."
Health Impairments As a Result of Changes in Cultural Ecology

Every population is engaged in a series of energy exchanges with its environment. Social change may disrupt both the quantity and quality of these exchanges and, therefore, adds to the adaptive load on the population. Also, in the process of adaptation to a particular ecosystem, every population develops defenses against the predators, parasites, and pathogens in its environment. Social change can destroy or invalidate these defense mechanisms or present new challenges for which there are no defenses, precipitating an increase in disease and disability and adding to the population's adaptation load.

I discuss these principles in Appell (n.d) and provide examples. The Bulusu\textsuperscript{1} resettlement provides additional interesting material.

It was quite obvious that those who had moved permanently to the respen did not have as good nutrition as those who were still living upcountry in their traditional villages and only visited the respen when the government called them in. In particular young girls from these traditional villages appeared better fed and to have more subcutaneous fat. I was told that the people in the respen were thin because they did not get enough meat, while those living upcountry had lots of meat--wild pig, deer, mouse deer, and domesticated pigs. One informant said it was hard to find food in the respen. Another informant said that his brother got beri-beri from the food at a timber camp while working there, but this would not have happened if he had been living in the forest because of the variety of foods available.

The methods of handling excreta and the defenses against water-borne diseases in the traditional village areas, while not perfect, were nevertheless adequate in that the population thrived and apparently there were not that many deaths attributable to these diseases. However, with the increased population density at the respen, the traditional
methods are not adequate. The river is in effect an open sewer, and eventually a disastrous epidemic will occur.

It is relevant in this regard that an epidemic disease struck the chickens being raised in the respen in 1977 so that most of them died. This had never been experienced in the traditional villages, and it was still difficult to raise chickens in the respen.

Health Impairments From Demand Overload

The consequence of too rapid change and an overload of demands for adaptation is the development of psychological, physiological, and behavioral impairments (see Appell n.d.). Leading indicators of growing maladaptation are impaired self-esteem and social identity, which result from psychosocial deprivation and devaluation, and role conflict and ambiguity. Growing maladaptation starts off with psychological impairments, but these then diffuse to physiological and behavioral impairments. Loss of meaning and motivation also contribute to psychological impairment.

Impaired Self-Esteem. Probably the most significant change in Bulusu' society is the Bulusu' perception of themselves. Several generations ago they were independent headhunters who maintained their own against their enemies. Now they perceive themselves as "ignorant" and their culture as "backward." They are ridiculed and ordered about. Thus, in integrating the Bulusu' into the economic mainstream of Indonesia with a loss of self-esteem and their acceptance of a position at the lowest level in the new organization of periphery and center, the government has structured the situation so that the adaptation capacity of the Bulusu' is eroded. As a result their opportunity to develop and participate in the economy is impeded so that they may always present a social and economic problem. In sum, the Bulusu' have been moved into the category of the "rural poor," where before they were not. And worst of all, the Bulusu' have now been made to perceive of themselves as such.

Impaired Social Identity. The social identity of the Bulusu' is also being eroded. They are not permitted their traditional burial rites, and so they are forced to take on
an Islam or Christian form. A few weddings now include Islamic rites or Christian rites, and this will increase.

Part of the population has entered Islam and is moving towards the social category of Coastal Muslim. And the men wear clothes like those of Coastal Muslim, which also are equivalent to those worn by men in the urban areas. I asked one Bulusu' why they did not have their own clothing style, and he replied that the Coastal Muslim ridiculed them when they wore their native dress.

The majority of women still wear traditional costume, but with the addition of a blouse. A few women who have had experience in towns will wear slacks or blue jeans. A few others will wear store-bought dresses. And a few will wear a sarong and Malay blouse.

The other part of the Bulusu' population is moving towards a Christian social identity. As there are a number of Christian Timorese timber workers living near-by, the definition of this social identity may be in the direction of their interpretation of Christianity.

The use of the Bulusu' language is still prevalent, although most men can speak Indonesian. With further schooling, the Bulusu' language may in a few generations disappear.

Role Conflict and Ambiguity. Role conflict and ambiguity was growing between parents and sons. There was a dispute over choice of religion between a father and son, and these kinds of conflict will probably increase. Sons are now more interested in purchasing the flashy consumables and consumer products, like the radio-cassette player, the wrist watch, and so forth. And young men show less interest in working hard in the swiddens.

The Bulusu' also are unsure of themselves in their role vis-à-vis the government representatives. This is an area of great conflict and ambiguity. In the role of selling labor service there is conflict, as they do not seem to appreciate the responsibilities that go with employment. Role conflict and ambiguity lead to health impairments (see Appell n.d.).
Further Psychological Impairment--Loss of Meaning, Motivation, and Belief. A society's beliefs and rituals provide meaning and motivation to work. The Bulusu world of meaning and motivation is on the verge of becoming seriously impaired. Their burial rites are forbidden. Weddings are beginning to include other rituals. And their religion is treated as if it did not exist. They are perceived as empty vessels to be given new religions, new beliefs that will conflict those they now have. During the period of loss of old religion and before they understand the new, there will be a time in which the world will be less meaningful. And the loss of meaning results in psychological impairment.

But the loss of belief in one's world, and this includes the efficacy of traditional cures for illness, reduces the ability of the individual to adapt. There is evidence that placebos commonly yield between twenty and seventy percent of relief of symptoms (see Appell n.d.). Therefore, with the loss of belief, with inadequate medical care being offered in its place, health impairment should increase.

Physiological Impairment. Psychological deprivation is the precursor of physiological health impairment (see Appell n.d.). But one would anticipate that the health of the Bulusu will decline from a variety of factors other than those just discussed. First, there is the crowding together in the respen, which can increase the spread of contagious diseases. Second, the lack of public health measures at a time of crowding can trigger epidemics of dysentery and other illnesses. Third, the increasing contact with the economic centers will constantly reintroduce contagious diseases that had previously run their course in the population. Fourth, the nutritional situation in the respen has degenerated because of the lack of variety of food stuffs, the decrease in agricultural yields, and the lack of a substitute way to make a living. Fifth, the stress of social change causes physiological, psychological, and behavioral impairments (see Appell n.d.). For example, stress has been shown to weaken the immune system. Sixth, the dangerous practices of the present health service could very well spread disease. And finally, the breakdown of social support mechanisms will increase health impairment.
Erosion of Social Support Mechanisms. Social support mechanisms are those social networks of kin and friends, the members of which provide scarce social and material resources to a focal member when an individual needs help as the result of unexpected demands or when he is ill (see Appell n.d.). The relocation of the Bulusu' village and the breakup of the longhouse has caused the erosion of the support networks based on them that help in caring for children, when sickness arises, and when there are demands for additional help in the swiddens. This means that there are heavier demands on the individual, and it is harder for the individual to cope. Individuals who have adequate support mechanisms are found to be healthier and to recover more quickly from a variety of illnesses.

Behavioral Impairments: Deviance and Antisocial Acts in the Respen. It is our assessment that the Bulusu' in the respen are more anxious, more defensive, and more irritable than they were when we visited them in their own villages upstream. They are not used to the density of population found in the respen. There is constant contact with strangers, members of different villages, and members of different ethnic groups. In their own villages everyone was known, and when a stranger visited his purposes were shortly discovered. In the respen there was the constant wondering and worrying as to what this or that stranger was up to. Once a child had been taken by a Timorese to his lumber camp, and another time there was an alert that a stranger had tried to kidnap two children. Furthermore, in the respen there were occasionally individuals from Dayak groups the Bulusu' had previously been enemies with, and this caused considerable uneasiness. Of course, there are always the unpredictable demands of the government on the respen residents and the constant threats by government representatives.

Appell-Warren (1986) made a study of children's play in the respen and found that there was less play there than in the traditional villages. This was related to a number of factors including: the respen was hot; there were not the resources of forest and swidden in the respen; houses were separated so that families themselves were more distant from each other than in the traditional longhouse; and the anxieties and fears of both parents and children were raised because they perceived that the respen environment was
hostile due to juxtaposition of individuals from other ethnic groups and the frequent arrival of strangers. Appell-Warren (1986) also concluded that parents may be reacting to the normless situation by being harsher on their children due to their own doubts and fears. There is little work in the respen for the children to do or to copy in their play activities, and so the parents perceive that their children are naughtier, more lazy, and not developing character (kakada') as they should.

Fights broke out frequently in the respen between children and between adults, usually but not always from different ethnic groups. One large, extensive fight in 1976 between the Bulusu' and the Coastal Muslim resulted in the respen being deserted by the Bulusu' for some time. Stealing of chickens, personal property, parts of outboard motors, and canoe paddles is a serious problem. It is the general assessment of informants that there is more fighting, stealing, fornication, and unmarried pregnancies than in the traditional villages. One informant thought there are also more divorces.

Sexual promiscuity was believed by all to have increased and was a major source of disputes. The Bugis carpenters, there to rebuild the school, were enjoying the sexual services of certain girls, and one when caught by the respen guard tried to knife him. The adat--customary law--of moi dandu', "visiting girls," appeared to have broken down. Informants said that there was much more fornication taking place now during these visits than in the traditional villages. This may be related to a number of factors. The traditional adat is being eroded. The Bulusu' are under the influence of new religions at the respen, and therefore the fear of ritual jeopardy from fornication may have lessened. They no longer may raise pigs there, which are used for the ritual necessary to cleanse the village after fornication. Older informants said that boys visiting girls had become much more noisy and disruptive than in the past. This was partially related to the loud use of radio-cassette players by young men when visiting their girl-friends.

Workers from various parts of Indonesia employed at the two timber camps nearby also came to take advantage of the Bulusu' custom of visiting girls. They brought
brandy, beer, and other forms of enticements to encourage the girls to fornicate with them. The situation got so bad that the liaison officer prohibited all forms of visiting girls, even among the Bulusu' and had the night guards on the alert for such activities. One Bulusu' found engaged in visiting was taken bodily and thrown into the river. In another instance, a boy was visiting his fiance when discovered by the night guards. This was permitted, but nevertheless they confiscated his radio-cassette player as punishment.

The search by the night guards, particularly the Muslim guards, for men visiting girls at night became a major source of friction. They would burst into a house where they thought something was going on without permission, which is against the customary law of the Bulusu'.

There were in addition two women of mixed Bulusu'-Punan ancestry who were apparently prostitutes. They had spent some time in the cities, and then returned to the respen for a while. They were visited not only by the Bugis, and various workers from the timber companies, but also by Kasim, the trader.

It was clear that both adults and the young people did not have enough to keep them busy in the respen as they would have had upcountry. Gangs of young boys, without adult supervision, hung around getting into trouble.

One village in the respen of mixed Punan-Bulusu' ancestry was perceived as being a particular source of trouble. The members were perceived as having changed the most and were the most modern. The boys and girls had had more schooling. A few of the women wore pants occasionally, dresses frequently, and one time a woman appeared in running clothes. The use of lipstick and nail polish was common. There was considerable drunkenness. There was also a lot of divorce among the younger generation. One of the younger generation committed suicide, which is unheard of among the Bulusu'. This was the village that produced the two women who were apparently prostitutes. It was also the prime source of fights and stealing. Someone said of them in Indonesian, "tidak buatan tentu," that is, "their behavior is uncertain."
This illustrates another factor in the growth of deviance, as it is not only psychosocial stress that precipitates it. As the previous social system changes, the systems of rewards and punishments no longer operate. What once one could not do, people do without the imposition of negative sanctions. And with the dissolution of the previous social system so also dissolves the network of interpersonal ties and informal exchanges that constrains behavior. As a result all sorts of new opportunities open up for choosing alternative forms of behavior. For example, one informant stated that nowadays people no longer were concerned about paying off their bride-price obligations in full.

The problem of choice behavior in this context of dissolving sociocultural systems is that in the respen there are no guides for the choices to be made. The primary guide for both respen inhabitants and the government officers making policy was whether it was modern, progressive (maju--B.I.) or not. Choices were not based on whether they were appropriate to the local ecosystem and local social conditions. Thus, as long as you had a religion, you could not be a Communist. As long as you had medical facilities, no matter how bad, you were modern.

**Structural Changes in the Periphery-Center Relationship**

Over the years after Independence the Bulusu' had been developing as independent agricultural entrepreneurs, selling their surplus fruits, vegetables, rice, pigs, chickens, and forest products to Tarakan. Originally, this trade had been largely in the hands of the Coastal Muslim traders. But as the market grew in Tarakan, as the Bulusu' became more accustomed to dealing with the outside, and as communication and safety of transportation grew in the region, they took the initiative into their own hands. With the growth of agricultural exports to Tarakan, larger fruit tree groves were planted.

However, after resettlement the amount of agricultural products and forest products sold in Tarakan dropped about forty to fifty per cent, according to several informants. The demands of the respen inhibit the gathering of forest products and interfere with the Bulusu' swidden activities.
What agricultural products are sold now are largely from the upcountry fruit tree plantations, which do not fruit every year, rather than from the swiddens, in which cassava, rice, and bananas, etc., are grown. Where before each household had pigs, now only a few of the families still farming upcountry raise pigs. Thus, the region is no longer producing much of a surplus from the Bulusu' agricultural activities, even though a number of families still continue working upcountry swiddens. Travel back and forth from upcountry swiddens to the respen to satisfy government officials cuts down on labor time in the fields and the ability to protect fields from agricultural pests. And the respen itself is not very fertile so that those who cut swiddens in that area have lower yields. As a result, Bulusu' for the first time have begun to buy rice.

Thus, the resettlement cut off the development of an independent farming class, economically viable and equivalent in income and assets to the urban lower middle class. Instead, the government has taken control of their land and has sold the rights to harvest trees from their forest to timber companies, many of them foreign. It has forced the proletarianization of the Bulusu' by converting their labor service, formerly used in their own agricultural enterprises or in exchange for similar labor within the Bulusu' community, into a commodity. Certainly, there is a very real question whether the Bulusu' can make a living from the respen. But wage labor is only occasionally available, as in the timber camps or when there are oil companies exploring in the area and workers are needed to cut lines, build boardwalks through swamps, etc. Worse, it was stated that the wages obtained are only sufficient to sustain an individual. There is nothing left over, unlike the situation in farming where surpluses can be invested in old jars, gongs, brassware, etc. In some instances, Bulusu' undertook wage labor and were never paid. One of the worst disadvantages of wage labor is that when one is sick and cannot work he receives no income. However, when a farmer is sick, if it is not for an extended period, he can still make a living as the crops continue to grow and the fruit trees continue to bear, and he can always rely on help from his family.

It is ironic that the government officials who exhort the Bulusu' to take up wage labor nevertheless appropriate
Bulusu' labor for their own personal use or to the government's advantage in the upkeep and management of the respen. Thus, their time, which is valuable to those who have to do manual work for their food or wages, is now being captured by government officials for a variety of duties, without compensation.

As few will be able to make their living on wage labor in the foreseeable future, farming and developing fruit, clove, and coconut plantations will be the major source of their economic survival. But they are receiving no instruction on this in school. School graduates with expectations raised will find few opportunities, and they will have to return to farming but without the background in practical knowledge or the resources. Furthermore, now with their old method of banking their surplus is in disrepute—they were ordered by the government not to invest in jars, gongs, and brassware--there is no substitute place to save their cash. There are no banking services in the respen. And on the other hand, the availability of consumer goods is growing.

Thus, in addition to the loss of their traditional lands, and the growing commoditization of labor, the society has been undergoing a monetizing of exchange. This was a continuation of a process that had begun when the Dutch organized the economy of the region and the sale of forest products could be made for cash. But this probably had a minor effect on Bulusu' economy, as trading forest products for gongs, jars, and brassware still continued. This process of monetization expanded when the Bulusu' started managing their own trading with Tarakan rather than going through the Coastal Muslim. However, with resettlement there was a quantum leap in monetization. It became necessary to undertake wage labor when it is available, and it is usually done by the young, unmarried men. Clothing now must be purchased from the shops, where only cloth was purchased previously. Before that cloth was made from bark or woven from various fibers. Inoculations by the dresser require cash. Rice has to be purchased. The dresser was organizing a football team and asked each member to contribute 4,000 rupiah for uniforms. With the advent of outboard motors cash was needed to purchase them, for repairs, and for their fuel. There now is a greater number and variety of consumer goods that attract the Bulusu' from radio-
cassette players to sunglasses, cosmetics, sugar, soft drinks, etc. The feasts at weddings and funerals have become more expensive as a proper feast requires the use of consumer products purchased at stores such as sugar, brandy, beer, cigarettes, coffee, rice, etc., rather than being based on swidden products as before. The growing monetization is typified in the statement of one informant who said that when all the children had been to school, then bride-prices would be made up of money rather than property (gama').

Small shops had been in the villages of the Coastal Muslim for a number of years, probably since before the time of the Japanese. But with the coming of the respen and the growth of monetization there also has appeared the trader and shop owner, Kasim, whose methods are questionable if not unscrupulous in making a profit. And the Bulusu' have come under his growing influence as he has taken over voluntarily the work of the government when their representatives are not present.

As the demand for consumer goods has risen, as the need has arisen to purchase supplies to finished their respen houses, and as their agricultural profits have dropped and they have needed to buy food, the Bulusu' have begun to sell their inherited property, their gama'. Old jars in particular have been sought out by traders to sell to Java and Europe. These are valuable, but the Bulusu' are not receiving their true value in the market place, as they do not have access to this. Yet from time to time in Tarakan we heard the Bulusu' ridiculed for investing in jars.

With the growing monetization there has also been a growing individualization. As the old society was being disrupted, it was stated that from now on everyone would be going his own way. They would not farm as a group with each family's swiddens beside other families from their village. Each would look for his own economic opportunity separately from his village mates, his kinsmen. In response to this breakdown of social ties, some had already moved into niches that have been considered characteristic of the lumpenproletariat, such as prostitution. But the recruitment to these positions is not the result of the disintegration of capitalism. Here it is the result of attempts to break down local cultures to integrate the population into the economic mainstream and get control over their resources.
growing individualization is thus directly the product of government policy. They were ordered to build separate houses. They were told to engage in wage labor. And, for example, they were told by the liaison officer that when they killed a wild pig they were not to divide it up but sell it. The informant who told me this was astounded for, he said, if you are poor and cannot buy meat, you will not have any to eat. The whole system of traditional redistribution of the Bulusu' was being attacked, destroyed, and exchanges then monetized.

It is a common occurrence in situations of imposed social change that the change agents believe that the traditional redistributive system is wasteful and they attempt to supplant it by greater individualism (e.g. Tibbles 1957). However, one of the purposes of a redistributive system is to ensure that the less fortunate and disabled are taken care of, as in the example of the distribution of pig meat. In the center where a more individualistic social economy can be found, the less fortunate or the disabled are cared for through a variety of social support services that the center maintains by various forms of taxation and charitable giving. But in the peripheries where the imposition on a traditional society of a more individualistic social economy occurs, institutionalized social support services are not in place. Therefore, the disabled and less fortunate carry a disproportionate load and suffer more in the growing linkage of the periphery to the center. And this may put them in a position where they are never able to respond to the demands for adaptation.

With growing individualization and monetization, one can expect growing conflict over property in which equal rights of access are held by individual members of a group of kinsmen, descendants of the original purchaser of the property or planter of the fruit tree grove. Thus, conflict will probably grow over the distribution of yields from fruit tree groves held jointly, as the moral order that should pertain between kinsmen dissolves in favor of a morality of individualism.

Rampant individualism is a product of social breakdown. It may go as far as the model presented to the Bulusu' by government officials, traders, and businessmen. There the interests of the individual are paramount over the interests
of the group for which he works, over the responsibilities of the position. Corruption and bribery are not only common but expected, so that the public good is sacrificed for private greed. Under such conditions, development will be hard to achieve.

PART V: CONCLUSIONS

Colonial imperialism has not yet died. It has become decentralized colonialism, or as Casanova (1965) terms it, "internal colonialism," as the case of the Bulusu' illustrates. The analogue of the former colonial office of the metropolitan countries is now found in the various offices for development in the capitals of Third World countries. Galtung (1980:128) distinguishes six types of imperialism: economic, political, military, communicative, cultural, and social. One can only conclude that the Bulusu' were subjected to all of these, which might be termed "total imperialism." The Bulusu' have lost control over their lives and are losing meaning to their existence.

From one perspective it is a clash of property systems, that of the Indonesian government and that of the Bulusu'. The Bulusu' had assets the government could use, and so the government took those assets, valuing them more than a healthy, economically expanding, and content population.

This is not new. It has been played out wherever western culture and its social economy have run up against indigenous systems. In experiencing the respen process, we had the sensation of being transported back in time to the reservations of the American West in the last half of the nineteenth century (see Appell 1985a, 1985b). All the misinformed and misguided efforts of the American government to control the American Indian, all the corruption, all the social consequences, but only some of the misery, as the American Indian suffered far worse, were there in the respen, played out before our eyes. And we could only wonder why the lessons of the nineteenth century have never been learned.
One wonders whether in a more humane time these forms of resettlement may not be viewed as a new form of concentration camps. Physical abuse has been, in contrast, minor and more threatened than actual, but the Bulusu have been stripped of their property; they have been made poorer; they have been psychosocially devalued and deprived; they have been bullied into acquiescence; they have been prevented from carrying on their own culture; their health has been put in jeopardy. There have been no explicit, organized efforts to lower their health status, but all the various efforts to bring them into the resettlement area and force them to abide by the government rules have been such as to undermine their health. One might expect that in a few years the Bulusu will be discouraged, disoriented, and apathetic rural slum dwellers with little chance of ever moving out of that category, being at the very end of the line for opportunity, for information by which to grasp opportunities, and for resources to create opportunity.

The sad and incomprehensible aspect of this development policy is that the Bulusu were themselves moving forward towards an integration with the center on their own terms prior to resettlement. If they had been left alone they would have developed into a solid, economically strong, landed, rural middle class. They would have provided Tarakan with the foodstuffs it needs to expand. And having an economically sound base, they would have provided the region with political stability. Now the region is a rice importing one. It is poorer off, and will probably be so for the foreseeable future.

Was it necessary to remove the Bulusu from their land? Was there sufficient forest to support the Bulusu as they integrated into the center themselves as well as provide timber for export? We do not have sufficient evidence to reach a conclusion on this. However, a British forester, hired as a consultant to evaluate the forest resources, said that he thought there was sufficient forest. But even if there wasn't one wonders whether the trade off of timber for a dispossessed population and the costs associated with this process has been worth it. The other reasons for resettlement—health care, schooling, and accessibility to the government—have all been handled in different ways by other governments without requiring resettlement. One is reminded of how the Australians and
the Canadians, in some instances, have provided services to dispersed populations.

Decentralized colonialism has as its goal the control over resources. In this case primarily it was the forest. It was not looking for mass markets. Or at least the statements of policy at the regional level give no intimation of interest in mass markets. At the highest levels in Indonesia that might have been a contributing factor to the plans for resettlement, but there is no evidence of this. Nor is there any evidence in this case of interest in getting control of the labor service of the Bulusu'. There was sufficient labor available in the region.

One reason for the policy of resettlement might have been to carry out the "business" of government efficiently. The provision of government services has become in Third World countries like a business. Certainly, the members of government can make considerable profit for themselves in carrying out their functions through graft and through rising to higher positions of authority (see Appell 1985c). For new countries there is the motivation of showing that the government can in fact govern, so an ethnic group that is not closely integrated to the center is, in their perception a threat, a challenge.

But there is another aspect. The data I gathered suggest that in Indonesia, and elsewhere, development and modernization have become a religious movement, in fact a cargo cult, rather than a rational approach to solving problems. I asked one informant who was from the Coastal Muslim village just above the respen and who had been away for education in the city what that village should do to become modern. He thought for a while and said that they should have a sports club and a music club. The Indonesian government in the region seem to have no grasp of what constitutes a modern social economy on the one hand, and on the other they seem blinded by their prejudices and world view as to what the actual social processes were in the region. If you wore the right clothing, if you had a dresser in residence, if you had a school, these were the sine qua non for being modern, no matter that the medical care was incompetent and the schooling questionable. In other words, the epiphenomena of a modern social economy were perceived as being the
fundamental causative forces of modernization. And so in bringing about the epiphenomena of modernization they actually destroyed the basic development processes already going on.

The Forest Department was partly behind the resettlement movement, as it wanted control of the forest resources. It was concerned that swidden activities were destroying valuable timber, not realizing that it was replaced by other valuable trees—fruit trees—and not really investigating whether or not swidden activities might be the best, long-term use of the land given, the soil and social conditions. Also they had no knowledge of the social economy of the Bulusu'. The consultant British forester told me that he had been assured by the Forest Department that the respen would provide a sufficient livelihood for the people. And he was astounded to find that no land had been established around the respen for agricultural purposes.

In a sense this type of social understanding and that which lay behind the institution and management of the respen might be viewed as more primitive than the Bulusu'. The Bulusu' world view was appropriate to their environment, to their social economy, to their situation. The world view of the government driving the development and modernization policies was in fact less appropriate to the environment and the social economy of the region and contained many delusional aspects.

Thus, the integration of the Bulusu' periphery into the Indonesian economic centers has ended up with the Bulusu' being poorer, less able to adapt to change, and the region has become poorer as well, less able to develop. What is clear is that what is needed is a new vision of what constitutes a good, a healthily functioning society. Until that is articulated, development decisions will be made on the basis of a clouded view of modernity and informed by the postulates of an economic fundamentalism that ignores the human costs of social change (Appell 1985c).
NOTES

1. I gratefully acknowledge support of this research from the National Science Foundation (Grant No. BNS-7915343), the Ford Foundation, and the Halcyon Fund, which has most generously supported my research over the years. I want to thank the Lembaga Ilmu Pengetahuan Indonesia for their help and approval of this research and particularly Dr. Masri Singarimbun, then Director, Population Study Centre, Gadjah Mada University, for his valuable advice and sponsorship. I am also indebted to Dr. Soetrisno Hadi, Rektor, Universitas Mulawarman, and Bupati Soetadji of Bulungan for their many kindnesses and help. My wife and daughters participated in this research, for which I am eternally thankful. My wife Laura worked on the Bulusu' religion; Laura Parker studied child rearing and play, mapped the various Bulusu' settlements, and inquired into the history of the attempts at resettlement in the region; Amity made a thorough linguistic inquiry into the Bulusu' language and helped both run our field station and collect Bulusu' and Punan material culture; Charity made a collection of myths and folktales and also helped run the field station and collect examples of material culture. We also owe a great debt of gratitude to the many friends that my daughters made and who helped in this research. I worked intensively with two informants, one of whom I became fast friends with and now miss. I owe them a particular debt of gratitude, but they must remain anonymous as they wish. I alone am responsible for the argument presented and the conclusions drawn.

2. Throughout this first section on traditional Bulusu' society I use the ethnographic present when dealing with observations made during the period we were in the field: 1980-81.

3. According to Crain (1970, 1982), the Lun Dayeh have a system of bride-price payments that is similar to that of the Bulusu'. And he provides a very detailed analysis of this type of system including an account of an engagement negotiation and the type of payments made and their redistribution.
4. To indicate words in the Indonesian language, Bahasa Indonesia, and to distinguish them from Bulusu' lexemes, I have marked them with "3.1."

5. The fact that the Bulusu' actually did have a supreme being, albeit not one from the religions recognized by the Indonesian government, caused some soul searching on the part of government personnel in the local office of religious affairs. If this fact were fully recognized, then the Bulusu' should have been treated differently.

6. It was sometimes difficult for us to manage the cognitive discontinuity that occurred when those who maintained such righteous superiority over the Bulusu', as of course they themselves were on the road to modernity and were educated, would ask us: Do you eat rice in America? Do you have streams? Do you have mountains? One member of the provincial parliament asked me if there were still wild Indians in America.

7. For much of the material in this section I am indebted to Laura Parker Appell-Warren. See Appell-Warren (1985). While the discussion here is focused on the Bulusu', the Punan who lived in the respen received the same treatment. In this section I use the past tense to describe events and processes that occurred and were completed while we were in the field. For those continuing events and processes, I use the present tense.

8. Each social system is a complex network of rewards and punishments. To participate in a social system frequently requires that an individual suppress his own immediate self-interests for those of the social system. This creates frustration and aggression, which is kept in check, more or less, by the system of rewards and punishments. But pent-up aggression is part of every social system, and perceived unfair distributive justice, also part of every social system, exacerbates it. In resettlement the ongoing social system is destroyed. That is the rewards and sanctions that controlled aggression are no longer operative. Consequently, resettlement may release this pent-up aggression, which can be extraordinarily destructive. For example, in the
resettlement of outer island fishing villages in Newfoundland in the 1970s to the mainland for better access to government services, the old, uninhabited villages were left intact to be used by the house owners for summer cottages. The houses and docks in one village were systematically vandalized, in some cases set on fire, and destroyed. Informants state that this was done by some former inhabitants because of their anger and jealousy over what they perceived as their unequal treatment vis-à-vis other members of the community.

9. The major feature of the social organization of the respen that raises concern is the lack of control over the abuse of power by the administrators, police, and military. There are no explicit mechanisms of recourse whereby the Bulusu' can appeal to higher authorities for protection when they are abused. This, among other features, gives the respen the aspect of a concentration camp. Psychosocial devaluation and deprivation, particularly when those in control believe that it represents the attitudes and interests of their superiors, can lead to violence, physical and psychological disability, and death as the result of abuse, and it can even sanction massacres (see Kelman 1973).

10. Umar Wirahadikusumah, an Indonesian general and former vice president of Indonesia's National Audit Board, estimates that corruption siphons off between thirty to forty per cent of the country's annual budget (Mayer 1986:36).
BIBLIOGRAPHY

Appell, G. N.


Appell, G. N. (ed.)

Appell-Warren, Laura P.


Black, Ian

Casanova, Pablo Gonzalez

Crain, Jay Bouton

Galtung, Johan

Kelman, Herbert C.

Mayer, Jane

Tibbles, Thomas Henry
PART FIVE

PHILIPPINES
CHAPTER SEVEN

AGRICULTURAL DEVELOPMENT AND SOCIAL EQUITY
IN THE UPLAND PHILIPPINES

James F. Eder
Arizona State University

The subject of this paper lies at the intersection of two vexing issues in agricultural development policy in Southeast Asia: "development and the uplands," and "development and social equity." The first issue concerns how to reconcile the fragility of upland ecology and the presence of indigenous tribal populations with government desires to utilize upland areas to increase agricultural production and to absorb excess lowland population. The second issue concerns how to achieve, in any setting, a pattern of agricultural development in which the "benefits of development" are broadly shared.

These are large issues. My concern here is to examine some of the factors that influence the "trajectories" of the ecological and socioeconomic orders of upland frontier communities in the Philippines as such communities are settled and "developed." Must such trajectories lead (as they often do) to environmental destruction and, for the majority, progressive impoverishment? Or can such trajectories be made to lead to ecological stability and broad participation in the benefits of agricultural growth? Abundant evidence suggests that agricultural development, wherever it occurs, is often accompanied by growing socioeconomic inequality and an absolute increase in poverty (e.g. Adelman and Morris 1973, Epstein 1973, Griffin 1978). Here and there in the Philippines, however, are a few "bright spots," upland areas where development appears to be proceeding in a relatively equitable manner. The possible lessons of these areas for upland development planning are the subject of this paper.
I begin by presenting brief sketches of three upland Philippine communities where—in my opinion—development is "working." These communities are all characterized by small-holder agricultural economies based on shifting cultivation. I use "upland agriculture" in its broadest sense, however, to include any non-irrigated agriculture system. Hence I do not restrict "upland areas" to the mountains only, nor "upland agriculture" to shifting cultivation. Indeed, the three communities are of diverse setting, ethnic composition, and degree of market involvement, and my "sketches" are just that. But when one is proposing "lessons" for development planning, I think it is important to present some evidence that the lessons in question may actually lead to success in particular cases. Then I turn to the lessons themselves, all of which concern the importance of maintaining or promoting diversity in upland production activities—a diversity that entails production for subsistence as well as for cash, the presence of labor-intensive as well as capital-intensive activities, and the cultivation of tree crops as well as annuals.

Throughout, my special concern is with how to avoid a pattern of upland development that leads not simply to impoverishment but to eventual disenfranchisement, or landlessness. Krinks (1974), reflecting on how the dreary kind of development in parts of Mindanao has simply recreated the agrarian problems of more densely settled, lowland areas of the Philippines, has labeled such a pattern "old wine in a new bottle." In those frontier areas which remain we can, with proper planning, do better.

SUCCESSFUL UPLAND DEVELOPMENT: THREE CASES FROM THE PHILIPPINES

Three pragmatic assumptions—and sociopolitical reality in Southeast Asia—underlie my approach to the question of what constitutes "successful" upland development in present day frontier areas. Most upland areas presently inhabited by tribal populations will not, I assume, be set aside for these populations, but will be shared with emigrant lowlanders—even though the latter are in clear violation of
the ancestral land rights of the former. Thus, the real issue is what sort of reconciliation of tribal and emigrant lowlander interests will be achieved. Similarly, I assume that "development" will occur in the uplands, with continued loss of primary forest cover; the real issue is how to minimize further ecological destruction, beyond the loss of that cover. Finally, I assume that, particularly in the capitalist milieu of most of Southeast Asia, increasing socioeconomic inequality is inevitable as development proceeds. But the form and intensity of that inequality is a variable, with some areas realizing a more egalitarian distribution of incomes than others. Thus the real issue is how to minimize socioeconomic inequality and insure that as many people as possible share in the benefits of development. Hence upland development is "successful" to the degree that all people involved benefit from it, and ecological degradation is minimized.

Only the first community described below lies in a present-day "frontier area"—and even then, the indigenous inhabitants have lived there for several hundred years. The second community was "on the frontier" until the 1950s but has since been fully settled and cleared of forest cover. The third community is in a long-settled upland area. None of the communities are idylls of "successful development"; each has important ecological, economic, and social problems of its own. My contention is simply that they are faring better than otherwise similarly situated communities, and that we can learn something from their experiences.

1. **Imugan, Nueva Viscaya.** Imugan is an upland community in Northern Luzon, one of several occupied by the Ikalahan, a tribal people of about 350 households whose traditional territory straddles the headwaters of the Cagayan and Pampanga Rivers in the Caraballo Sur mountains. Like their neighbors, the Ibaloi and the Kankanai, the Ikalahan are traditionally shifting cultivators of sweet potatoes. While they are conservative in their cultivation practices, internal population growth and pressures from lowland society had created, by 1970, a variety of ecological and social problems for the Ikalahan. But with the guidance of a missionary trained as an anthropologist and as an engineer, and with considerable indigenous support and participation, the Ikalahan then embarked upon a program of upland development. I visited Imugan briefly in 1975 but
the following discussion derives primarily from a recent report on the progress of Kalahan development (Rice 1981).

The Kalahan case is made striking--indeed, unique--by a 1974 Memorandum of Agreement between the Philippine Bureau of Forest Development and the Ikalahan people, incorporated as the Kalahan Educational Foundation. This agreement allows the Ikalahan to lease, in effect, 14,000 hectares of mountain land from the national government. This land in fact comprises a large portion of traditional Ikalahan territory but is nevertheless regarded by the national government as public land, as such lands are typically regarded by governments throughout Southeast Asia. The Ikalahan sought to lease this land to protect themselves against encroachment by lowlanders and thus to ensure that they would have a place to live, to grow their crops, to gather forest products, and so forth. The principal condition of the agreement with the government is that the Ikalahan follow a program of upland development that is ecologically sound. Whether this arrangement will remain unique, or whether it will serve as a model for upland development programs in other tribal homelands, remains to be seen.

But for the Ikalahan, this arrangement, and the relatively high level of tribal organization it reflects, has enabled them to self-consciously pursue an ecologically and socially sound development program. One major element of this program is reforestation of already denuded areas and incorporation of biomass-building and nitrogen-fixing food and non-food plants into existing swiddens. These changes aim at reducing fallow intervals and accommodating anticipated population increases on the existing stock of cultivated land. A second major element is an effort to diversify cash income sources, both in the agricultural and non-agricultural sectors, with the intent of taking some of the burden of further economic growth off of sweet potato production. An example is a collection of renewable forest products that can be utilized for marketable handicrafts or otherwise processed locally.

A final element of interest here is an ongoing concern with bringing the Ikalahan into the mainstream of surrounding lowland society on mutually satisfactory terms and with a minimum of damage to Ikalahan cultural integrity. Thus
the Ikalahan manage their own high school, affiliated with and approved by the Bureau of Private Schools of the Philippine government. This school is staffed by teachers of various Northern Luzon tribal backgrounds; instruction concerns indigenous tribal values and traditions as well as the standard lowland Philippine curriculum. The program at Imugan has only now begun, but it has begun, and with the seat of decision-making securely located in a group of Ikalahan elders, it promises to include most Ikalahan as it proceeds.

2. San Jose, Palawan. San Jose is a coastal, Cuyonon-speaking community of 112 households located eight kilometers from Puerto Princesa City. Cuyonons are lowland Filipinos but differ from such lowland groups as Ilocanos or Visayas in their possession of an upland, rather than a lowland, agricultural technology. Migrant Cuyonon home-steaders founded San Jose during the 1930s and 1940s. My description here is based on field work I conducted in San Jose during 1970-72 and 1976-77 (see Eder 1982).

In contrast to the preceding case, considerable development has already occurred in San Jose. All of the original forest cover has been removed and much of the community stands in tree crops. The remainder stands partly in gardens, swiddens, or plowed fields; partly in scrubby regrowth; and partly in cogon grass. Average farm size is 2.5 hectares, and eighty per cent of farmers own and operate 0.5 or more hectares of land. By the standards of the rural Philippines, San Jose residents enjoy a generally high level of prosperity; the past 30 years has seen a broadly based increase in real incomes and standards of living. In 1971, per family income was twice the national median for rural families, and the community's numerically dominant group was not an impoverished "lower class" but an enterprising and optimistic group of "middle farmers."

True, the community is significantly advantaged by proximity to the market and employment opportunities in Puerto Princesa City. But other factors are important as well. One is the sheer variety of economic activities: swiddens, orchards, vegetable gardens, and livestock raising are all important sources of both food and cash income. The direction of technological change in these activities, furthermore, has been biased toward small farmers. The
early 1960s, for example, saw the introduction and rapid spread of commercial vegetable gardening, an activity that made possible greatly increased inputs of labor against a unit of land, and at a level of return to that labor higher than that in the traditional shifting cultivation regime (Eder 1977). Market gardening economized on land, and its cultural requirements were readily learned. The innovations it entailed had no marked economies of scale; fertilizer and improved seeds, for example, are infinitely divisible. Pesticide sprayers were costly for many farmers but could be borrowed or purchased jointly. Hand water pumps, the only other large item of production capital, were useful but not essential; a farmer could locate his garden near a spring or the pump of another. Some economies of scale existed in marketing, but most farmers either met them on their own or overcame them by cooperating with others. Hence precisely as San Jose filled up, and growing land scarcity or declining soil fertility made such previously important income sources as swiddening, bananas, and cattle progressively less opportune for many farmers, market gardening helped raise labor productivity and expand market participation on even the smallest farms.

An interdependence in the economic lives of San Jose's farmers has also contributed to community prosperity. An example is the partnerships farmers form to operate coastal and estuarine fish corrals. One farmer provides the capital to purchase the necessary wood and chicken wire, and another provides the labor, constructing the corral and then visiting it daily to empty the catch. The two farmers split the proceeds fifty-fifty over the lifetime of the corral, about nine to twelve months. Similar partnerships are made to raise livestock. Also, illustrative of such interdependence (and of rural prosperity) are San Jose's numerous small stores and tricycles (motorcycles with sidecars attached and operated as public conveyances).

3. Mabini, Batangas. Mabini is an established upland farming community of 120 Tagalog households. It is located on rolling land six kilometers from Lipa City, Batangas, in Luzon, south of Manila. In terms of agricultural technology and length of settlement, Mabini appears to represent a point further along the same trajectory that San Jose now travels. In some respects, however—population, distance to the market, distribution of landownership, diversity of
production activities—it resembles San Jose. The discussion here is based on a brief visit to Mabini in 1980 and subsequent correspondence with a University of the Philippines soil chemist resident in the community.

The Mabini case is striking because it combines relative prosperity and some "appropriate technology" under long-settled upland conditions. Eighty percent of households own land, and average farm size is about 4.5 hectares. Houses are typically large and comfortable. Residents are visibly "well off" in their clothing and their consumer durables. About seventy per cent of the land is planted in tree crops, principally coffee and coconut. Black pepper is also an important cash crop. Almost all households raise one or two cattle, steers purchased as calves for fattening and resale. Rather than being allowed to roam, as in most areas of the rural Philippines, cattle are tethered and fed on a "cut-and-carry" basis, an arrangement which effectively substitutes labor for land. A farm family's school-aged children typically care for its tethered cow, gathering and bringing to it such agricultural by-products as rice straw, corn or cane leaves, banana stems, split coconut frond midribs, ipil-ipil (Leucaena leucocephala), and grass. Most families, too, continue to produce part of their own subsistence. Subsistence fields are plowed and double cropped. Upland rice is planted in the rainy season and followed by a crop of pigeon pea, or peanuts. Agricultural resources in general are carefully husbanded. In addition to second cropping with legumes, mulching is a common practice.

In the non-agricultural sector, about five per cent of households receive income from wage workers in Lipa City. More important is the thriving non-agricultural sector in Mabini itself. The community supports eight local stores, and community residents own seven jeeps and about 25 tricycles, mostly purchased with farm profits.

SOME LESSONS FOR UPLAND DEVELOPMENT PLANNING

Diverse as these several cases are, they share some important commonalities suggestive of policy measures to minimize the growth of socioeconomic inequality and the spread of landlessness as development proceeds. These commonalities ultimately all concern the importance of
diversity in production activities. The importance of maintaining systems diversity in developmental contexts is now widely recognized. Here I want to examine some specific entailments of this notion under upland Philippine conditions. In doing so, I will be taking a lot of "prerequisites" for development as "givens": the presence of markets, the presence of adequate infrastructure (e.g., farm-market transport), access to credit, and so forth. These are big "givens," but the needs in question are well known, and my contention here is that even where the institutional setting is adequate to support development, quite different developmental trajectories may result, depending on the factors discussed below. My basic purpose is to emphasize small farmer-oriented development strategies that will help keep the "opportunities to be enterprising" (Hunter 1969:96) as broadly distributed as possible.

1. The Continuing Importance of Subsistence Production. All three cases reviewed above support the contention that subsistence production should be viewed as something to coexist with cash production, not as something to be phased out in favor of cash production (Grandstaff 1978:562-63; Dewalt 1979:267-68). First, from the standpoint of rural welfare, many upland farmers are more likely to enjoy a more varied and more nutritious diet if they produce some or most of their own subsistence than if they must purchase most or all of that subsistence in the market economy. Mabini and San Jose farm families consume a striking variety of foods. A recent survey of school children in San Jose by government health workers found them to be among the best nourished children in that part of Palawan. Such findings refute common stereotypes that the spread of cash crops and increasing market participation necessarily entails declining nutritional well-being.

Second, to the extent that farmers can produce their own subsistence, they do not have to expend scarce cash for food purchases but can expend it instead for other things, including production inputs for cash-producing activities, without going into debt. Certainly a striking feature of our three upland communities is a very low level of indebtedness. In San Jose, for example, the only debts of consequence are production loans owed by better-off farmers to banks, not the consumption loans, so common elsewhere in the rural Philippines, that poorer farmers must
take in the marketplace at usurious interest rates. San Jose's limited indebtedness dates to its frontier days. Because there were adequate opportunities for all farmers to earn subsistence during the period of San Jose's growth and early development, even migrants with little or no starting capital could get off to a viable start. Such circumstances, I have argued, help minimize the growth of social inequality (Eder 1982:194-96).

In contrast, in frontier settings where the production focus is exclusively on cash cropping, and particularly where cash crop harvests are seasonal or there is a long lag before production begins, a farmer's cash income may be insufficient even to purchase food for his family. In such circumstances inequality-breeding indebtedness and exploitative creditor-debtor relationships may soon appear. After coffee growing was introduced in a meso-American community, for example, production lags and world market coffee price fluctuations resulted in a reorganized production in ways that drove small operators to the sidelines and concentrated ownership of coffee lands in relatively few hands (Greenberg 1981). Margolis (1973) similarly observed an exclusionary pattern of development on a coffee-growing Brazilian frontier.

Some evidence of similar trends may be found in the upland Philippines. Schlegel (1979) has examined the transition from shifting cultivation to upland plow agriculture among the Tiruray of Mindanao. In contrast to their traditional counterparts, Tiruray who have taken up the plow are extensively involved in a market economy—but on unfavorable terms. Plow agriculture Tiruray plant only four major crops: rice, corn, tomato, and onion—a tremendous reduction in crop diversity from their swidden past. And they have virtually no other subsistence or cash income sources. Such Tiruray have lost control of their lands and work primarily as tenant sharecroppers, selling even their starch staples in the marketplace to obtain cash needed to buy food and other commodities (Schlegel 1931:113). Because the Tiruray have no withholding power to protect them against seasonal price fluctuations, they typically "sell cheap and buy dear," and rely heavily on expensive (and exploitative) credit sources. Thus the Tiruray, despite their "Filipinization" and the "development" of their agriculture,
are more the victims than they are the beneficiaries of that development.

2. Agricultural Systems Diversity. The Tiruray case calls attention to another negative trend in many developing upland areas: a simplification in cropping mixes and adaptive strategies. Such trends should be resisted, for it is diversity, not simplification, which appears to be associated with more favorable development trajectories (Dewalt 1979:261). The agricultural sectors of Mabini and San Jose, for example, are both based on the cultivation of a wide variety of annual and perennial crops and on the raising of livestock—all high quality foods with strong market demand. The ecological advantages of crop diversity—crop rotation, mixed stands—under tropical conditions are well documented. In comparison to monocrop regimes, such diversity allows more efficient use of nutrients and solar radiation, minimizes pesticide and herbicide requirements, and so on (Igbozurike 1971, Dickenson 1972). I return to ecological advantages below. Here I wanted to emphasize that such diversity has important economic and social advantages as well.

A diversity of agricultural crops and activities helps reduce the risk of small-scale farming over the short run because the farmer is not totally dependent on one economic activity; and it helps minimize environmental degradation over the long run because of the greater inherent ecological stability of mixed-farming regimes. Such circumstances may encourage entrepreneurial decision-making and investment in permanent improvements, including tree crops (see below). By smoothing out labor demands and production over the entire year, mixed-farming economies, like continuing subsistence production, minimize involvement with the economically debilitating and autonomy-reducing creditor-debtor relationships commonly associated with the characteristic peaks and valleys in the production and labor demands of monocrop regimes.

Beyond these more general considerations, I want to emphasize two specific entailments of local-level agricultural and economic diversity for the pattern of development. The first entailment concerns Belshaw's proposition that "a key to development is not everybody doing exactly what everybody else is doing. It is precisely in specialized
differentiation—once known as division of labor" (1976:236). Full realization, however, of the advantages of "specialized differentiation" requires not merely diversity in economic activities, but diversity of a particular kind. That diversity entails the simultaneous presence of both capital-intensive and labor-intensive activities, with, as a consequence, the interdependence of farms and farmers. Thus Yengoyan (1974) has compared favorably the heterogeneous economic landscape of Capiz, where fish ponds, fishing, rice, and sugar are all important economic activities, with the greater ecological simplicity—and stark poverty—of the monocrop sugar economy of Negroes Occidental. The presence of a set of interdependent economic activities in Capiz, some capital-intensive, others labor-intensive, make it possible for excesses of capital or labor in one economic activity to flow to other economic pursuits in the local economy, thereby mitigating against rigidification of the existing socioeconomic order (Yengoyan 1974:64). In contrast, where production possibilities are limited, as in monocrop plantation economies, any surplus capital generated on the farms of the rich will likely be diverted to investment opportunities in the regional economy, where such investment will not benefit the local poor. In these circumstances, Yengoyan argues, the worse aspects of rural poverty and inequality are likely to emerge.

Both San Jose and Mabini resemble Yengoyan's Capiz case in that their mosaic economic landscapes provide a variety of niches for small operators to earn a satisfactory living. Thus, as discussed above, the partnerships formed to raise livestock and operate offshore fish corrals in San Jose channel some of the excess capital of wealthier farmers into local enterprises which generate part-time employment and income for poorer farmers. That "most people here are their own bosses" is a widely repeated constant in San Jose, even among the poor, some of whom compare their lives favorably with those of tenants in a nearby irrigated rice village and unskilled wage workers in Puerto Princesa. In Mabini, too, a farmer's welfare or social status is not merely a simple function of landownership, for even the smallest landowner can earn a significant income from fattening cattle or growing black pepper. The presence of some such labor-intensive activities—activities which economize on land and capital and hence minimize the importance of credit—is probably essential in small-holder
communities if the more exclusionary developmental trajectories are to be avoided.

A second favorable entailment of agricultural systems diversity is social psychological. Development planning is often based on models of human motivation which assume that all farmers would like to expand cash income and will take advantage of genuine economic opportunities to do so. While desires for greater income (and a willingness to work for it) are certainly present in the most general sense, both in the Philippine upland and elsewhere, whether particular individuals will perceive particular economic activities as attractive or opportune is considerably more complex issue than our conventional models of human behavior recognize. Such perceptions are not only affected by gross economic and cultural variables (capital resources, soil quality, cultural notions about desirable kinds of work) but by psychological variables as well: two individuals, in otherwise identical ecological, economic, social, and cultural circumstances, may nevertheless not find the same money-making scheme equally attractive--not because they have different inherent desires to earn money, not because one is inherently more industrious than the other, but because one finds the activity personally more congenial than the other.

Elsewhere, for example, I have argued that some migrants to San Jose, by virtue of their personalities, were attracted by the individualizing requirements of successful vegetable gardening--the relative isolation from other workers, the repetitiveness of tasks, the attention to detail--while other individuals disliked such a work regimen (Eder 1982:187). Human beings are varied and complex individuals, something which we all know from experience but which we often forget in our development planning. One of the great advantages of mixed farming regimes, both for social stability and for stimulating entrepreneurship, is the many different kinds of niches such regimes provide against which farmers, in all their intrinsic variation, can match their varying tastes and preferences.

3. Sustained Yield Production. While continued subsistence production and maintenance of a variety of economic activities may help minimize socioeconomic inequalities in developing communities over the short term, such measures
would ultimately be useless if the long-term viability of the economic system itself cannot be ensured. Hence we must here ask the question, what conditions promote the long-term viability of tropical upland agricultural systems?

Considerable attention has already been given to this question and only a brief overview is possible here. One of the most widely promoted ideas is agroforestry: a system of managing land resources on a sustained-use basis which combines agriculture and silviculture and, in some cases, even pasture and fisheries (see for example, Kirby 1976 and Moran 1982). Again, our three developing communities illustrate, in various ways, some of the principles in question--although all would benefit considerably from their more systematic application.

The case for agroforestry is based, in particular, on the argument that where irrigation is not feasible, trees and tree crops are a critical component of upland tropical agriculture (Dickenson 1972, Clarke 1976:256-57). Not only are trees the natural vegetation in the tropics and protective of soils and watersheds; in appropriate variety they can become--as in San Jose--important sources of cash and subsistence (see Eder 1981). Several small operator-oriented, tree crop-based model farm systems suitable for sustained yield application in tropical uplands have already been proposed (e.g., Holdridge 1959, Kirby 1976).

Where considerable environmental degradation has already occurred, agroforestry also emphasizes grassland reclamation and watershed rehabilitation. However, domesticated animals, again a potentially important source of both subsistence and cash, can figure in ecologically appropriate grassland utilization strategies, as in Mabini. Additional research is needed on environmentally appropriate forage grass and livestock species (Tosi and Voertman 1964:200-1), but when properly managed and integrated with other economic activities, pasture could be part of a stable, small farm production system (Clarke 1976:256, Moran 1982:24). Where watersheds are in question, however, such measures as terracing or reforestation, perhaps with an eye toward forest products as potential secondary cash income sources, are essential. Rice (1981:81-82) reviews the progress of such measures in Imugan.
Finally, an agroforest approach recognizes that in many upland areas there are no suitable alternatives to shifting cultivation as the basic food production system (Grandstaff 1978:554). This is the case for the Ikalahan, who will remain shifting cultivators for the foreseeable future. Hence agroforestry programs must also take measures to improve and stabilize shifting cultivation itself. On the one hand, problems of fertility maintenance must be addressed. At Imugan, intercropping with legumes appears promising (Rice 1981:81); at lower elevations, systematic planting of new swiddens with ipil-ipil, a leguminous tree with a variety of uses, is widely advocated. On the other hand, further research is necessary to improve productivity in swiddens (see Tosi and Voertman 1964; Greenland 1975). Proposals to improve swidden viability and productivity are reviewed in detail by Grandstaff (1978:553-62).

CONCLUSION

Drawing lessons for upland development planning is one thing, of course; implementing them is another. While the design of implementation programs is beyond the scope of this paper, a few words about the conditions under which such programs must be undertaken are necessary. For the tribal and lowland emigrant inhabitants of upland areas must themselves ultimately "implement" the above ideas. Governments, unless they resort to coercion, can only "direct" and "encourage." Such measures as mulching field crops and planting ipil-ipil and tree crops are, in effect, investments—the payoff comes later—and investments require a long-term view by the people asked to make them. Whether upland farmers will be encouraged to take such a longer view will depend upon their assessments of their own long-term prospects for residence on the land in question. Farmer motivation, in short, will rest squarely on the shoulders of land tenure security. Hence national governments that want their upland farmers to "take a longer view" in their agricultural activities must themselves take a longer view (Grandstaff 1978:572-73).
The issues involved are complex and revolve around the thorny question of how much control upland peoples and societies should exert over their land and other resources (Jones 1978:64). But the outlines of such a longer view are clear: if upland development is to proceed in an equitable and ecologically sound fashion, national governments must recognize that it is in their own best interests to secure land for upland farmers in a way that does a minimum of violence to indigenous land tenure systems (Grandstaff 1978:573). Further, these governments must recognize and act on this reality now. That the three communities described here are successfully meeting the challenge of upland development reflects, in part, the circumstance that each community still retains some degree of traditional cultural and social organization. Their respective members were not so disorganized, in other words, that they could not act. Successful upland development will be difficult enough; further delays in implementing the necessary strategies--and hence additional cultural disruption and social disorganization in upland societies--will only compound the problem.

NOTES

1. My field work in the Philippines was supported by the National Institutes of Mental Health during 1970-1972, by the Ford Foundation during 1976-1977, and by the Wenner-Gren Foundation and Arizona State University during 1980-1981. I would like to thank Delbert Rice and Rey Lucero for their assistance during my visits to Imugan and Mabini.

2. An intriguing analogy to the argument below may be found in Jacobs's (1969) comparison of the economies of the English cities of Manchester and Birmingham. In the mid-1800s, Manchester appeared to be the city
of the future, its thriving economy built around a single industry: the immense and highly efficient textile mill. "The mills were Manchester." In contrast, "Birmingham was just the kind of city that seemed to have been outmoded by Manchester": a city of small households trades and a multiplicity of small manufacturing endeavors, a city with an economy so diverse that it appeared to be a "muddle of oddments." And yet it was precisely this characteristic, argues Jacobs, that enabled Birmingham to adapt to change and to remain vigorous and prosperous, while Manchester, in all its "efficient specialization," was destined for obsolescence: "today it has become the very symbol of a city in long and unremitting decline" (Jacobs 1969:86-89).

**BIBLIOGRAPHY**

Adelman, Irma and Cynthia Taft Morris  

Belshaw, Cyril S.  

Clarke, William C.  

Dewalt, Billie R.  
Dickenson, J. C.

Eder, James F.

Epstein, T. S.

Grandstaff, Terry

Greenberg, James B.

Greenland, D. J.
1975 Bringing the Green Revolution to the Shifting Cultivator. Science 190:841-44.

Griffin, Keith
Holdridge, Leslie R.

Hunter, Guy

Igbozorike, M. U.

Jacobs, Jane

Jones, Steve

Kirby, John

Krinks, Peter

Margolis, Maxine

Moran, Emilio F.
Rice, Delbert

Schlegel, Stuart A.
1979 Tiruray Subsistence. Quezon City, Philippines: Ateneo de Manila University Press.


Tosi, Joseph A., Jr., and Robert F. Voertman

Yengoyan, Aram A.
CHAPTER EIGHT

GOVERNMENT INTERFERENCE AND LOSS OF LAND: AN INTERPRETATION OF GROWING LANDLESSNESS AMONG ADIVASIS OF SOUTH GUJARAT, INDIA

C. Baks
University of Utrecht

INTRODUCTION

In this article I will examine the history of land reform in South Gujarat, particularly tenancy reform, to evaluate what actually happened to the Adivasi peasants' titles to land when ultimately tenancy was abolished. It is based on field work in the two subdistricts of Bardoli and Valod belonging to the District Surat during 1962-63 and again in 1970 and 1977. The subdistricts are some 40 to 50 miles east of the city of Surat. In colonial times the area was part of British Gujarat in the Bombay Presidency.

The British colonial government in India, and afterwards the Indian state governments in Independent India, have for over half a century or longer issued act after act, amendment after amendment, and regulation after regulation to improve the social-economic conditions of the peasantry. In South Gujarat the aim was to provide peasants, in particular tenants, with security rights to improve agricultural conditions and productivity. Among these peasants the Adivasis form the largest social category, a majority being sharecroppers in those days. In 1957 the government took a final step by declaring that all tenants, with some exceptions, would be deemed to have purchased the land cultivated by them. However, to present the landed interests of Adivasis and their masters as tenancy relationships that
could be solved by legislation is an oversimplification of the truth. Tenurial relations are enmeshed in a web of debts and patronage, partly hidden from the legislator's view, and, that for this reason, cannot be simply done away with by legislation.

BRIEF HISTORY

In 1603 English merchants dropped anchor at the entrance to the river Tapi, off the city of Surat (Woodruff 1963:22). Trade with Arabia, the Persian Gulf, and Egypt was already highly developed in this part of the subcontinent. Surat was the major harbor and a center of enterprise. An overland route connected the city with northern India, the heartland of the Mughals (see Furber 1976). After half a century in Surat the traders of the English East India Company (henceforth the Company) shifted business to Bombay, and their first stronghold in India gradually decayed. Surat's harbor silted up, and the Company's possessions were neglected for many years. Only at the beginning of the nineteenth century was more territory around Surat acquired, and British Gujarat came into being (Hamilton 1820:715). By this time the Company had evolved a dual administration. There were British Gujarat under direct rule and the smaller and larger principalities under indirect rule (Bhargava 1936:163).

After 1860, as a consequence of the increasing importance of Indian cotton due to the American Civil War, the British constructed railways and roads from Bombay up north through South Gujarat. For a long time the region continued to be agrarian only. After independence towns and villages, situated on the railroad and the highway, have gained much from industrial activities. Today an industrial belt stretches from Vapi in Gujarat's south to Ahmedabad in the north. Surat has expanded as a textile market and comprises a number of varying industries which give employment to a fair number of its nearly one million inhabitants.

Major changes in the rural area can be perceived too. In early colonial days important exports like wheat, sugar-
cane or indigo were absent in South Gujarat. As the rivers are not easily amenable to irrigational use (Barmeda 1950:11), agricultural modernization on a scale as described by Whitcombe for the North-West Provinces and Oudh, and by Darling for the Punjab, was not feasible (Whitcombe 1971; Darling 1928). Irrigation works were too costly. It therefore took some time before this part of India was integrated into the wider market economy. At the end of the last century cotton became an important cash crop, and during the First World War fruit cultivation developed. Yet, even as late as the 1920s the greater part of South Gujarat was not very important from an economic point of view (Broomfield and Maxwell 1929:9-17). Wide-scale commercialization of agriculture did not begin until independence. Then agencies to instruct the cultivator to increase productivity were introduced with the Community Development schemes. Large irrigation works were started, and the Kakrapar irrigation scheme was completed in 1953 serving the western subdistricts of South Gujarat. With the completion of the far bigger Ukai Dam, water is now available in the eastern subdistricts as well. As a result the cropping pattern has changed and sugar-cane growing has become very lucrative. But this is reserved for the middle-sized and big farmers only. These successful farmers are an important political power group in the region. Labor relations and tenurial arrangements have also altered considerably (Breman 1978, 1979). Thus, change has spread over South Gujarat reshaping and splitting existing social relationships in the village community. Incorporation in the wider economic structure and the impact of state organization have restructured the local social system.

This change, viz. a change in titles to land, I would like to trace back following the land reform acts, in particular tenancy legislation as devised by the British colonial administration and continued and refined by the Indian government. I will pay attention to the Adivasis in the two subdistricts of Bardoli and Valod.
THE ADIVASIS

In the Directive Principles of the Indian constitution the socioeconomic weaker groups of the Indian society are given special rights to protect them from social injustice and exploitation. Today known as positive discrimination, these rights are aimed at eradicating oppression and subjugation, and to improve the social status of these groups. Among them are the so-called Scheduled Tribes or Adivasis. They enjoy privileges for educational facilities, a percentage of jobs in the government service, and reserved seats in the union and state parliaments. In the Surat District there are Chodhras, Gamits, and Dublas or Halpatis, about two-thirds of the district's Adivasi population.2

Formerly, the Adivasis were called Raniparaj (Forest People) or Kaliparaj (dark-skinned people), depending on the notion of the British administrators. These terms were used by the Hindu high castes and were adopted from them. The Adivasis have also been referred to as "Quasi Hindus" (Census of the Bombay Presidency 1872). Today there are approximately one million Adivasis in the District Surat, or, nearly half of its population. Out of them the Gamits number 25%, the Chodhras 20%, and another 20% Halpatis (Census of India 1981, Surat District).

The boundary between the Adivasis and the lower grade Hindu castes is vague, and one could bring forth sufficient evidence to classify Adivasis as part of the Hindu system. In a paper Beteille reinforces this. He denies that between tribe and caste a distinction could be drawn linguistically (Beteille 1980:20). Besides, the Hindu caste structure in itself is typically linguistic and regional (Panchanadikar 1962:20). Thus, it is possible to classify the Adivasis as one of the many social categories of the lower Hindu castes, notwithstanding their preferential treatment as Scheduled Tribes in the Indian constitution. It is perhaps for this reason that Breman has proposed to categorize them as tribal castes, which indicates at the same time their dependence on the Hindu castes (Breman 1974).

This vagueness between tribal and Hindu caste is no recent phenomenon. In the 1872 Census it is said with regard to the Surat District that far the greater part of the
"aborigines" are Hinduized (Census of the Bombay Presidency 1872:103).

As with the Hindu castes the Adivasis trace their origin to Rajput clans, the Kshatriyas of the Varna system, once ruling in northern Gujarat. Such claims are one of the indications of sanskritization, a process by which Sanskrit rites and ceremonies of the upper Hindu castes are adopted to raise a group's ritual and social status (Srinivas 1961:18). Not all the Adivasis sanskritize, whereas, alternatively, also lower Hindu castes preserve rituals, usages and myths that are similar to the Adivasi religious beliefs and ceremonies (Kosambi 1965).3

The various Adivasi ethnic groups are differentiated both socially and economically. Each of these groups, like the Chodhras and Gamits, is based on the fundamental identification of sharing of a common culture. Of these groups the Chodhras and Dhodias are considered to have the highest social status, followed by the Gamits, who, otherwise, outnumber the other ethnic groups. They live near to and in the central belt of South Gujarat, the most fertile area. The ethnic groups with a lower status as the Kunkanas and Varlis live in the hilly area to the east. In the Bardoli and Valod subdistricts, which partly belong to the central belt, Chodhras, Gamit, and Halpati dominate. In this region the dominant Hindu castes are Patidars, Anavil Brahmins, and Banyas. A few decades ago the Parsis, who had established themselves in the eighth century in the coastal towns of South Gujarat were still an important group.

Even in the past, rights to land were not evenly distributed among the Adivasi households. This could have been the result of the impact of Rajput, Mughal, Maratha and British rulers and the collection of tax revenue. Tribal chiefs acted as intermediaries under different land tenure systems, and businessmen and timber contractors went into the interior for purposes of trade. Thus, in the process of exposure to the outside world the Adivasis were subordinated and exploited, in particular as cheap laborers to cultivate agricultural products and to deliver timber and other forest products.
The various Adivasi form endogamous groups, and these are subdivided by *kul*, or exogamous kin groups. Patrilineal descent and a virilocal pattern are characteristic for the Adivasi kinship system. Marriage payments are from the husband and his kin to the bride’s kin, but among the richer and more educated families the dowry system has superseded bridewealth or the bride-price. The poor Adivasi man does not pay bridewealth, but works for his father-in-law instead, and stays at his place, thereby remitting bridewealth through his labor. This marriage by service, or *khandadia*, fits into a pattern of labor shortage, which was prevalent for the area in the past.

Nuclear families are found among the poor and joint families among the rich peasants. Land is the bond that keeps families together, and division of lands within families was not customary. Today new laws of inheritance, allowing the division of land between sons, are followed. But a rich family can easily be disrupted and break up due to such divisions of property. Efforts to keep the family together often fail. Divorce is common. It seems that widow remarriage is on the decline, one of the indications of an increasing Hindu influence. One also comes across panchayat organizations that carry out purification ceremonies in case of an offense.

Being food producers, the Adivasis live near their fields in *faliyas*, so-called streets, which mostly encompass one and the same kin group. Generally, a village has five to six of these scattered *faliyas*.

At the end of the nineteenth century some well-to-do Chodhra families sent their sons to government schools (Gazetteer of the Bombay Presidency 1901:319). Today twenty percent of this ethnic group are literate. However, education and job prevalence are for the well-off families owning about 10 ha. and more of land. Under the influence of the Gandhi movement ashrams or schools were founded which have contributed to the Adivasis’ social and economic uplift (see I. P. Desai 1969).
THE ECONOMIC SITUATION OF THE ADIVASIS

The Adivasis are considered economically and socially backward. To understand how this has come about, it is necessary to review the historical data.

Contrary to earlier information (see a letter by Bellasis of 1820, in Bellasis 1854:3-4), the majority of the South Gujarat Adivasis were not unsettled cultivators. In colonial literature reference is made to their migratory way of life, which is only partially correct and probably derived from the custom of removal to a new house when a family member died. With the exception of a few small ethnic groups in the eastern interior of South Gujarat, the Adivasis were not hunter-gatherers. The Chodhras have even been settled in this part of the country for nearly 500 years. As an important trade route led through the Chodhra territory, linking the city of Surat with Agra and northern India, they have had dealings with traders from early times.

By the middle of the last century a number of the Adivasi ethnic groups in eastern Surat District are described as poor cultivators growing coarse grains. They had learned agriculture from their peasant neighbors, the Kanbis (now called Patidars), (Bellasis 1854:3). In old gazetteers Adivasi dwellings are reported as miserable and the diet of the inhabitants as poor. But, the non-Adivasis were no better off. When touring through the western part of South Gujarat in 1821 the famous British administrator Elphinstone observed that the peasants were "ill-clothed" and "ill-lodged." The economic situation of these Hindus, he thought, was very much depressed (Ballhatchet 1957:140).

Virtually all peasants had economic difficulties during the seasonal round. The products of the kharif or wet season (June - September) were: jowar (sorghum), rice, and later on cotton; in the rabi or winter season (November-February) there were beans, peas, and castor. In the dry and hot season (March - May) there was no cultivation. The selling of reserves was frequently necessary, and borrowing was usual. Even seeds for the next season were sometimes eaten. Complaints about the lack of savings are often found in the colonial reports. Thus a periodical lack of sufficient money or food drove the Adivasis into the
hands of the moneylenders. In the official reports borrowing is described as the natural state of things.

Members of the higher Hindu castes and Parsis in search of commerce arrived in the Adivasi region a long time ago. Penetration happened from the smaller and larger towns situated along the road from Surat to northern India, and from the coastal towns. Banyas and Parsis were among the most well-known petty traders, but also Desais (Anavil Brahmins) settled in eastern South Gujarat. The latter were already tax collectors, previous to the British, in Mughal and Maratha times. However, economic activities did not differ significantly among these groups. As the years wore on, more and more of them became involved in business, often living in an Adivasi village.

For the most part the village scene was transformed as follows. A little shop was opened or a trader or peddler appeared in the faliya. Daily utensils, but also liquor was sold, in this case by the Parsis. Soon, in combination with the shop or liquor selling the more lucrative business of money lending started. Without exception the Adivasis fell into debt as goods and money were lent to them on account (R. Mukherjee 1933:263). The Parsis were in the business and money lending at least from the seventeenth century onwards (B. V. Shah 1955:16). At the end of the last century an increasing number of Adivasis borrowed to pay the land assessments as laid on by the British.

The methods of a moneylender were simple. Firstly, he got an Adivasi into his debt. Secondly, he arranged things in such a way that the debt exceeded what the Adivasi could repay. And, thirdly, he compelled him to cultivate the land to get a share from the yield. Consequently, the Adivasis sold their lands as sharecroppers, which was the rule rather than the exception in the course of time. It was one of the signs by which an Adivasi village may be distinguished, as Broomfield and Maxwell wrote (1929:17). They quote a letter of 1896 that states, referring to the area under study, "It is a rare exception to find a cultivator free, and probably at least one-half of the lands is encumbered" (Broomfield and Maxwell 1929:108). In this way the moneylender acquired lands from the Adivasis, as land was the moneylender's security.
Thus, in time many Adivasis got into debt, and indebtedness was reported in terms of sharecropping. The reasons given in official reports and documents to explain the Adivasis' need of credit were their marriage and drinking habits. But, there were other causes such as a failing monsoon or crop failure, or a famine as in 1900, or illness and death. The loss of cattle through disease also contributed to the need for credit.

Another aspect of the growing indebtedness is related to the more general phenomenon of agricultural commercialization and the activities taken by the British colonial government. While the British government stimulated agriculture through infrastructural works, it relied on the indigenous credit systems to supply the cultivator with capital, which covered short-term purposes only. A common borrowing system in the countryside were kawi loans for food during the lean months of the year or birda loans for seed. These loans were small, a few rupees only or sowing seeds, or a few maunds (about 20 kg.) of coarse grains. A survey after India's independence shows that private credit agencies, particularly private moneylenders, accounted for as much as 93 percent of the total credit supply to agriculturalists (Report of the All-India Rural Review Credit Committee 1969:15-16).

While some grain was sold to itinerant merchants, the money received was not sufficient in case a calamity happened or to meet the yearly payment of assessment. Payment of it on collection day caused more and more problems. Borrowing increased after the British had introduced their land revenue system.

An Adivasi debtor could scarcely cheat his money-lender. Initially, there were but a few moneylenders, who, nevertheless, carefully kept their books and refused loans to notorious defaulters. Later on when the number of moneylenders increased, the "territory" was divided and the moneylender's black list became a feared weapon. Moreover, as shopkeeper, liquor seller, or grain merchant, they periodically or even habitually lived in the village or hamlet. Furthermore a moneylender usually had a servant who went on the road, and who knew the ins and outs of the debtor better than his master. In this way a local network of loans developed little by little by which the production and
collection of crops and the distribution of money and goods have come under the supervision of a handful of people, staying in a relatively small area.

It was difficult to clear debts, and a number of interconnected things contributed to the debtor's dependence. As already said, short-term loans were the rule, and interest was high, as well as land rents. Borrowing was common when stocks were lowest. As a consequence, prices of daily necessaries were at the highest levels. Paying off was during harvest time when prices naturally fell. As the custom was that the eldest son was bound to pay his father's debts, the creditor was ensured of the continuation of payments. Saving, therefore, was a great problem, specifically, as the Adivasis' agriculture was dependent on the vagaries of the monsoon. A shortfall in harvest was followed by endless miseries in the months after.

Thus, the provision of loans became a very profitable field for the investment of local capital. Even small amounts lent to Adivasis for agricultural activities produced a rapid and sizeable return. A moneylender could compel his debtor to sell at prices fixed by him. A next step was to order which crops to cultivate and how to divide the yield. The situation for the Adivasis in Surat by 1850 was bad. "The very seed he (the Adivasi) sows is often not of his own, and the rates of interest he has to pay leave him with only a bare subsistence of the coarsest grain" (Selections from the Record 1854:195). A report of 1923 on the Backwards Areas of Baroda State, the major princely state in South Gujarat and adjacent to the District Surat stated: "The Kaliparaj live in poor huts, they eat coarse rice and pulses and sometimes vegetables. This is sufficient to keep them alive. Copper utensils are far beyond their reach. Daily earnings are spent in the purchase of liquor in the evening. An Adivasi lives from hand to mouth and is firmly in the hands of the money-lender" (Gazetteer of the Baroda State 1923:273-74, 320).

In the official reports the notorious drinking habits of the Adivasis are regularly mentioned. As I. P. Desai has argued, these habits did not turn the Adivasis into permanent debtors when they brewed liquor and toddy (country wine) themselves, neither did they lose their land to their creditors before (I. P. Desai 1969). The problems started
when the British declared brewing illegal and sold by auction license rights to non-Adivasis as the Parsis. The latter provided legal liquor now, and were able to get the Adivasis into debt.

The policy of the Banyas, Parsis, and other money-lenders, who required land as security for loans, was not to recover the full amount of the loan immediately, but to organize a source of regular income for themselves.

ADIVASI RIGHTS AND LAND

In the late eighteenth and early nineteenth centuries the Company acquired substantial territories in India and the leading men were obliged to conceive of an administrative machinery to rule their new subjects. There was no choice but to raise money from the peasants to meet the Company's growing expenses. As land was the prime source of wealth and land revenue the obvious way to cover the expenditures, a system of collecting land revenue from the cultivators was gradually worked out. Naturally, the new rulers studied, interpreted and copied the existing Mughal administration and the various land systems.

In eastern India the Company's initial efforts resembled those of Akbar, the great Mughal ruler. Under his reign, in Gujarat too, the first land revenue survey was carried out in 1576 (Statistical Atlas of the Baroda State 1918:10). The difference was that the Company was capable of pushing the plans through, and as a result the British land revenue system has deeply influenced tenurial relationships. Under the Mughal rulers collection of land revenue was undertaken by persons who stood in between the sovereign and the cultivator of the soil. At the onset the Company followed this pattern of intermediaries in Bengal, bestowing hereditary rights upon the collectors of Mughal times. The system went under the name of zamindari system.

But later in western India another land revenue system was introduced based on that used in the Madras region (see
N. Mukherjee 1962). This system has been called ryotwari. The extent of money to be paid by the peasant or ryot was based on a survey and a settlement between the cultivator and the government as to the amount of the money assessment that was to be fixed on the land under cultivation. In turn, the ryot received from the government, being the malik-ala or superior proprietor of land, khatedari rights or inferior proprietary rights. These khatedari rights are so-called occupancy rights (Bhargava 1936:68). An occupant remained in the possession of his land as long as he paid his assessment to the government. Prior to British interference, the ryot also had occupancy rights, viz. by means of inheritance or a gift. In some cases there was a right of purchase of land, even a right of mortgage (Ghurye 1933).

So in British Gujarat types of tenure were mostly ryotwari. Assessment, which was viewed as rent and not as tax, was changed every twenty or thirty years by a resettlement survey. The surveys were based on scientific principles according to soil classification, and the assessment was estimated on soil capacity. The system was a change for the better as compared with previous land revenue collections from Mughal or Maratha times. When the center of Mughal power weakened, the arbitrariness of raising money from the cultivator increased as did widespread rural unrest. The British rule tried to put an end to this arbitrariness to minimize rural unrest.

The British land revenue system, however, was superimposed on the existing rights of autochthonous law systems. They overruled rights of tribal origin and of Hindu and Muhammedan law. And it was based on English law concepts. The English interpretation of a cultivator's title to the soil was his right of occupancy, recognized and maintained by government, and subject to the payment of the amount of assessment. Land became a commodity, and an occupancy right was transferrable, heritable, and "...continuable without question at the expiration of a settlement lease, on the occupant's consenting to the revised rate" (Bombay Presidency 1894:7). Consequently, rights of occupancy were legally rooted in the paying of assessments. These rights were compiled in the Village Records in the early twentieth century (Bombay Land Record-of-Rights Act IV 1903).
Ryotwari tenure was introduced in British Gujarat as early as 1817 (Ballhatchet 1957:140). In the "wilder districts" of South Gujarat, i.e., the eastern region, a reassessment is mentioned for Valod in 1830 (Rogers 1892:187). In the beginning occupancy rights were likely conferred on members of Hindu castes only. The Adivasis got their rights much later. There is a first indication of this in 1875 when occupancy rights were conferred on "...Kolis and other wild tribes in jungle tracts of Ahmedabad and Surat" (quoted in Gupte and Gupte 1969:173). Formerly in Adivasi society, rights to land were founded on the assumption that a kul or exogamous group possessed land by cultivating it and by other activities such as "...cutting or preserving the wood, gathering wax, or wild honey, collecting stick, lac, etc." (Gupte and Gupte 1969:164). In British colonial times these rights were reaffirmed as it were; because Adivasis got a title to the land already under cultivation, which were, moreover, duly registered later on through the procedure of a settlement survey. Thus, families by the settlement survey were confirmed in their rights and according to law remained the substantive holders or occupants of the land.

Land revenue regulation, procedures and other technicalities were mostly issued by Government Regulation. In 1879 the various land revenue rules were codified in the Bombay Land Revenue Code (hereafter the Code). In the course of time, with its amendments the Code has become the most comprehensive legislation for this part of India, and it has been in practice for over a hundred years since.

GROWING DEPENDENCE AS PER JURIDICAL PROCEEDINGS

To the British colonial administrator the regular payment of assessment was of the first importance. He took a keen interest in a high output of agriculture; for, the increasing governmental expenses had to be paid. Though he was acquainted with the recurrent credit problems of the peasantry, and with the institution of moneylending in the village, the prevailing idea was not to intervene in Indian customary relations. The conception of
the administrator was deeply rooted in English law and the concepts of mortgage and tenancy easily applied to Adivasis, who arrowed on security or who cultivated their fields for a moneylender. Yet instead of looking upon this as an established usage to repay a debt, and having the force of local law, British concepts were introduced. The British administration had provided the peasant with a title to land for which he paid assessment. If a peasant did not pay, as in the case of an indebted Adivasi family with their moneylender meeting the agricultural assessment on this land, the moneylender observed the British law. Eventually, the title to the land was assigned to him.

The Adivasi peasant was slowly dragged into a muddle of legal rules. These rules belonged to another world of which he had a very imprecise idea. He worked his lands, for his creditor did not want to take possession of his debtor's holdings to close out the debt. The debtor's labor, his stock and implements were productive if left on the land, and "the sale of immovable property for debt was opposed to usage and public opinion" (Report on the Deccan Riots 1873:93-94). Thus, a debtor remained in the physical possession of his land, enjoying its use and the advantages of his efforts. Both the parties were satisfied. The creditor had his security and the labor of his debtor and family; the latter was able to go on cultivating the fields without losing his income. Part of the yield was handed over to the creditor, who also regulated the division of the crops, and what was to be sown in the next season. As a matter of fact, such tenurial relations could easily be classed as sharecropping.

However, this construction did not exist according to law, where sharecropping was linked to tenancy, and indebtedness ultimately could end up in mortgage, as is described in the official reports. But, there was rarely a conveyance of land by the Adivasi debtor to his creditor with the proviso that the land would be returned on the payment of debt as in the case of simple mortgage. The Adivasi debtor was not a tenant. Neither was he an agricultural laborer. He preserved a higher social status (see Desai and Shah 1950:1140). Yet, the debt system was gnawing at his rights. He incurred the greatest risks, i.e., losing his title to the land, if he could no longer pay the assessment, and his moneylender started regularly paying
instead. If the payment was registered in the moneylender's name, this man could legally enter the title of the land under concern in the Village Records in his name, thus, according to the Code (The Code, Section 3 (11), in Gupte and Gupte 1969:14).

Accordingly, I would like to refer here to the principle of foreclosure and the suit for foreclosure (Dictionary of Legal Terms 1968:53). Moneylending with land as security was grafted upon this English principle. That is, if a debt is not repaid within the stipulated time, the mortgagee has a right to obtain from the court a decree that the mortgagor shall be absolutely debarred of his right to redeem the property. Contrary to customary law, rights to land were assigned to the moneylenders (Sonius 1986:75-76).

It is of interest to note here that by amendment to the Code a creditor's juridical position was defined more precisely in 1913, "... where the holder in actual possession is a tenant the landlord or superior landlord, as the case may be, shall be deemed to be the occupant (The Code, Section 3 (16), in Gupte and Gupte 1969:19-20). The government preferred to safeguard the land revenue interests and assigned further rights to the creditor. Whitcombe, in a different context, has rightly observed that, on the whole, government supported the moneylender's position (Whitcombe 1971, chapter IV).

Relations of debt were understood as tenure relations, or more specifically as mortgage, concepts with which the British administrator could work. In the official data there are a greater number of tenants. Between 1900 and 1920 tenancy increased in the two subdistricts of Bardoli and Valod from 26 percent to 48 percent (figures for the cultivated area, Barmeda 1950:122). About twenty years later, in 1939, the percentage of tenants to total cultivators was even 50 (Desai and Shah 1950:139).
GROWING DEPENDENCE AS PER ECONOMIC DEVELOPMENT

In pre-British times in Southern Gujarat there was plenty of waste land. Given the availability to cultivate unoccupied land, a debtor and his family could have taken refuge in these lands to escape from unscrupulous moneylenders. In the latter quarter of the nineteenth century this situation no longer existed. Though there were open resources, i.e., waste land, the moneylender's position was strengthened by the British. As was explained in the previous paragraph, the administration took action in arrears of assessment. When the British introduced their land revenue assessment, such escape from obligations was no longer available as newly occupied lands were also assessed and money had to be paid. The key problem of getting credit in difficult times, which would come sooner or later to an Adivasi family, also remained. In other words, these Adivasi families would escape one moneylender, but not shortage of credit.

A moneylender was primarily interested in the Adivasi family's labor to get part of the land's produce. Migration was known, but labor-migration was absent, and as a consequence there was shortage of labor. By means of their powerful position, the moneylenders were able to impose labor service on their debtors and keep them in a state of subjection. The effect is comparable to bonded labor, which was common and expressed in a variety of types and known under various names. One of these was hali (Breman 1974). Through bonded labor, economic and social, but also religious, relations were adjusted. In a way there is a similarity to jajmani relations, but the origin is simply debt. A labor market, as we know such a system now, still had to be developed. There was no free labor.

In the course of time a social relationship developed between both parties, comparable to a patron-client relation. As the eldest son was bound up to pay his father's debts, the relationship was continued between descendants of the moneylender and of the Adivasi debtor. British administration supported this growing patronage system.

With the spread of British colonization and the penetration of the market economy, customs regarding indefeasibility of ancestral titles to land has given way to
commercial transactions. Landed possessions were treated as individually owned, not as inalienable rights vested in families or lineages (Rudolph and Rudolph 1967:279 ff.). Land has gradually become a marketable commodity especially since the turn of the century when a severe famine afflicted the countryside. Land can be leased, mortgaged, or sold. Furthermore, through British legislation and the land revenue administration, together with the impact of the wider market economy, the Adivasi communities became differently structured. Social positions became primarily determined through patronage relations, i.e., by structural dependence (Long 1977:71 ff.).

In recent times the shortage of land is most remarkable. Demographic growth and limitations to the area of arable land have contributed to this. The size of agricultural holdings have dwindled as the Adivasis lost control over their lands bit by bit. The inheritance system further added to their deteriorating economic position, and division of lands among the heirs resulted in excessive fragmentation of holdings.

REGULATIONS, A GROWING STATE INTERVENTION

Did the British government leave the Adivasis to their fate? In government circles there was great concern about land transfers, tenancy and absenteeism. If we pay attention to the number of acts and regulations which were introduced, there were many efforts to improve the peasant's position, in particular the tenant's position. In spite of that, the colonizer's attention was focused on the problem of the collection of land revenue. In the Code rights of ownership are defined and land, its productiveness, and value are made clear in order to assign rights to a person to use the land. The position of the Adivasis based on a debt relationship and connected to sharecropping was beyond the concepts in the Code. Oral agreements prevailed, and the Adivasi families needed cash. They did not have much knowledge of a market structure in which their creditors were the main obstacle.
There have been many amendments to the Code, leading to more interpretation and further amendment. The Code has always provided well for advocates, barristers, judges, and other court personnel. The Code has anglicized autochthonous law, e.g., restrictions on the partition of joint-family possessions as embodied in customary law were liberalized and the principle to divide these lands was introduced.

As the British colonial administrators became alarmed at the speed land was alienated, the government in British Gujarat stepped in, and protective measures were issued at the turn of the century. A division between so-called unrestricted and restricted tenures was drawn to prevent further alienation. In unrestricted tenures the rights of the occupant could be transferred, whereas in restricted tenures the rights could not be alienated (Kavi 1947:27). The measures were formulated after the 1900 famine, and restricted tenures were operative for Adivasi tenures only.

Other acts were the Land Alienation Act, 1900, and the Regulation of Debt Relief. But nevertheless a proper solution for the Adivasis remained in abeyance (Agricultural Legislation in India VIII, 1958:vii ff.). Subsequently, more regulations, including restrictions were extended to other fields, one of these the protection of tenancy rights. The Adivasis had to cope with a swelling number of rules. To look to the social workers of the Gandhian ashrams was of limited avail only. There were not many workers, and their activities were not aimed at weakening the legal order of proprietary rights. They themselves were members of dominant castes, or, in the subdistricts of Bardoli and Valod, the followers of Mahatma Gandhi during his early actions were members of the leading middle castes, the Patidars, his main supporters (M. H. Desai 1929). Among them were the patrons, the moneylenders, of the Adivasis, and they were well-informed with the legal procedures, and generally, had good relations with the Gandhian workers.

It is obvious that the British finally were urged to take action, and to frame an agrarian policy. The rising nationalist movement, as expressed in the Congress Party, supported a change in the rural relationships, and some influence radiated from the programs. In 1935 at the Allahabad conference of the Congress Party, the members...
decided in favor of a land reform program which was elaborated at later conferences. The Congress policy took shape in three ways: abolition of the institution of intermediaries (like the zamindari system), tenancy reforms, and a ceiling on land (Malaviya 1955:57-60). Strictly speaking tenancy problems were at the very root of the intermediaries' system too. So, two main themes have determined the land reform policy of India after independence: tenancy and the ceiling question on land.

Under British colonial government far-reaching tenancy reforms were promulgated in western India in 1939. The aims of the act introduced were to create a category of protected tenants. The Bombay Tenancy Act, 1939, however, was applied to some selected areas only, because of the outbreak of war in Europe. One of the areas was the Surat District. Here, according to the opinion of the government, there were a large number of tenants, their condition was bad and "the landlords were most extortionate and wanting in public spirit" (Gupte 1963:2).

After independence a more comprehensive tenancy policy became part of the agrarian policy of the Indian government. In western India new acts came into force at the end of 1948 (Bombay Act LXVII, 1948). Unfortunately, this act left much to be desired, and amendments followed at a rate that only added to the bewilderment of the peasants. The act and its amendments had apparently been issued in haste, and tinkering seemed necessary. Moreover, ignorance of the act was one of the causes of a slow effectiveness of tenancy reform in general (M. B. Desai 1958:2), e.g., opportunities to purchase land by the tenant were inserted in the 1948 Act, but, as for the Adivasis, few of them could take advantage of the occasion. Firstly, a majority of them were unaware of the opportunity, and, secondly, the existing credit system and their indebtedness were finite obstacles. As a result, the purchasers belonged mostly to the middle and higher castes.

In a great number of studies the acts and the amendments have been scrutinized and their defects revealed. It may be, therefore, reasonable that the state government reached out for heavy measures in the end to force tenancy reform within the reach of the majority of the peasants. On so-called "tillers' day" (1st April 1957) the state
government declared the protected and other tenant, "shall ... be deemed to have purchased from his landlord, free of all encumbrances subsisting thereon ... the land held by him as tenant ..." (Bombay Act XIII, 1956, in Gupte 1963:263, Section 32). Payment was to be arranged in installments, and handed over to the erstwhile landlord through mediation of the government.7

"The tillers' day" initiated the abolition of tenancy, except for a few cases embedded in the act.8 However, an Adivasi could hardly find his way in this legal world. For the average person the legal world is a labyrinth. To understand the manifold rules in order to be successful one cannot take these for granted without proper juridical guidance. For the Adivasis in a weak social position it was almost impossible to hire a wakil or attorney to defend their rights. A person in a weak social position can hardly vindicate his rights, e.g. to get evidence against his landlord as Shah has vividly described (P. G. Shah 1964:158-59). Even if an Adivasi could get such evidence, he would think twice before taking advantage of the occasion. A landlord, on the contrary, could easily go in for discreditable activities, e.g. changing names in his favor in the Village Records. He had money to pay traveling expenses to go to the local court, and to pay stamps for the documents as laid down in the law. Another essential aspect is that the parties did not have the same orientation towards legal issues.

For all the years, the point of departure of the colonial government was that many peasants in debt with their land mortgaged cultivated the lands as sharecroppers or tenants. The Adivasis were no exception. The money-lender or landlord mostly had the land in his name in the Village Records. In the general opinion of the Adivasis their land was simply cultivated as their forefathers had done so, and debts could be repaid. They did not have knowledge of the acts and the intricacies regarding debts, neither of the concepts as mortgage and protected tenant, nor the colonizer's policy.
TENANCY REFORM, THE STUMBLING BLOCK

The moneylenders who gradually developed into landlords did not await the events of "tillers' day" submissively. Some of them used the act's very loopholes to evict the Adivasi peasants, others traced the inconsistencies in the act to do the same, and there were also landlords who ignored the act and simply expelled the peasants. In many cases this happened preceding the enactment of "tillers' day." However, the Adivasi peasant's labor could not be missed, quite a few families got a piece of land in return, smaller and less fertile, and less favorably situated, than the previous or ancestral lands. While this new land is in the Village Records in the name of the Adivasis nowadays, the change of plots implies an irrevocable loss to these Adivasis. The ancestral lands are lost once and for all, and no legal means can return the family's possession.

Since its abolition, tenancy is illegal, and landowners are reluctant to farm out lands to Adivasi peasants in the old style, viz. as sharecroppers. So, "tillers' day" is a stroke of irony. Under the 1956 Act the bond between the Adivasis and their ancestral land has been disrupted, and so has their relationship with their former landlord. As labor is in abundance now, they are forced to compete for dwindling labor opportunities in a highly competitive labor market. Credit remains an insurmountable problem. To the existing debts of the Adivasis the payment of installments has been added. Notwithstanding the existence of cooperative credit societies, the moneylender has maintained his position in the village. The societies require a client to provide for security, for trustworthiness and guarantees. Capital has remained scarce, and local influential people are able to redirect credit facilities and appropriate money to their own use.

The Adivasi peasant lacks the efficacious means to change his economic situation. His major problem today is, as in the past, in preabolition days, to establish a lasting relationship with a moneylender. Although the Adivasis are involved in a market economy, they do not partake in profitable commercial productivities. On the contrary, their present social position tends to reduce their changes to escape insecurity of subsistence. For the Adivasis are now,
mostly employ das agricultural laborers, generally on daily wages, and treated as laborers.

NOTES

1. This far-reaching act is confined to a few states of the Indian Union only, like the state of Gujarat. Other state governments have proceeded these efforts to guarantee the tenant's rights differently.

2. Information for this paragraph is from various sources, to be mentioned are Clatter (1969), Khanpurkar (1945), Naik (1947), Ghanshyam Shah (1977), and P. G. Shah (1964).

3. Sometimes there are ethnic groups which are able to rise in the social hierarchy of the society. Before independence it was usual to distinguish between the various groups which together form the cluster of Patidars. One of the poorer and lower groups was the Kanbis of Bardoli. They were described as being from tribal origin. Today it would be better to refer to this out-of-hearing of the group members, because they will take such remarks as an insult. They are Patels and from Rajput origin. Moreover, they explain that they were fierce anti-British opponents and staunch Gandhi followers. Today, they are economically and politically the dominant caste in the central belt of District Surat.

4. From a strict economic point of view agricultural commercialization (or modernization of agriculture) occurs when agriculture is submitted to the market forces. However, a political element should be added here, i.e., government action, because government steps in to initiate chances for businessmen and entre-
preneurs to enter the market (Van Lindert 1978:447-50).

5. Land tenure means, the manner and the right in which land is held and possessed as well as the duration of holdings. Tenure is the legal relation in which the holder of any land stands to government, or any other landlord (Patel 1950:3).

6. In a comment on land reform Mukerji gives a summary of these tenures in the Bombay Province (to which Southern Gujarat once belonged) for the years 1941-1942. Unrestricted tenure completed 23,220,000 acres or 95 per cent of the total cultivation area under ryotwari and restricted tenure completed 1,220,000 acres, or the other 5 per cent (Mukerji 1952:23).

7. In those days, South Gujarat was part of Bombay state, which, a few years after "tillers' day," was split into the states of Gujarat and Maharashtra.

8. Certain provisions of the act are not applicable to industrial or commercial undertakings and to areas under the cultivation of sugar cane and fruits, neither to municipal areas in order to protect their industrial development, and other nonagricultural development. Tenants in these areas have remained protected tenants. There is also a restriction on transfers of lands purchased under the act to prevent a new process of alienation.

BIBLIOGRAPHY

Agricultural Legislation in India
Ballhatchet, K.
1957    Social Policy and Social Change in Western

Barmeda, J. N.
1950    Agricultural Tenancy in Gujarat. Ph.D.
        thesis, Bombay University, Bombay.

Bellasis, A. F.
1854    Report on the Southern Districts of the
        Surat Collectorate, Letter from 1850
        Selections from the Records of the Bombay

Beteille, Andre
1980    A Propos du Concept de Tribu. Revue

Bhargava, Brijkshore
1936    Indian Peasant Proprietorship. Bombay.

Bombay Land Record-of-Rights Act
1909    (Bombay Act, IV, 1903). Bombay.

Bombay Presidency: Selections from the Records of the
Bombay Government
1894    No. CCLXXVIII, New Series, Character of
        Land Tenures and Systems of Survey and
        Settlement in the Bombay Presidency.
        Bombay.

Breman, J. C.
1974    Patronage and Exploitation: Changing
        Agrarian Relations in South Gujarat, India.
        Berkeley: University of California Press.

1978    Seasonal Migration and Co-operative Capital-
        ism: The Crushing of Cane and of Labour
        by the Sugar Factories of Bardoli, South
        Gujarat. Part I. Journal of Peasant Studies
        6:41-70.
Breman, J. C.

Broomfield, R. S., and R. M. Maxwell

Census of the Bombay Presidency, 1872

Census of India

Darling, M. L.

Desai, I. P.
1969 The Vedchhi Movement. Surat: Centre for Regional Studies.

Desai, M. B.

Desai, M. B., and C. H. Shah

Desai, M. H.
Furber, Holden

Gazetteer of the Baroda State

Gazetteer of the Bombay Presidency

Churye, G. S.

Glatter, Augusta

Gupte, K. S.

Gupte, K. S. and A. K. Gupte

Hamilton, W.

Kavi, C. D.

Khanpurkar, D. P.

Kosambi, D. D.
Lindert, Paul van

Long, Norman

Malaviya, H. D.

Mukerji, K.

Mukherjee, Nilmani

Mukherjee, Radhakamal
1933 Land Problems in India. London.

Naik, T. B.

Panchanadikar, K. C.

Patel, G. D.

Report of the All-India Rural Credit Review Committee
1969 Bombay: Reserve Bank of India.
Report on the Deccan Riots
1873 Extracts by Commissioner Chaplin "A Hundred Years Ago." The Indian Journal of Agricultural Economics VII(2):87-94.

Rogers, Alexander

Rudolph, Lloyd I. and Susanne Hoeber Rudolph

Selections from the Records of the Bombay Government
1854 No. II, New Series. Bombay. (See A. F. Bellasis.)

Shah, B. V.

Shah, Ghanshyam

Shah, P. G.

Sonius, H. W. J.

Srinivas, M. N.
Statistical Atlas of the Baroda State, from 1900-1907
1918 Baroda.

Whitcombe, Elizabeth
1971 Agrarian Conditions in Northern India.

Woodruff, Philip
CHAPTER NINE

MODERNIZATION, PAUPERIZATION AND THE
RISE OF LANDLESSNESS:
A CASE STUDY FROM BANGLADESH

Salauddin M. Nurul Alam
Chittagong University

Bangladesh is a country of villages where 91 per cent of the population lives in the rural areas and derive their livelihood from agriculture. Unlike many other Third World countries landlessness is a serious problem in Bangladesh (ILO 1976, Jannuzi and Peach 1980, Adnan et al. 1978, Alam 1982). In recent years the number of landless and near-landless people in Bangladesh has increased significantly. This is in spite of the fact that some important programs were undertaken for agricultural and rural development to improve economic conditions of all classes of people, especially the rural poor and the landless. In Bangladesh landlessness is a multifactor phenomenon caused by the interaction and adjustment of land size, property relations, class structure, demographic pressures, and technological interventions (Adnan et al. 1978). Indeed an analysis of the rise of landlessness requires an examination of the settings where people live and make their decisions and sociopolitical and economic systems.

It is important to recognize that presently the rural areas are not isolated from exogenous influence. More exposure to agricultural modernization programs has made rural people more vulnerable to outside influences. The micro-economy of the village society is significantly affected by the policies, programs, and decisions of the macro-level of the national economy. It will be shown in the paper how an unawareness and a lack of understanding of the planners, bureaucrats and politicians of what exists at the village level created some unrealistic and inappropriate programs.
that exacerbated the increase in the number of landless in the rural areas of Bangladesh.

This paper contains several sections, the first of which defines and clarifies such concepts as modernization and pauperization and a discussion of how these concepts relate to the problem of landlessness in Bangladesh. The second section provides a definition of the landlessness, a description of landlessness over time, and also the present status of the situation in Bangladesh. The third section is a short description of the sources of data, followed by a description of how the landlessness is exacerbated by various governmental modernization programs. The final section contains the summary and the conclusions of the paper.

MODERNIZATION AND PAUPERIZATION: CONCEPTUAL CLARIFICATION

In recent years some important attempts were made toward agricultural and rural development in Bangladesh. The two most widely implemented programs were the New Rice TechnoL (henceforth NRT) and the two-tier Comilla cooperatives. The concept of modernization has a variety of meanings and are used differently in the literature. However, this paper will define modernization specifically as the NRT and the Comilla cooperatives, which have significantly affected the people of all rural Bangladesh. This paper will show how these two along with other ancillary programs that have been heralded as panacea for all round rural development in the mid-1960s by planners, bureaucrats, and politicians have in fact impoverished a large segment of rural people and have thrown another segment into landless and near landless category.

The NRT represents a package use of High Yield Variety (HYV) seed, fertilizer and controlled irrigation. In Bangladesh NRT began with the distribution of fertilizer and irrigation with smaller number of pumps and tube wells. In 1966 the first variety of HYV seed (IR-20) the crucial component of NRT was introduced. The objectives of NRT were: (1) increasing agricultural output, particularly the attainment of self-sufficiency in the production of food
grains; (2) creating employment opportunities in rural areas; and (3) reducing rural poverty and promoting equal income distribution (Alamgir 1975:274).

A new type of cooperative that was tested and subsequently developed in the Kotwali thana4 of the Comilla District provided the institutional backdrop of the new rice technology. Akhter Hamid Khan, the principal architect of Comilla cooperatives, pointed out that:

Economically the village is explosive, for socially the old leadership and the old institutions are now completely helpless. In some cases they have totally disappeared. Introducing new skills and new implements and new methods will require a complete reorganization of the social and economic structure of the village [1973:6].

Indeed through this quote Khan indicated the core of the problem of rural areas of Bangladesh. Extreme disorganization of rural areas through the loss of old leadership and old institutions are the two principal facets of the problem. The question remains what is the way out? The Comilla cooperatives that were experimentally developed in the Kotwali thana of Comilla District are expected to provide the answer to the above two crucial problems. It is expected that Comilla would provide a new institutional set-up, create a new leadership, reorganize social and economic structure and create an atmosphere for all-round rural development.

The main emphasis of the Comilla cooperatives is on institutional planning rather than technical physical planning. Institutional planning refers to the establishment of two-tier cooperatives consisting of village-based primary cooperative and a federation at the thana level known as Thana Central Cooperative Association (TCCA). Every village cooperative society, which meets once a week, elects a model farmer, a manager, an accountant, makes thrift deposits and purchases shares for building up its own capital, and helps in the preparation of production plans and use of credit, linking credit with input. In this way Comilla appears to be a departure from the old cooperatives. Some other features of Comilla cooperatives are as follows:

305
1. In each village cooperative society a model farmer (MF) is selected by the members of the society. MF represents the society in its external dealings with TCCA and the thana officials. He attends extension meetings at the TCCA once a week from where he brings his knowledge of inputs and other improved agricultural practices. MF also discusses the problems of the society with the TCCA and the thana official. In this way MF acts as a two-way mediator in the dissemination of information of new technology from village to the thana and then from thana to village. The MF concept is an effective alternative of the government-sponsored agricultural extension agent network.

2. The Comilla cooperative encourages capital formation although in a meager way. Each farmer who wants to become a member of the village cooperative is required to buy a minimum of one share of taka 10 and to save at least 50 paisha per week.

3. The concept of Thana Training and Development Centre (TTDC) was also evolved with the Comilla cooperative which has become the chief focus for training and organizing the farmers and the cooperatives. At the TTDC officers from different nation building departments, i.e., agriculture, education, health, family planning, livestock, cooperatives and rural development are housed together. The thana Circle Officer (CO) development acts as the chief executive officer of TTDC.

Apart from providing a suitable strategy for rural development, Comilla has also contributed to the development of two other complementary programs for rural development. These are:

(1) Rural Works Program (RWP).
(2) Thana Irrigation Program (TIP).

1. The RWP is mainly a labor intensive program and is based on the PL-480 counterpart funds. It was designed for building up essential physical infrastructure for the rural areas through certain labor absorbing programs. This program includes the building and
rebuilding of roads, canals, culverts, embankments, the excavation of derelict tanks and other public works at the village, thana and district level. These projects utilize the unemployed landless and near-landless people in the dry season.

2. The TIP was envisaged as a controlled irrigation program in 1966-1967 to provide irrigation facilities to organize pump groups through excavation and re-excavation of canals and provision of pumps. The crux of the TIP program is the pump groups which the villagers form in order to efficiently utilize scarce water in dry season.

The concept called "pauperization" explains the process of landlessness in Bangladesh. Pauperization refers to a process of general impoverishment of all segments of people in rural areas. It is a situation of gradual alienation from the means of production. Pauperization is evident in land sales, land mortgages, a decline in real wages and income, an increase in population and also a simultaneous increase in production cost and a decrease in productivity.5 This paper will argue that there are certain inherent shortcomings in the formulation and implementation of various agricultural and rural development programs in Bangladesh, and that instead of improving the economic conditions, these shortcomings are leading to pauperization and ultimately to a landless and near-landless situation.

LANDLESSNESS IN RURAL BANGLADESH

Although the landless laborer as a species was in existence as far back as antiquity (Adnan et al. 1978:3), landlessness was never quite as critical as it is today. In the past, most village communities of the Bengal region were prosperous self-sufficient little communities (Powell-Baden 1899, Mukherjee 1957), and there was no tendency toward the growth of any distinct class of landless laborers in the districts of Bengal (Hunter 1876:301, 309). Recently landlessness emerged as the inevitable outcome of the availability of land and the increasing growth rate of population. A. R. Khan rightly points out that:

A. R. Khan rightly points out that:
The combination of a very unfavorable average resource endowment (only .03 acre of cultivable land per rural person and only 0.4 acre per member of an average agricultural household) and a high degree of inequality has resulted in an unprecedented concentration of extreme poverty in rural Bangladesh today [1976:137].

The exact number of landless people in Bangladesh is hard to determine. Abdullah et al. (1964) and A. R. Khan (1976) have made an estimate of the size of landless in Bangladesh. Combining their estimates and ignoring the problem of definition, it is found that the percentage of landless households increased from 14 per cent in 1951 to 18 per cent in 1961 and 38 per cent in 1973-1974. It shows a net increase of 24 per cent over a period of 23 years. A. R. Khan also compiled data from various population censuses, and Master Surveys of Agriculture showed that the number of landless labor as a percentage of total cultivators went up from 14 per cent in 1961 to 20 per cent in 1968-1969.

However, there is no agreement among the social scientists as to the definitions of landless. I am inclined to use two definitions of landlessness. First there are households (landless I), who may or may not own homestead land but own no cultivable land. Second is the functionally landless households that own no more than 0.50 acre of land excluding homestead land. They are "functionally landless" because such households cannot be considered to have a viable agricultural holding even in a nation in which the average size of an agricultural holding is small (Jannuzzi and Peach 1980:21). Furthermore, "functionally landless" will be merged with "near-landless" households and the discussion in this paper will be limited to these two categories of landless. The recent data concerning the above two categories are given in Table 1.
TABLE ONE

LANDLESSNESS IN BANGLADESH
(1977-1981)

(\% of total households)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Landless I</td>
<td>26.82</td>
<td>28.78</td>
<td>32.79</td>
</tr>
<tr>
<td>Functionally Landless II</td>
<td>36.00</td>
<td>21.29</td>
<td>15.29</td>
</tr>
</tbody>
</table>

Source: Alam (1983); Jannuzi and Peach 1980.

An increase in the size of functionally landless households is indeed significant. These households are most vulnerable in time of economic crises that might even jeopardize their existence and put them in a completely landless situation. Moreover because of poor economic conditions and low capacity for investment, the functionally landless households either do not participate or sometimes reluctantly participate in agricultural and rural development programs. As a result, their current conditions continue with the probability of further decline in the future.

SOURCES OF DATA

This paper is an accumulation of the author's research and thoughts of the last several years. The research for the paper has two components. First is an intensive library research of different published materials on NRT and other rural agricultural development programs in and out of Bangladesh. Important information is also derived from different statistical yearbooks of Bangladesh, agricultural censuses, surveys and also population censuses. The second component of research consists of field work in two Bangla-
desh villages which lasted for ten months from March of 1981 through December.

The village data were collected in two phases. The first was a household questionnaire which included both structured and unstructured questions. This phase provided vital information such as household sizes, assets, sources of income, landholding patterns, and land transactions. The household survey was very detailed and provided preliminary information that was to be further investigated in the second phase called the participant observation method. This was the most intensive phase of the research.

PROCESS OF LANDLESSNESS: HOW IT IS ACCELERATED

The principal thrust of criticism of agricultural modernization programs in Bangladesh is that technocratic, top-down, hierarchical planning is devoid of reality and lacks in-depth knowledge about the rural areas and the rural people. This resulted in the formulation of unrealistic plans that inadequately meet the needs of rural people. This is not surprising in a bureaucratic and hierarchical system of planning and administration which is a legacy of British and Pakistani colonial rule. The way bureaucrats are recruited, trained, and supervised fosters in them an urban mentality, quite detached from the problem of village people. Many of them have little respect and confidence in the capacity of rural people. A renowned Bangladesh economist describes two crucial dilemmas in rural development as follows:

Bureaucratic approach to rural economic change tacitly assumes that the rural people are passive, fatalistic, uninterested in initiating anything of their own, incapable of undertaking initiatives to change their lives, and therefore, need constant prodding, supervision and spoon feeding. While this view does not do justice to the reality, the opposite view, which seems to claim that the rural people are fully capable and willing to change their lives if only the bureaucrats would leave them alone, is equally unreal. The second
view refuses to see the class structure of rural society and the exploitative process within it. Central intervention through institutional designs, legislation and appropriate policy measures must keep the exploiting class under check and let the dispossessed class have a fighting chance to free themselves from the instruments of exploitation [Yunus 1976:51].

In a SIDA report the bureaucrats' attitude is described as follows:

Most government officials come from middle or upper class and tend to be neither field-oriented, nor poor-oriented. When they do leave their urban offices to make trips to the field, it is quite natural that it is the rural rich whom they most easily communicate with [Vylder and Asplund 1978: 66].

Apart from the class character and background of bureaucrats, which is reflected in their attitude to the village people, there is another problem. This is linked to the development administrative structure at the thana level, considered to be the focal point of rural development in Bangladesh. By development administrative structure, I refer to the different hierarchy of officials at the thana level and the relation among them. In every thana in Bangladesh there are at least 15 to 20 officials from different development-related (or national-building) departments. Many of these departments lack coordination and sometimes their work becomes redundant. What can be done by one or two officials is now being done by a dozen officials. The personal rivalry and jealousy among these officials due to difference in status, pay and power is endemic. Given these situations it is unlikely that a plan made by these people for rural development will fulfill the need and aspiration of rural people.

The failure of bureaucrats and planners to understand the problems of rural areas is reflected in the programs they formulate and execute. By and large the NRT is implemented within a prevailing socioeconomic structure that completely overlooks the existing land distribution pattern. As a result, those with a large amount of land have a
higher participation in NRT than the small and the medium farmers. The rich farmers have more access to institutional sources of credit (i.e., cooperatives, or banks) than those with a small amount of land. Since land is the only acceptable security for credit for cooperatives and other institutional sources of credit, these institutions are useless for the landless, tenants, and the sharecropper.

Large and middle-sized farmers also dominate pump or irrigation groups. The location of pumps and the management procedures are determined by rich and influential farmers. It is also evident that the managers and the managing committee members have a much higher average amount of irrigated land than the ordinary members. A SIDA/ILO report in 1974 stated the situation as follows:

In late 1960's the pump group emerged as organization of rich farmers, by the rich farmers and for the rich farmers. Although the cooperatives present no barrier to the membership of small and marginal farmers but rich cultivators soon become over-represented and tend to dominate the organization [Abdullah et al. 1974:121].

I have found a similar situation in my two research villages. The socioeconomic background of managing committee members indicate that all of them are rich cultivators and influential members of the village community. Elements of kinship dominance is also found. In most cases rich cultivators take advantage of the amount of timeliness of the distribution of water. It may be mentioned that water is crucial for the cultivation of HYV. Since HYV is cultivated in dry winter season, a right amount at the right time is sine quo non for the success of the HYV program.

As a result NRT emerged as what Alavi (1976) calls an "elite farmer strategy," which provided the large farmers a greater opportunity to prosper. What is surprising is the absence of any program for the landless and small subsistence farmers who needed support from the government.

In the late 1960s the success of NRT was impressive due to a significant increase in rice production.7 The sine
quo non of success during this period was a heavily subsidized government input distribution program. In the early years of NRT various inputs were subsidized by the government. A subsidy is the difference between the actual price (cost and distribution) and the sale price to the farmers. The government sought to encourage cultivators' acceptance of new inputs, especially fertilizers, HYV seeds, pesticides and cheaper means of dry season irrigation through subsidy. The two most highly subsidized inputs are fertilizer and irrigation water. In the late 1960s the overall subsidy rate on different varieties of fertilizer and types of irrigation was 60-65 per cent. Pesticides was almost 100 per cent subsidized. The recent withdrawal of subsidies for fertilizer, seed, pesticides and irrigation and an increase in labor wage have inflated the total cost of production almost 650 per cent over the 1965-1966 cost. This recent withdrawal was necessitated by budgetary constraint.

There have also been changes in the real wage of rural labor. The reasons for this rise and fall are: (1) The decline in 1955-1960 was caused by a situation that developed in the aftermath of the Korean boom. During the Korean War Bangladesh agriculture gained substantially from the export of jute. (2) An increase in real wage after that period was a return to the level of pre-Korean boom situation, slightly higher and with relatively fewer fluctuations. Khan points out that during this period the terms of trade for agriculture improved, aided by an increase in industrial employment which absorbed some surplus labor from agriculture (1976:153). (3) The decline in the late 1960s and early 1970s was related to the increase in population, cost of production, increase in the price of essentials, decrease in output, and limited increase in agricultural employment opportunities. Since the mid-1970s there is a steady upward trend in the wage of agricultural labor without any declining trend.

Production cost of both local and HYV varieties have registered a considerable increase in recent years. There has been a significant increase in labor wage cost since the mid-1960s. This is affecting the total production cost of both HYVs and local varieties. The increase in cost in HYV is higher than in the local variety. HYV needs more intensive cultivation and irrigation, application of fertilizer and pesticides needs more labor compared to local variety. On
the contrary labor requirement in local variety although less but the cultivation of old (or local) varieties of rice has also become expensive. The three most important components of production cost of local variety are plowing, weeding, and harvesting. The cost of operation of all these three components have increased 450 per cent to 500 per cent over the last two decades. So even if a cultivator decides to cultivate a local variety they cannot escape cost and thereby loss. Although their loss may be lower compared to HYV they will continue to incur the loss. The overtime trend of cost for the cultivation of HYV in my two research villages is shown in Table 2.

**TABLE TWO**

A SUMMARY OF RECENT TRENDS IN INPUT COSTS, PRODUCTIVITY AND RICE PRICE

<table>
<thead>
<tr>
<th>INPUT</th>
<th>PERIOD</th>
<th>% INCREASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labor</td>
<td>1967-80</td>
<td>525</td>
</tr>
<tr>
<td>Irrigation</td>
<td>&quot;</td>
<td>650</td>
</tr>
<tr>
<td>Fertilizer (three types)</td>
<td>&quot;</td>
<td>1,149</td>
</tr>
<tr>
<td>Urea</td>
<td>&quot;</td>
<td>1,220</td>
</tr>
<tr>
<td>TSP</td>
<td>&quot;</td>
<td>1,050</td>
</tr>
<tr>
<td>MP</td>
<td>&quot;</td>
<td>1,312</td>
</tr>
<tr>
<td>Items</td>
<td>% Increase/Decrease</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PERIOD</th>
<th>&quot;</th>
<th>% Increase/Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per-acre Production Cost of HYV Boro (1968-80)</td>
<td>565 Increase</td>
<td></td>
</tr>
<tr>
<td>Per-acre Productivity of HYV Boro (1968-80)</td>
<td>19 Decrease</td>
<td></td>
</tr>
<tr>
<td>Price of Medium Quality Rice (1968-79)</td>
<td>294 Increase</td>
<td></td>
</tr>
<tr>
<td>Cost of Living Index 1969-70=100 (1967-75)</td>
<td>444 Increase</td>
<td></td>
</tr>
</tbody>
</table>
A situation of increasing cost and declining productivity further aggravated the conditions of tenant and small farmers. At the present terms of contract, sharecroppers bear all costs of production but only get half of what they produce. After giving half to the landlords, their shares hardly cover the cost of production. Since the landless and near-landless cultivators lack capital to afford the cost of production, in many instances they end up with selling their household goods, land and even mortgaging their land.

The Comilla cooperatives are a prime example of how a highly appreciated program for rural and agricultural development is contributing to an increase in the number of landless and near-landless people. The program is based on the assumption of an "undifferentiated peasantry," which has created a situation in which those with larger amounts of land have benefitted more than those with little or no land. Two studies in Comilla thana demonstrated that the number of landless people which accounted for 15 per cent of the households in the late 1960s (Akhter 1964), increased to 27 per cent in 1975 (Rahim 1977). Khan summarizes that during this period there was an increase in landlessness, an increase in the proportion of larger peasants, and a reduction in the proportion of smaller peasants (1976:406). In yet another study in Comilla, Van Schendel found that since 1960 the condition of the poorest households continued to deteriorate as their numbers increased (1981:30).

The most unfortunate drawback of the program is that it has nothing that would benefit the landless or poor cultivators. The landless people have been systematically excluded from the cooperatives while the large and medium sized farmers participated and benefitted more from these cooperatives. In Natore and Ggaibandha regions about 30 per cent of the cooperative farmers are big farmers owning more than 5 acres of land (Hamid 1978). Khan concludes that "the Comilla cooperative programs have failed to protect the small peasants from increasing proletarianization and near proletarianization" (Khan 1979:408). The significant trend is toward ruination and pauperization especially for the landless and near-landless people.

This paper argues, therefore, that the new seed fertilizer technology and the Comilla cooperatives have become a nightmare for many poor landless and near-landless people.
transforming many of them to a point of no return, accentuating the process of dispossession, and raising further the number of landless. The 1977 Agricultural Mission has made an important observation which is worth quoting at length.

The irony is that the government's own program of agricultural and rural development are tending to accentuate this process of dispossession of the poor farmers. First, the new technology combined with share tenancy and the risks of farming make them more vulnerable to total indebtedness and forced sale of land. The government's liberal doses of credit and input subsidies to elicit the adoption of the higher costs inputs have been syphoned off by the big landlords, who retail them out at higher interest/rentals to the smaller farmers, resulting in their further indebtedness and ultimately to the forced sale of land ... If the poor farmer or tenant is to retain his land under such a system, he had better steer clear of the high cost of new technologies ... [Quoted in Vylder and Asplund 1978:109].

LANDLESSNESS AT THE VILLAGE LEVEL

The micro data presented here were collected from two villages located in the southeastern part of Bangladesh. The trend that was observed at the macro level can be proven with data from the two researched villages. The region where the two villages were located is very densely populated. One of the villages that will be called Comilla Village (CV) is larger than the other village called Noakhali Village (NV), although the population of the former is smaller than the latter.

There is no uniformly agreed upon definition of a village. This problem arises because a village in Bangladesh does not have any definite boundary or nucleated area. The villages in Bangladesh represent a scattered settlement pattern of homestead clusters on land. The political interaction of villagers often goes beyond a particular
village and links itself with extra-village sociopolitical groups. Sometimes a village is designated as a mouza village, a revenue administration unit. In other cases, it is a census unit. These varied ways of referring to a village have created problems and confusion. Here I will use the term village to refer to a socially agreed upon area located in geographic space. In this sense a village is a "geosocial entity."

The NV is 375 acres in size, of which 271 acres are cultivable. The CV has a total area of 417 acres of which 313 acres are cultivable. The net cultivable area in CV is 263 acres, after we exclude the land owned by the people of adjoining villages. The net cultivable area of land includes two kinds of land: (1) land owned by the people within the village and (2) the land owned by the people outside of the village. Only 3 per cent of cultivable land owned by the people of these two villages is located outside the village boundary. In 1981 the population of CV was 1,304 while the population of NV was 2,100. In the last several decades the population of these two villages has increased significantly, putting pressure on limited land, raising the density per-cultivable acres 113 per cent in NV and 62 per cent in CV since 1951.

Twenty-nine per cent of the total households in the two villages are landless. In NV it is 32 per cent and in CV it is 23 per cent. Most importantly a larger number of people own as little as .06 acre. Thirty-six per cent of the households in the two villages can be considered as functionally landless which is higher than the national average of 21 per cent as reported by Jannuzi and Peach (1980). The average amount owned by these functionally landless is .25 acre, but 19 per cent of them, who own less that .25 acre of land, are hard pressed both socially and economically in the rural areas. They have a few assets, and most of them work as agricultural wage laborers. Agricultural income is inadequate and uncertain and, therefore, in times of economic crises, the small landowners do not have an alternative but to sell or mortgage their land.

Most landless villagers have become so either during their father's times or during their own times, but 25 of the 126 landless respondents have become landless during their grandfather's time (Table 3).
TABLE THREE
PERIOD OF BECOMING LANDLESS

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Both Villages</th>
<th>CV</th>
<th>NV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grandfather's time</td>
<td>25 (20.4)</td>
<td>12 (30.76)</td>
<td>13 (15.66)</td>
</tr>
<tr>
<td>Father's time</td>
<td>48 (39.3)</td>
<td>11 (28.20)</td>
<td>37 (44.58)</td>
</tr>
<tr>
<td>Own time</td>
<td>49 (40.2)</td>
<td>16 (41.10)</td>
<td>33 (39.76)</td>
</tr>
</tbody>
</table>

N.122 N.39 N.83

Missing cases 4 3 1

Figures in parenthesis indicates percentage of the total.

In the past, many of the landless sold land in small bits and parcels. Eighty-seven per cent of households, which became landless during their own time, sold less than an acre of land and in fact an average amount of .44 acre. Most land sellers in this category sold land to escape poverty and to pay debts. Many of these sales (42 per cent) occurred during 1971-75, a period of severe economic crises and food shortages in Bangladesh. The sales did not occur in a single parcel, rather in small bits and parcels. Six respondents sold land in the amount of .12 acre while there were two respondents who sold .06 acre, .36 acre, and .48 acre of their land.

Increased land sales and mortgages are the two most important indications of general pauperization and eventual landlessness in the two villages. Land sales mark a desperate and frantic effort of villagers to ensure their survival. Mortgaging represents a temporary salvaging of economic conditions by shifting the control of one's land to someone else for money. One hundred forty-five respondents sold a total of 63.38 acres of land involving 183 land transactions (Table 4).
### TABLE FOUR

**LAND TRANSACTIONS**

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1948-55</td>
<td>10 (5.46)</td>
</tr>
<tr>
<td>1956-60</td>
<td>6 (3.28)</td>
</tr>
<tr>
<td>1961-65</td>
<td>20 (10.93)</td>
</tr>
<tr>
<td>1966-70</td>
<td>36 (19.67)</td>
</tr>
<tr>
<td>1971-75</td>
<td>71 (38.80)</td>
</tr>
<tr>
<td>1976-80</td>
<td>40 (21.86)</td>
</tr>
</tbody>
</table>

N.138 (100.00)

Figures in the parenthesis indicate percentage of the total.

It is evident from the table that out of 183 land transactions, 147 (80 per cent) took place during 1966-80, particularly since 1970.

In recent years increased use of land mortgages has greatly contributed to the pauperization of rural households and eventually to the alienation of cultivators from their most vital means of production. The crux of the land mortgage problem in Bangladesh is that when a cultivator mortgages his land to another, the cultivator loses all his control in the land (except holding the title), until he repays his money. A person who takes responsibility for the mortgage may cultivate it himself, rent it out, or anything he likes. The amount of money a person gets from a land mortgage is much lower than the actual market price of land. This is due to the small landowner's lack of bargaining power. It is likely that a land mortgage might eventually end up in the sale of the same plot. In practical consideration, it is a kind of *de facto* sale much below the
market price. Thirty-nine households which currently have their land in mortgage have sold land in the past. The total amount they sold is 18.43 acres, which is 29 per cent of the total land sold in both villages. There are 90 households in these villages that have 21.05 mortgaged acres. The small landowners have sold and mortgaged more overall than the larger landowners.

A significant similarity can be seen between the reasons for land sale and land mortgage. Fifty-seven per cent of the land sellers and 74 per cent of the land mortgagors cited poverty and family maintenance as the most important reasons for land sales and purchases. Although land sellers and mortgagors did not specifically cite higher agricultural investment in NRT as the reason for these sales and mortgages, they did imply that it might have implicitly caused poverty.

An increase in production cost of rice significantly affects the cost of living in rural areas. This is because in Bangladesh rice is a staple food and constitutes almost 75 per cent of the total food expenditures of middle, lower middle, and poor Bangladeshis. The cost of production refers to the cost of producing per-maund of rice equivalent to 37.33 kilogram (or 82.29 pounds). The problem is that higher costs of production lower the profit margins of the farmers, and therefore they do not have sufficient cash to purchase all their needs which cannot be produced by the household. In NRT although the amount of return is high, it is at the cost of high investment. In local variety although the production cost is relatively low the average production is two and a half times lower compared to HYV. So when the cost of producing rice and other agricultural commodities increases, it is automatically reflected in an increase in living costs.

The process of becoming landless appears to be simple: the small landowners often lack sufficient capital to cope with a higher production cost and an increase in the cost of living. Thus they attempt to make ends meet by selling and mortgaging land. An intensive interview with several landless and functionally landless households disclosed that aside from poverty and family maintenance costs, the need for greater investments in NRT, has compelled many to mortgage and sell their land and at times
other household goods. An increase in the cost of living also seems to be caused by several other modernization factors. First, development of transportation and communication systems and a consequent increase in urban contacts; secondly a greater reliance on market for both producer and consumer goods, supplied outside of village; and finally, an increasing monetization of rural economy instead of a simple barter economy and consequent vulnerability to market forces.

In order to realize the extent of poverty it is important to mention how far the available cultivable land is sufficient to provide enough food to meet the basic minimum nutritional requirements of an average size household in an average year. Mead Cain (1976) estimated the amount to be 1.60 acres and Peter Bertocci (1970) puts it at 1.50 acres. Taking 1.50 as the dividing line of the households who can and cannot provide minimum food, it is found in the author's research villages that only 10 per cent of households own more than 1.50 acres of land. And 65 per cent of households either do not own land (29 per cent landless) or own less than .50 acre of land (36 per cent functionally landless). This 65 per cent of households are living at a starvation level and mostly depend on labor wage as their important source of income. Their condition is more vulnerable in a current situation when the rice price is increasing at a much higher rate than the increase in labor wage. In the author's research villages it is found that in between the years of 1955-1980, in NV money wage increased 134 per cent while rice wage increased only 42 per cent. In CV, money wage increased 109 per cent and rice wage increased 16 per cent. Rice wage is calculated deflating the money wage by appropriate rice price (Alam 1983). So the present situation is an overall pauperization accentuated by the growth of landless and near-landless households. This is again linked to the various modernization programs and the failure of these programs to provide necessary wherewithal to eke out a subsistence living.

So the overall trend in these two villages in general pauperization reflected through more frequent land sale and mortgage, and eventually increased number of landlessness. It seems that since 1966 pauperization and landlessness have increased significantly in both villages. Obviously these
different agricultural modernization programs have indeed accentuated the process of landlessness.

SUMMARY AND CONCLUSIONS

This paper has described the nature, extent and the process of landlessness in Bangladesh. It has also shown how different agricultural modernization programs have contributed to general impoverishment and thereby landlessness in Bangladesh. The situation was illustrated from a case study of Bangladesh. In the paper landlessness referred to pure landless and functional landless. It is evident that there is a significant trend toward an increase in the size of both these groups of landless people.

This paper also argued that there were some fundamental shortcomings in the planning and implementation of agricultural modernization programs that have contributed to landlessness in Bangladesh. Since the planners who plan and the bureaucrats who execute those plans lack an in-depth knowledge of the "institutional constraints," they further aggravate the problem. The hierarchy of interests in landownership has been overlooked and the assumptions of an "undifferentiated peasantry" in the planning and implementation process had led to a situation where the rich people have derived more benefits than the poor people. This further accentuated the problem of the poor and it is quite possible that the problem may further deteriorate in the future with an ever increasing population.
NOTES

1. The research for the paper was made possible through a Ph.D. fellowship grant by the Agricultural Development Council, Inc., New York. The author wishes to thank Dr. Jack O. Waddell, Professor of Anthropology at Purdue University, and Dr. Peter J. Bertocci, of the Department of Sociology at Oakland University, for their useful comments at various stages of the research. The author also thanks Mr. Criss Helmkamp and Mrs. Ann Cauthen for their editorial help. The author alone is responsible for the contents of the paper. The author is an assistant professor of economics at Chittagong University, Bangladesh.

2. There is excellent literature on landlessness and poverty in rural Asia and elsewhere. An International Labor Organization publication of 1976 contains case studies on Pakistan, India, Philippines, and Sri Lanka on poverty and landlessness. In the case studies the authors discussed the factors leading to increased landlessness and poverty and the ways the people are coping with it (ILO 1976, Adnan et al. 1978, Jannuzi and Peach 1980, Alamgir 1978).

3. Comilla is a district in Bangladesh. It is located in the southeastern part of Bangladesh and is the second most densely populated district (i.e., 2,654 persons per square mile) in Bangladesh after Dacca District.

4. A thana is similar to a rural county in the United Kingdom or the United States. On an average a thana has a population of 225,000. A Kotwali thana indicates a principal thana in a district.

5. A comprehensive discussion can be found in Alam (1983).

6. Rather than depending on a single method, it is helpful if more information is gathered through an intensive phase involving participant observation as one of the strategies. It gives a change to the researcher to cross check the information that was gathered earlier. It also ensures greater reliability of the data thus collected.
7. The new rice technology is a very widely researched program. Some of these works include Brown (1970), Dalrymple (1976), IRRI (1975, 1978). In his book Brown predicts a surplus in cereal production. Also see Griffin (1979). This book contains some useful remarks on the performance of the so-called green revolution in Asia and elsewhere in the world from a comparative and historical perspective. Griffin argues that the green revolution has failed to attain the expected increase in production and widened the inequality in income distribution.

8. "Institutional constraints" refers to the constraint imposed by land tenure system, class structure, traditional leadership, old values and dogmas. These are also called the institutional factors in development and the constraint imposed by these constitute institutional constraint.

BIBLIOGRAPHY


Alam, Salauddin M. Nurul  

1983 Marginalization, Pauperization and Agrarian Change in Two Villages of Bangladesh. Unpublished Ph.D. dissertation, Department of Sociology and Anthropology, Purdue University, West Lafayette, Indiana.

Alamgir Mohiuddin  

1978 Bangladesh: A Case Below Poverty Level Equilibrium Trap. BIDS, Dacca, Bangladesh.

Alavi, Hamza  

Bertocci, Peter J.  

Brown, Lester  

Cain, Mead  
1976 Demographic and Socioeconomic Profile of the Study Village. VFS Report No. 2. Dhaka: Bangladesh Institute of Development Studies. (Mimeographed.)
Dalrymple, Dana G.

Griffin, Keith


Hunter, W. W.

International Labor Organization

International Rice Research Institute
1975 Changes in Rice Farming in Selected Areas of Asia. Los Banos, Philippines: IRRI.

1978 Economic Consequences of New Rice Technology. Los Banos, Philippines: IRRI.

Jannuzi, F. Tomasson and James T. Peach

Khan, Akhter Hamid
Khan, Azizur Rahman


Mukherjee, Ramkirishna
1957 The Dynamics of Rural Society. Berlin: Academic-Verlac.

Powell-Baden, B. H.
1899 The Origin and Growth of Village Communities in India. London: Swan Sonnenschein.

Rahim, A.
1977 Amon Crop Survey in Comilla Kotwali Thana BARD. Comilla, Bangladesh.

Schendel, Willem Van

Soliman, Md.

Vylder, de Stefene and Daniel Asplund

Yunus, Mohammad
PART EIGHT

AFRICA

328
CHAPTER TEN

DEVELOPMENT POLICY, LAND REFORM, AND ECONOMIC STRATIFICATION AMONG THE MBEERE OF CENTRAL KENYA

Jack Glazier
Oberlin College

INTRODUCTION

Since Kenyan independence at the end of 1963, land reform has assumed a central place in national development planning. It represents a continuation, with important modifications, of policies of rural development originally articulated during the colonial era and predicated on the individualization of land holding at the expense of customary corporate controls.

Although the term "land reform" often implies redistribution of land among previously landless peoples, its meaning in the Kenyan context differs sharply from the more familiar connotations occurring in traditionally class-based societies of Asia, Europe, and Latin America. Land reform in these regions represents, at least at the level of policy if not in practice, a means for the more equitable distribution of land. In Africa, by contrast, land shortages were traditionally little known and hence provided no basis for political control by a ruling group whose power lay in ownership of the land. Goody (1971) has argued this point while also noting that the ratio of land to population was very high. Traditionally undifferentiated by economic classes, Africa generally and Kenya as a case in point have not witnessed the reassignment of the lands of large estates, with the exception of the "White Highlands," to previously landless peoples. The alienation of African lands to Europeans there had created serious land shortages...
resulting in a post-independence move to resettle African people on former European estates.

But aside from this scheme of resettlement in the former White Highlands, land reform proper has referred to a different set of processes predicated on the assumption that customary modes of land tenure inhibit critical development goals such as increasing both agricultural output and rural farm income. By divesting kinship groups of their customary corporate control of the land, the government has been attempting to terminate traditional social constraints on all matters pertaining to the land, including modes of land use, sale, and capital improvement. At the same time, the individualization of land tenure whereby each farmer secures a registered title to his land can, in the official view, accelerate rural development by enabling secure farmers to pledge their farm titles as collateral for agricultural loans.

A crucial step in this complex program has required the adjudication of many claims by traditional land-holding social groups—patrilineages—predominantly under the unwritten rules of customary law. Following land adjudication and the resolution of contending corporate claims, individuals within the lineages successful in litigation could then receive titles to particular lands within the corporate claim. As this program finally runs its course, the lineage as a corporation will be dramatically undercut by statutory land law emphasizing the rights and obligations of individual farmers.

The program of land tenure change in the agricultural areas of Kenya represents one of the two major approaches to the modern transformation of African rural economies. The Kenyan model, which might simply be termed the "individual approach," contrasts markedly with the "collective approach" of neighboring Tanzania, where development of the rural sector, according to prevailing ideology, grows out of traditional cooperation and communalism. While comparison of these two models of African rural development is beyond the scope of the present article, it is useful to bear in mind the social costs as well as the benefits of each strategy. Despite the idealistic hope accompanying the Tanzanian effort to collectivize agriculture and to promote a highly egalitarian African socialism, the present status of
ujamaa, or collective farm villages is grim. Compared to Kenyan agriculture built on the independence of small holders, Tanzanian collective farms have not increased agricultural productivity but rather have resulted in diminished output (Migot-Adholla 1979:171).

Although the Kenyan emphasis on rural capitalism and the entrepreneurship of small farmers has led to greater output and higher rural incomes than in Tanzania, the social costs of development policy based on individualized land tenure include the economic stratification of previously highly egalitarian societies. The recent Kenyan development plan (1979-83), for example, emphasizes the value of the family farm as a fundamental unit of rural production, but notes that "the incidence of concentration in landownership among the better-off small-scale farmers has increased" (Government of Kenyan 1979:53). The government officially discourages the ownership of large holdings and land speculation, but the concomitant emphasis on private ownership and individual entrepreneurial effort to improve the land creates a climate in which economic stratification and differential access to land, heretofore unknown, inevitably results.

In this article, I will consider the impact of Kenyan development planning in regard to land on the Mbeere, a Bantu-speaking people of Embu District, Eastern Providence. In examining customary patterns of Mbeere land tenure and social organization and the ways in which current development policy has fundamentally altered them, I will note the position of chiefs and other appointees, who were among the initial beneficiaries of the new land tenure policies. These individuals were the first to rise to the top of a social order growing increasingly stratified on the basis of access to salaries and the use of influence, which government service made possible. This discussion leads naturally then to conclusions regarding emerging patterns of rural stratification, including the creation of landed and landless classes in contemporary Mbeere.
The Mbeere inhabit the plains south and east of Mt. Kenya. They were traditionally organized in an acephalous society around shallow patrilineages and an age organization. They bear strong ethnographic and linguistic similarities to the other Bantu peoples of the higher elevations near the mountain. These groups include the Kikuyu, the Embu, and the Meru. The Mbeere are also culturally akin to their southern and eastern neighbors, the Kamba. All of the Bantu peoples of central and eastern Kenya maintain mixed economies based on farming and stockkeeping emphasizing sheep and goats, although maintaining some cattle is not unusual, especially among the Kamba. Considerable variation in the relative emphasis on farming and herding occurs between the various ethnic areas as well as within a single area.

Within Mbeere proper, an area of approximately 600 square miles inhabited by 60,000 people, three ecological zones occur (Brokensha and Glazier 1973:190). The first zone lies at the average elevation of 3,500 feet and contains land of high agricultural potential. The processes of stratification which I shall discuss are especially dramatic in this area, where the land is of great value for its cash crop potential, particularly in tobacco and cotton. Rainfall in this area averages some 40 inches annually, but it may be highly erratic, although its reliability is greater than in the lower zones of Mbeere. Farmers cultivate a number of different crops including maize, varieties of pulses, millet, and two very popular perennials, mangoes and bananas. Livestock does not flourish in this zone, and people prefer to concentrate their economic attention on farming, although some animals are still maintained. Owing to the relatively high potential of these upland areas, government has concentrated its initial land reform efforts here in an effort to spur agricultural development.

A second zone ranges from 2,500 to 3,500 feet in elevation and offers much less agricultural promise than the first zone, in the main because rainfall declines to a 25-40 inch annual average. Bananas fare badly in this area, and farmers tend to concentrate on pulses and on sorghum and millet. Some maize may also be grown. Below the second zone and following an ecological gradient from northwest to
southeast (from highest to lowest potential land), the third zone includes land below 2,500 feet elevation. Abutting Kamba territory, this parched area of lower Mbeere averages less than 25 inches of rainfall annually. Vegetation includes thorn trees, cactus, baobab and other markers of a very desiccated land suitable more for herding than for farming. With a small, scattered population, this zone has attracted little attention from the government except in recent years as plans for group ranches have begun to materialize.

Farming in the first two zones conforms to a distinct pattern dictated by two rainy seasons, each broken by a dry season. Men clear the bush for gardens or reclaim fallow lands which have lain uncultivated for at least two years. Once cultivated, a previously unclaimed piece of land remains part of the lineage estate. It does not revert to unclaimed status if it lies fallow.

Clearing bush—a highly labor-intensive activity—may be facilitated by enlisting the aid of neighbors, and burning off the scrub vegetation is not unusual. This practice receives the regular condemnation of government agricultural officers, who believe soil erosion will follow in the wake of this efficient strategy. Once the rains begin, both men and women normally commence planting, although they may delay if it appears that the precipitation will not continue. Otherwise, premature germination may result in the shoots drying up in the ground. But because of the highly erratic nature of the rains, even in areas of highest potential in Zone 1, no one can be certain about the reliability of rain in any particular season. Mbeere farming is thus a highly risky venture.

Like the clearing of bush land, cultivation itself represents a very labor-intensive activity dependent on basic horticultural tools such as the digging stick or, since the colonial era, the metal panga, which resembles a machete. During the 1970s especially, a greater use of animal-drawn ploughs was apparent, although only a small minority of farmers could afford the services of the plough team for the going rate of approximately five dollars per acre. Farmers may cultivate a particular field for at least four growing seasons before allowing it to lie fallow. If a garden has not been cultivated for several seasons, then the cost of hiring a plough could double. In addition, a tractor owned
by the government was available for hire at an even more prohibitive cost. In effect farming in Mbeere has traditionally been a very labor intensive activity built on the needs of a subsistence economy producing very little surplus food.

Since the 1960s, an increasing number of farmers have expressed interest in producing cash crops but only a small minority has assumed the risk entailed. In my research site, the Zone 1 area of Nguthi sublocation in northwestern Mbeere, tobacco drew the attention of most cultivators interested in cash crops. Yet they had to balance the labor demands on the subsistence food economy against similar labor requirements to produce tobacco. Because farmers were required by the local cooperative to cure their own tobacco, this critical aspect of tobacco culture necessitated the construction of a curing barn. These barns are considerably larger than either traditional huts or other familiar structures around a typical homestead, and a good deal of labor goes into their construction. People who have decided against raising tobacco emphasized their fear that such high labor expenditures for erecting a curing barn and for planting, weeding, harvesting and curing the crop would put at risk the more essential tasks surrounding the production of food crops. The recurring cycle of famine, which so dramatically informs Mbeere history and is an intimate part of the experience of each farmer, creates quite understandable caution in regard to any major agricultural change. Conservative rather than innovative attitudes predominate, primarily because the average farmer's margin for error in calculating how he will feed his family and attain some cash is very small. In these circumstances, poor people are less likely than their more prosperous counterparts to take risks (Hunt 1975).

CUSTOMARY LAND TENURE AND SOCIAL ORGANIZATION

The system of land tenure the government seeks to modify invests patrilineal descent groups with corporate control over land founded by the apical ancestor of the group. The social constraints built into this system
manifest themselves particularly in matters of land transfer. An individual farmer cannot sell or loan his garden plots to another individual without securing the permission of his agnates. But in other matters as well, a farmer's freedom of action is severely curtailed by his obligations to patrilineal kin, who maintain at least residual interests in all land claimed by their lineage. Under the new rules, land titles registered to individual farmers are believed to expand markedly the boundaries of personal maneuverability, which the government regards as essential in the new rural economy taking shape in Kenya. Specifically, the residual interests of the lineage in a farmer's land will be dissolved, and it is believed that individual cultivators will more easily secure loans by pledging their titles as collateral without any interference from agnates. In order to understand fully the key features of land reform and development policy, it is first necessary to examine at least briefly the framework of customary land tenure, which current development efforts are attempting to eclipse.

Since land tenure discussions must perforce consider concepts such as "property," "sale," and "ownership," it is essential to be clear about their precise meanings, especially in the context of non-Western economic systems. Western notions about private property, its disposition, and control are very clear, yet they inevitably convey incorrect meanings should we apply them uncritically to other cultural settings. Western ownership of land, for example, despite the various constraints of property law, empowers the individual owner with various prerogatives likely to be more comprehensive than those of cultivators holding land in kin-embedded forms of customary tenure. In traditional Mbeere, agnates could prevent their kinsman from selling the piece of lineage land he was cultivating and could constrain his efforts to grant tenancy rights. Thus, considering the perennial problem of translation in anthropology, especially in regard to the meaning of property, it is desirable to examine land tenure in relationship to different categories of rights including those of use, sale, tenancy and the like. The concept of ownership in this view is too gross and culture-bound to be of much use in understanding the traditional Mbeere system. Further, the vital distinction between rights of usufruct and rights of transfer in the customary system will highlight the crucial
relationship between individual action and descent group constraint.

Under the customary system, a senior man in the homestead—typically a patrilocal extended family sometimes reaching three generations—allocates gardens to his wife and to his married sons and their wives. Gardens may lie within a short walk from the homestead, or they may be a mile or two distant. In the prevailing pattern of land fragmentation, most people hold noncontiguous multiple gardens. In the several microenvironments of the research site, farmers were sensitive to the differing crop requirements for minimal levels of moisture and for particular soils. They thus value the pattern of multiple, dispersed garden holdings, and the government has made no sustained effort to consolidate each farmer's fragmented gardens into single plots.

Gardens allocated by senior males in each homestead usually represent portions of lineage-claimed land generally known as kithaka. The kithaka normally comprises cultivated gardens, lands lying fallow, and bush areas. Ideally, all men claiming descent from the founder of the kithaka, or "land parcel," may seek entitlement to gardens within that land. Critically important in the claim to "founded" land is the assertion that the eponymous forebear of the lineage brought a pristine bush area into initial cultivation. Once he established a claim and began cultivating, his descendants would exercise corporate control over the entire territory including gardens, former cultivations in fallow, and original bush. Over the generations, pressure on land in lineage and quarrels among agnates have spurred the process of hiving off and of establishing new lineages whereby new areas of bush are claimed and brought into cultivation. Until recent decades, a relatively stable population and an abundance of land characterized Mbeere, and the easy mobility of individuals breaking away from their lineages to claim new territory continued unabated. In recent years, however, increasing population pressure of developing lineages has militated against cultivated land reverting completely to bush.

When an individual obtains use rights to a garden belonging to his lineage, he exercises virtually complete control over matters pertaining to planting and harvesting.
That is, he decides what to plant and how the harvest is to be used. The lineage can make no claim under customary law on either food crops or cash realized from the sale of portions of the harvest, although the informal demands of agnatic kin for financial assistance are ever-present. Rights of usufruct once achieved are virtually indissoluble and permit a wide range of action in regard to the exploitation of the land. Lineages begin to exercise their corporate prerogatives regarding the agnatic estate when a particular member wants to transfer his use rights to another person. These transfers of usufruct include the conferring of rights to either tenants or affines, and the lineage tends not to be resistant to these transactions, if they are assured that the heirs of the grantees will not be able to cultivate the land without renegotiating terms of the grant. This usually amounts to nothing more than once again seeking permission, which at the same time marks such supplicants as outside the controlling lineage. Lineage members, once they assume usufruct rights, would continue to exercise them without seeking permission from their agnates.

Prior to the colonial era and up through the 1930s, tenancy in Mbeere was never at issue. Only with the intense pressure on Zone 1 lands in recent decades have migrants to those areas from the Mbeere lowlands become tenants. Besides women who as a matter of course assume cultivation rights from their husband's groups, sons-in-law are the most likely affines to secure usufruct rights from lineages other than their own, although this practice is uncommon. Like other tenants, sons-in-law must renegotiate the terms of their use rights for their sons.

Sale of the land, on the other hand, represents a considerably more serious decision, which calls for the collective deliberation of all male members of the lineage holding the land as its corporate estate. Prior to the 1950s, sale of land rarely occurred. But following the land reforms in Kikuyuland during this decade, the Mbeere found a new marketability in land, developing interest in cash crops, and generally greater pressure on the land as people began to claim increasingly larger acreages. When an individual wishes to sell any of his land held by virtue of his membership in a lineage, his agnates first attempt to assist him with his needs in order to negate the reasons for the desired sale. This assistance may entail giving their
kinsman cash or livestock, in which case those lineage members providing assistance assume usufruct rights to the land at issue for as long as the loan is outstanding.

In the event that assistance is not forthcoming, the lineage may give its permission for sale outside of the group, but they do so only with the greatest reluctance. Sale nonetheless did not customarily represent a permanent transfer of use rights from one person to another since the original cultivator was entitled to return the cash or livestock he realized from the transaction. In this way, he could regain his use rights. Sales were thus redeemable and were akin to the granting of loans against usable collateral.

Since the 1950s, as land transactions have grown more common amidst an increasingly entrepreneurial attitude toward the land, redeemable sale has been replaced by land transactions in which the customary residual rights of the seller are negated when the land is transferred. The establishment of permanent sale cannot be regarded as a natural development in the customary system apart from the profound influence of external factors; the latter include the monetization of land transactions and the inability of the colonial administration to check such developments, which were ubiquitous across the various lineages of chiefs, subchiefs, and others with new found sources of income or influence. Lineages, accordingly, had the choice of adapting to these changes or of facing the certain erosion of their existing rights and claims.

Cultivators claiming wilderness lands and then clearing them for cultivation without assistance from agnatic kin feel little constraint compared to the control they experience as holders of lineage land. Any farmer may thus hold both exclusive rights to land he has claimed as founder and rights in land controlled by his lineage. These founders of landed estates exercise the usual rights of use in their new land and also control the transfer of these rights to a tenant; more importantly, they may sell the land without consulting the lineage. But once the founder dies, the land he brought into initial cultivation devolves to his heirs and becomes their joint property subject to their corporate control. This mode of tenure excludes each female descendant from any active participation in the affairs of her natal lineage, including the control of land for it is assumed
that on marriage she will secure gardens from her husband's lineage with which she will increasingly identify over the course of her life. Mbeere customs including the prolonged payment of substantial bridewealth, the affiliation of adulterine children to the clan of their mother's husband, and the levirate are indicative of a social structure unremittingly drawing a woman into her husband's lineage.

Under the traditional rules of land tenure, a founder's death normally resulted in his eldest son assuming a kind of trustee role regarding the land. Ideally, he insured the passage of cultivation rights to his brothers in accord with their father's wishes; with the eldest as a primus inter pares, the male offspring of the founder also assumed joint control of the territory initially claimed by their father. Until recent decades, the abundance of unclaimed bush land easily provided the safety valve for relieving social pressures due either to crowding on the land or to interpersonal conflicts among brothers. The latter factor or the quest for better land is most often cited by informants in recounting their various migrations. Commonly, the migration of one or another brother from their natal homes to claim new territory resulted in the founding of a new lineage. The availability of land together with the ease of migrating away from one's brothers created a pattern of weakly corporate lineages of rather shallow depth.

The system of customary land tenure embedded within shallow lineages provided sufficient land for the people but began to transform itself in the face of a growing cash economy. Increasingly large pieces of land were claimed, especially beginning in the 1960s, thus maximizing the gain which could be achieved through sale. These lands, to which various lineages were laying claim, included large wilderness areas well in excess of the immediate subsistence or even cash cropping needs of their members. To these uncultivated and previously unclaimed territories were added the plots that the lineage had claimed in the previous two generations. Larger claims resulted in an artificial shortage, not because of sudden increases in the population but because relatively small groups of people of single lineages were claiming land parcels out of all proportion to the need for maintaining economic holdings capable of boosting output beyond the subsistence level. Consequently, many other less fortunate individuals whose lineages suffered legal reverses
in their efforts to make similar claims were left with subsistence holdings of only a few hectares or, in some cases, no land at all. The most serious conflicts over land, both within lineages and between them, are thus very recent products of rapid social change, including the land reform itself.

Until the late 1950s, the few land cases which appeared in the Mbeere Court exclusively concerned the boundaries between established gardens. These cases numbered less than five per year and were entered in the civil registry along with litigation over bridewealth, divorce, and the like. But in 1959 the number of land cases began to proliferate, averaging about 25 per year through 1970, and the court established a separate land case registry. Moreover, the nature of the cases changed, as the issues in dispute increasingly centered on the very ownership of large tracts of land and not simply on boundaries. Contending lineages were attempting to extend their claims, first at court and then before adjudication committees, at the expense of each other. Because much of the research site was settled only within the past three generations, particularly influential lineages such as those whose membership included chiefs or former chiefs, were especially emboldened in claiming new territory, where long-term occupation was often asserted but unproven by various lineages. Subsequent case outcomes indicate the extraordinary success in litigation of these influential lineages.

MBEERE POLITY: THE EMERGENCE OF CHIEFS

In the precolonial era, age-sets and generation classes were fundamental features of Mbeere sociopolitical organization (Glazier 1976). Chiefs and hierarchical political offices were unknown in what constituted an acephalous system built on the influence of elder males of senior age-sets. Civil order was maintained through elders' councils, which were ad hoc bodies of eight to ten men assembled at the invitation of disputants for purposes of mediating conflicts. Particular individuals gained a reputation for skillful arbitration and thus would be regularly called to council
hearings. But these councils, which occurred throughout Mbeere neighborhoods, were not standing bodies since they existed only for the life of the particular issue in question. They exercised considerable influence without the authority of office, yet their capacity to effect settlement ultimately lay in the willingness of individuals to accept a council decision. A man's eligibility for service on an elders' council followed the circumcision of his first child, either male or female, when he would undergo the rite of elderhood.

Confronted by a political system which diffused rather than concentrated power, the new British authority, beginning with the pacification of Embu District in 1906, set about to centralize local government. The government began with the appointment of headmen and chiefs—individuals who had gained respect in their local areas sometimes as regular members of the ad hoc councils. But these first appointees had enjoyed nothing resembling chiefly prerogatives prior to the intrusion of the colonial regime; they exercised no authority over large areas and could issue no commands of office. In other words, the first headmen entered a civil administration as salaried public servants under the control of the European district commissioner, and they exercised a political authority vastly different from anything which had existed up to that time, including the power of arrest. Space does not permit a detailed examination of the manner in which the civil administration evolved, but in sum it can be said that over the course of colonial rule in Embu District and continuing into Independence, tendencies toward centralization and specialization in the civil administration grew more pronounced. The ad hoc councils of elders waned in significance as their role in conflict resolution was assumed by courts. On a more informal basis, headmen and chiefs often intervened in local disputes and effected settlement through the coercive authority of their new positions, which were more feared than respected.

In relationship to the present problem of emerging stratification in Mbeere, the critically important positions of headman and chief enabled the incumbents of these offices to benefit more than any other individuals from the rewards of collaboration with the colonial regime. These men were among the first to receive a regular wage, and they also
became relatively affluent by accumulating livestock and other unofficial gratuities from individuals seeking favors from them. They became patrons to various of their constituents and could serve as brokers in relationship to the civil administration. The Mbeere chiefs, as well as their counterparts among the other "tribes" of Embu District, served on the Local Native Council (LNC)--a district-governing body headed by the district commissioner. The LNC further concentrated government, enabling it to operate in the context of a single administrative body rather than through the various elders' councils throughout the district. These councils, together with the age-sets, continued to suffer a decline after the institution of the LNC in 1924, as the balance of power in the district continued to shift from the diffuse role of elderhood to the chiefs, who also dominated the LNC.

Thus the institution of chiefs fundamentally altered the political relations defining precolonial life and created not only a system of political hierarchy but also an emerging system of economic stratification with chiefs usually rising to the top. The power and patronage of chiefs enabled the more successful to benefit from both the formal rewards of government service and the informal, often coercive demands placed on local people. Whether through salaries or gratuities from favor-seekers or others unable to resist the importuning of these new office holders, chiefs as a group were able to accumulate large holdings in land and livestock. In the many land disputes accompanying land reform in Mbeere, chiefs also exercised extraordinary influence at court and before adjudication committees composed of local elders. Most chiefs and their lineages benefited accordingly.

ECONOMIC STRATIFICATION: COLONIAL SOURCES

In depicting the customary system of land tenure as a balance between individual rights and corporate interests, I wish to emphasize that few conflicts centered on issues of land prior to the momentous changes of the colonial era. Land existed as an abundant, essentially unrestricted resource, and the few disputes occurring in case records in
the Mbeere court, even up to 1959, centered on conflicts over boundaries separating gardens. These disputes were usually settled easily in a hearing between the two litigants without extensive involvement of men from their respective lineages. Virtually no disputes over entire land parcels (iithaka) amounting to hundreds of acres took place, although litigation of this sort involving entire lineages has been commonplace since the beginnings of land reform. Success at law by a contending lineage is rewarded by registered land while losing groups will have to content themselves with less land or perhaps no land at all. A critical problem of land loss and the dramatic stratification of a previously egalitarian agrarian economy has become especially acute since the onset of land reform, but its roots lie in the colonial era when the tandem process of political stratification also began.

Colonial land policy and initial attempts at reformulating rules of land tenure among indigenous peoples began among the Kikuyu, the numerically largest ethnic group in Kenya. Although some areas of Mbeere in Zone 1 are amenable to cash crop production and support a variety of staples, thus resembling the generally richer land of the Kikuyu to the west, most of the land in Mbeere offers less economic potential than Kikuyuland owing to more erratic rainfall and inferior soils. Colonial reports throughout the period of British rule emphasized the marginal aspects of the Mbeere ecosystem, particularly its vulnerability to famine and drought. Indeed, informants readily provide a chronological list of Mbeere famines, named like age-sets after some noteworthy event during the designated year or else commemorating a particularly gruelling aspect of the famine. The famine of 1898, for example, is referred to as the famine in which "they ate skins," karía ndwara.

As a result of its generally tenuous economic position, Mbeere never suffered land alienation to European farmers, who were drawn instead to the excellent highland areas of Kikuyuland. The latter area of high agricultural potential and political conflict between European settlers and dispossessed Kikuyu farmers became the crucible in which government land policy in Central Kenya was formulated, and that policy by the 1950s was intimately tied to efforts at political control of an increasingly restive population. Title deeds providing security of individual tenure were
intended to insulate native rural loyalists from the Mau Mau movement, which developed primarily over the alienation of land from the Kikuyu to European settlers. Sorrenson's excellent study (1967) of Kikuyu land reform examines the complex relationship between colonial land policies and strategies for coping with the Mau Mau movement. Mbeere lay outside the mainstream of these policies until the late 1960s when land reform, originally inspired by the colonial government, was extended to other parts of the country.

During the colonial period, the problem of overcrowding arose on the Kikuyu Reserves. This "tribal" or "trust" land had been set aside by the government for the Kikuyu and was distinct from the "scheduled" areas alienated from the Kikuyu for European settlement. These population pressures in the Kikuyu Reserves resulted in a quest for more secure tenure, and many Kikuyu migrated into Embu District beginning in the 1930s. The migration gained momentum in the next decades. In the wake of this population movement, serious problems of unauthorized land sales developed, especially in regard to particular individuals selling portions of lineage land without permission from agnates. Growing pressure on land and an increasing monetization of land transactions together with numerous complaints about secret sales spurred the LNC to take action. But all of its efforts failed to stem the tide of land sales and the increasing tendency toward private, individual gain at the expense of the corporate concerns of the lineage. LNC minutes from the 1930s and 1940s expressed the council's desire (which in reality was shaped by the district commissioner) to control land sales and to strengthen various customary controls over land transactions. The 1945 Annual Report for Embu District (prepared by the district commissioner) expresses these concerns and the hope that the tide could be stemmed by recourse to "custom," which the administration always considered its conservative ally in controlling the pace of change in the district:

In view of a number of instances in which land had been sold secretly to Kikuyu of other districts ... and the possibilities that large buying of land might be going on by prominent persons without control, it was decided that something should be done a) to strengthen public opinion with regard to retaining old customs until better
ones could be found and b) arranging for a liaison between the ruling age grades so that amiable agreements might be reached during transition stages.

While expressing the government's concern over uncontrolled individual transactions in land which were enriching "prominent" locals (chiefs) and outsiders, the district commissioner also reveals an utterly naive faith in the constraining force of "custom." What various administrators failed to appreciate in their assessment of the agrarian trends in Embu District was the custom itself included spirited individual action built into such traditional activities as council service, which rewarded the most skilled councilors with prestige and gratuities. The elders' councils of the age organization thus preadapted the Mbeere and their neighbors to the competitive individualism accompanying the developing cash economy, the growing monetization of agricultural transactions, and the increasing capitalization of the economy by European settlers.

The people of Embu District and Kikuyuland thus were not interested in the constraining power of custom to maintain a government vision of the past but rather wanted to avail themselves of the same kinds of opportunities enjoyed by Europeans. These included security of tenure, cash crop production, and the accumulation of capital, and these goals introduced new sources of social differentiation based on relative wealth and land holdings. Because government land policy during the colonial period followed a dual course--European and African--developments in the African areas which smacked of entrepreneurial speculation or other individualized efforts at maximizing income or capital were discouraged. In this way, the ready supply of African labor was guaranteed, for Africans simply were prevented from taking advantage of opportunities available to European farmers.

District reports regularly expressed alarm at the mounting evidence of African land speculation and differential holdings. European agricultural development was to proceed on an individual basis, while African development was envisioned in corporate terms. Thus Europeans enjoyed freehold tenure in the highlands from the earliest days of colonial rule. Africans, on the other hand, living on Native
Reserve, or Trust Lands were expected to utilize land in conformity to the government's view of customary tenure; that view considered indigenous land tenure in communal terms. Prior to the 1950s, African efforts to gain freehold title along lines established for the European areas came to naught as the government sought to control individual aspirations of African farmers. The government emphasis on "traditional authority" and "custom" stemmed from this dual policy and its goal of holding individualism in check. In this way, the African population could be consigned to Trust Lands whenever African farms were alienated to Europeans. Individual grievances were thus submerged as the government simply added more land, usually less desirable, to the Trust areas (Sorrenson 1967:22-24). However, despite the government's wish to bolster community controls, land acquisition and sale in the African areas continued unrestrained, with chiefs and other salaried individuals, especially in the lower echelons of the civil administration, effectively exploiting available opportunities.

Although a small minority of people were subject violating Mbeere customary law, individual transactions or the collaboration of a very few lineage members for their own gain continued unabated. A key factor promoting these extra-legal procedures was the power of local chiefs, who sometimes colluded with particular self-seeking groups or individuals pursuing personal gain at the expense of their agnatic responsibilities. That some chiefs abetted activities that so dramatically departed from customary expectations is emblematic both of the authority of this new office and the inevitable failure of successive colonial officials seeking to exploit customary controls, which colonial policy itself was undermining. And despite government efforts to constrain the entrepreneurial spirit, especially manifesting itself in land sales, the process of rural class formation was under way by the 1930s.

LAND REFORM

Land reform in the sense of land tenure reorganization began in the 1950s in Kikuyuland and was intimately tied to
government attempts to quell the Mau Mau movement. The crisis of marshal law, the Emergency, set in motion a series of policies designed to undercut the appeal of Mau Mau. Articulated in the Swynnerton Plan, the reforms began a series of alteration in the rural landscape which had been under consideration since the 1930s. The consolidation of dispersed fragments of land into a single farmstead and the registration of this land to individuals represented the centerpieces of the government program. By providing registered titles to consolidated holdings, the government hoped to reward loyalists and remove the root causes of the insurgency—land tenure insecurity, crowding in the Reserves, and the frustrations of a people oriented strongly toward economic achievement.

Along with these changes, the government hoped that agricultural credit would be forthcoming to farmers who pledged their newly acquired land titles as collateral in order to improve farming and increase productivity. Previous concerns about rural entrepreneurs acting independently of kin and the creation of a landless class dissipated as government reversed its earlier policy. The Swynnerton Plan of 1954 clearly explains this transformation of policy:

In the past Government policy has been to maintain the tribal system of tenure so that all the people have had bits of land and to prevent the African from borrowing money against the security of his land. The result is that there is no agricultural indebtedness by Africans ... In future ... Government policy will be reversed and able, energetic or rich Africans will be able to acquire more land and bad or poor farmers less, creating a landed and a landless class. This is a normal step in the evolution of a country [Swynnerton 1954:10.]

With differences of emphasis, the changes promulgated in the Swynnerton Plan continued to inform much thinking regarding rural development in the years since Kenyan Independence.

The reform process began in Mbeere in 1968 with ultimate goal of divesting agnatic groups of corporate land and awarding titled plots to individuals previously dependent
on the lineage corporation for their gardens. Up to 1968, Mbeere remained relatively unaffected by the Swynnerton Plan (except for its loan provisions) which had been aimed at Kikuyuland and the areas of Mau Mau insurgency. The Mbeere, however, were little affected by the Mau Mau movement. Land had not been alienated to Europeans, and consequently, the critical grievances precipitating the movement never developed. The agrarian transformations taking shape in Kikuyuland in the wake of Mau Mau soon became enshrined in a series of land reform statutes enacted following Independence, and these transformations included land demarcation, adjudication of outstanding disputes under customary law, and registration of titles to individually owned farmsteads.

Before 1968 and the formal commencement of land reform in Mbeere, a few people took advantage of the availability of loans, and the record of these loans was to have profound implications for subsequent land adjudication. To have secured a loan in the 1960s was tantamount to proof of uncontested "ownership" since at the time of the loan the land in question could be the subject of dispute. A 1966 communication from the agricultural officer of the Embu District to agricultural workers in Mbeere explains the loans as follows:

It is Government policy to encourage ... many farmers in the District to acquire ... loans. Therefore it is your duty to encourage farmers with ... acreages more than fifteen acres to apply. ... In non-consolidated areas, individuals or registered clans may apply for these loans (and) the land should be free of disputes and have well-defined boundaries. Large scale loans can be used for ... erection and maintenance of permanent improvements, purchase of dairy cattle, purchase of beef cattle, and agricultural machinery, (or) the establishment of any other agricultural or rural industries.

Loans were to be provided by the government-sponsored Agricultural Finance Corporation, which defined the "large scale" farmer as one with "fifteen acres of land (and) able to produce five hundred pounds income after the loan." Taking advantage of the new loan opportunities, a few
lineages and coalitions of agnates from different lineages of the same clan jointly availed land to a single member seeking a loan. In one case, for example, a chief and some of his clanmates used land as collateral to secure an agricultural loan, and they did so without the objection of other farmers, who only later contested the transaction when they learned that their tacit support constituted strong proof of "ownership" by the chief's group. The chief and his agnatic kin also obtained over 1,600 shillings from the British American Tobacco Company which eventually established a tobacco nursery on the land. This "modern" variety of evidence proved pivotal during the subsequent period of land adjudication and, in enhancing customary forms of evidence such as genealogies, guaranteed successful case outcomes.

The granting of loans in the years immediately preceding land reform in Mbeere thus continued a process of differential reward which began in the first years of colonial rule. The initial beneficiaries of the loan program for increasing agricultural output were the chiefs, other government functionaries, or those with agnatic bonds to such people of influence and relative wealth. Chiefs, especially because of their positions of influence and power, gained rewards in support and salary from cooperative service in the civil service administration. The government regarded these people as possible models of progressive farming which would build on a new system of private control of land, although even more dramatic rural stratification than theretofore occurred in Mbeere would ensue.

The Development Plan for 1970-1974 sums up the rationale for land reform:

It has long been Government Policy that the land tenure system in traditional Kenya should be changed so that farmers can be provided with the title deeds to their land and, where necessary, so that scattered fragments of land can be consolidated into one holding. This change has manifold benefits. Time and money no longer need be spent on land litigation, nor is it necessary for farmers to waste time travelling between numerous scattered plots of land. The reform acts as a powerful stimulus to agricultural development.
Farmers are more willing to make long-term improvements to their land; and they can obtain agricultural credit more easily to help them effect these improvements, for the land title deeds provide good security for agricultural loans. Because agricultural development proceeds more rapidly after land rights have been adjudicated, the reform also tends to encourage a much higher level of employment in rural areas [1969:210].

The subsequent plan (1979-1983) reiterates these themes, but recognizes that land transactions among small farmers have resulted in the increasing accumulation of land among the small number of wealthy holders. In some areas of Kenya, district land control boards, mandated to curb undue concentration of land holdings, have shown only a limited effectiveness in this regard (Coldham 1978). During the most critical phase of the Mbeere land reform process--land adjudication--unequal distribution of land was guaranteed as two lineages succeeded in winning cases over the largest and most productive land at the research site. Should their successful case results stand up under appeal, which has not yet run its course, fewer than 100 men, each one owning a minimum of six hectares, will gain title to this land, but they will do so at the expense of many hundreds of others. A number of former chiefs, headmen and other employees of local governments belong to these lineages.

Thus, although land reform has been intimately tied to hopes for economic development, the program also threatens the security of a considerable number of people. Fear of land loss has pervaded the high potential Zone 1 areas, as a complex, interlocking series of land suits has been filed following the declaration of Mbeere as a land adjudication area in 1968. As one of its goals, of course, the land reform program sought to curtail litigation, thus saving farmers considerable time and money. Ironically, the program itself stimulated unprecedented litigation. Amidst the legal tangle of conflicting claims, most informants feared that they might ultimately gain title to smaller holdings than they were cultivating under customary land tenure rules or that they might lose their land altogether. All agreed the Mbeere had never experienced land shortages. Hence the prospect of a marked disparity in land distribu-
tion among the people, including the possibility of landlessness following the reform, has been especially appalling. The monetization of land transactions, the growing cash value of the land itself, the prospect of gaining freehold tenure, and the independent actions taken by administrative functionaries and others with cash incomes or access to political influence have led to new patterns of self-seeking unknown in the past. In the 1970s, a casual visitor in the Zone 1 area might see signs outside of homesteads warning of the "fierce dog"; other signs forcefully proclaim "no trespassing." People not only fear their neighbors' intentions regarding land claims but also express great concern that even their clanmates may be conspiring to seize large portions of land at their expense.

CONCLUSION

By the mid-1970s nearly 4,000 hectares of land had been registered in the research site—an area of 56 square kilometers with a population of approximately 6,000 people. Individual plots range from a minimum, as defined in the land demarcation rules, of .20 hectares to more than 25 hectares. Large land holders also tend to control non-consolidated multiple plots. Of approximately 1,800 registered pieces of land, the average garden is less than two hectares in size. After the completion of the reform, it thus appears that the majority of farmers will cultivate subsistence plots; many farmers will gain title to more than one piece of land, but the total size of each farmer's holdings will, in most cases, fall below six hectares. Due to natural increase as well as to the migration of people from Zones 2 and 3 to the high potential areas, the pressure on land since the beginning of land reform has also grown intense as the population of the research site increased from about 4,000 to 6,000 between 1969 and 1979. The rate of population growth also threatens to reduce further the amount of land each person holds, if customary inheritance patterns giving land to each son remain unaltered. On the other hand, inheritance by primogeniture or some other restrictive mechanism will facilitate the creation of a class of more or less permanent rural workers laboring for the better-off.
land holders or in the non-farm rural economy, which remains very small. Others, particularly men, will participate in the long-standing rural-urban migration to seek employment in the cities, which at present are unable to absorb the many job seekers from the rural areas of the country. And given the extraordinarily high birth rate in Kenya, prospects for an improvement in urban job opportunities are not hopeful for untrained migrants.

Heretofore, migration to cities was always temporary, however prolonged it might be. Men left their families in the rural area and periodically returned for visits. In the usual pattern of rural-urban migration, migrants would eventually return to their families and the land. Their occasional visits home enabled them to renew bonds with their agnates and to keep abreast of lineage affairs in which they very much had a stake. The rural area was thus a migrant's permanent home and the source of his most fundamental security. It is still too soon after land reform to say for certain if the character of this migration will change, as a major "pull" factor of the rural area, namely the land, is lost to some individuals.

Through the 1970s and continuing to the present, many of those deprived of good land continued to appeal crucial case results from the land adjudication proceedings. Discontent occurred not only among particular lineages which lost their corporate legal battles but also within some lineages whose leadership unfairly distributed newly won land to their membership. Although some adjustments are occurring, the prevailing pattern I have described is unlikely to change. The small group of large farmers controlling more than 20 hectares each stands to gain the most from the various development schemes and loan plans. The second and largest group composed of farmers owning subsistence plots will lead their economic lives much as before. A third group will have lost land through the adjudication process and will either work for wages in the rural economy or seek land in the less desirable zones. A process of rural class formation, which took root in colonial days, thus continues to transform a traditional subsistence economy into one increasingly bound to development strategies of a nation-state oriented toward capitalist production, bringing with it inevitable, often dramatic wealth differentials.
NOTE

1. Field work in Mbeere was carried out for fifteen months in 1969-1970 under the sponsorship of an N.I.H. Training Grant (No. GM12211) awarded by the Department of Anthropology, University of California, Berkeley. Additional field work was conducted for three months in 1973 through the support of the Wenner-Gren Foundation for Anthropological Research and Oberlin College, and for two months in 1979 through a grant from Oberlin College. I gratefully acknowledge the generous support from these various sources.

BIBLIOGRAPHY

Brokensha, David and Jack Glazier

Coldham, Simon

Glazier, Jack

Goody, Jack

Government of Kenya
1945 Embu District Annual Report.
1966 Embu District Agricultural Report.
Government of Kenya
1979 Development Plan, 1979-83.

Hunt, D. M.

Migot-Adholla, S. E.

Sorrenson, M. P. K.

Swynnerton, R. J. M.

Tuma, Elias
PART NINE
MEXICO
INTRODUCTION

Chamula is an enclosed Indian community in the Mexican state of Chiapas. This chapter is concerned with the way its traditional economy of subsistence cultivation of maize at the household level is in the process of being transformed into an exchange economy in which truck farming, carried on by a small class of local entrepreneurs, is an important component.

This transformation is but one result of an increase in the local population—which may already have been critical at the beginning of the century—to a level which the traditional agriculture could only support at the cost of a too intensive use of the available land. The adverse effects of this process, which is described in greater detail below, were in part counteracted by seasonal migration, in search of wage employment outside the community. In the last thirty odd years, however, the growth of truck farming within the boundaries of the community has provided an alternative form of wage labor, if at the cost of converting the majority of the former owners of the land use for this purpose into a landless peasantry. The factors leading to this transformation are first considered under five heads,
agronomy, land tenure, demography, infrastructure, and politics, which then lead to an evaluation of its social consequences.

AGRONOMY

The proximity of the highlands of central Chiapas to both the Gulf of Mexico, to the north, and the Pacific Ocean, to the south, makes for a high rainfall (Vivo 1964:188), which, although somewhat unpredictable, and subject also to extreme local variation (Vivo 1964:198), is relatively favorable to intensive agriculture. At the same time, the fragmented nature of the countryside, with altitudes ranging from under 1,000 to nearly 3,000 meters, gives little encouragement to the use of any of the methods of modern large-scale farming. The soil cover, in which limestone predominates, is easily eroded, a factor exacerbated by the heavy seasonal rainfall falling on steep hills where only the natural forest cover is able to retain the soil. Once the forest is cleared, to allow for the shifting cultivation of maize, the traditional staple of the whole area, over some four or five seasons, it may take at least thirty years to recover its former growth. Even to this day, agriculture in the highlands is still largely confined to small plots worked with no more than the most primitive technology.

LAND TENURE SYSTEM

The allocation of land in Chamula is traditionally governed by a rule of partible inheritance by both men and women. In practice the plots owned by the individual members of a given family, defined patrilineally, are likely to be contiguous, so that in the average village—containing some hundred odd nuclear families, each owning the basis of its own household economy—the cultivated land is divided into a much smaller number of recognizable units. Two
factors enable this pattern to be maintained. The first, and most important, is that the practice of shifting cultivation in any case requires the continual abandonment of existing farmland—including the dwellings of those who work it—and the allocation of new land, the length of any such cycle of redistribution being about a generation. The second factor is that a continual process of exchange, combined with a certain degree of flexibility in relation to changes in the boundaries of the different patrilineal units, generally enables land inherited by women to be retained by their own family of origin. At the same time the different heads of household comprised in any "extended" patrilineal unit are equally flexible in regard to the reallocation of the land within its boundaries—a process which may be accompanied by the payment of cash.

DEMOGRAPHY: LAND-POPULATION BALANCE

The traditional agricultural system only remains viable so long as the population engaged in it remains below a certain critical threshold, which, until about a hundred years ago, had not been reached by any of the twenty odd Indian communities in the highlands of Chiapas. If, in most cases, the local populations were safely below this threshold—as some of them still are—that of Chamula, occupying the very highest ground in the immediate hinterland of the old colonial capital of San Cristobal, came dangerously close to it. Relatively poor soil, and a cold, wet climate, combined with the denial of any opportunity to increase the territory of the community, are sufficient to explain this fact. In the course of the present century, natural increase—helped in recent years by the provision of much improved public health services—have meant that the critical threshold has been exceeded by an increasingly wide margin. As this process continues, the demands made on the land become intolerable. Over a shorter time span the forest cover cannot recover to its former level, the land cleared for sowing yields smaller harvests, and the more intensively it is worked, the more susceptible it becomes to erosion. At the final stage of degradation, the soil contains insufficient nutrients for the forest cover to return, and the land is...
good only for grazing. This explains why in Chamula, when
the women in the household graze sheep for wool, an
important commodity in a region subject to extremely cold
weather, the men no longer have access to sufficient land
to cultivate enough maize even for their own families. To
support their families, they must be wage earners.

The choice is one forced upon the Chamulas by
circumstance. The communal land now used for grazing was
once farmland in individual ownership, allocated according to
the principles described above, always taking into account
the long-term cycles inherent in swidden cultivation. But
now, for want of any possible alternative—save that of
truck farming the special case examined in the present
chapter—the land, once returned to grass, can only be used
for grazing sheep. The making of the woven cloth essential
for clothing in a cold climate was a craft traditionally
reserved for women. If, originally, such rough grazing as
was available allowed only the production of sufficient wool
to clothe the members of the individual household, the
increase in grassland created by force of circumstance now
makes it possible to produce a surplus, for which there is
something of a local market. There is little question of a
choice deliberately made between two alternative sources of
income, the grazing of sheep or the cultivation of maize.
Indeed, if there was such a choice, maize would almost
certainly be preferred to sheep, if only because of the
relatively small contribution which the latter can make to
the household income. Income from the raising of sheep
and the making of cloth may occasionally be sufficient to
maintain a widow living alone in somewhat straightened
circumstances, but this is about the limit of its economic
potential. In the general case, these tasks form no more
than one part of the economic contribution which women
are expected to make to the household. The male members
will always provide much the greater part of the cash
income, which explains why, for a hundred years or more,
Chamulas have been an important part of the labor force
employed in the coffee plantations in the hills overlooking
the Pacific Coast of the state. Demographic factors have,
therefore, long constrained the Chamulas to work in an
exchange economy, dependent upon that of the nation at
large.
CHANGE IN THE INFRASTRUCTURE

So long, however, as the highlands of Chiapas remained isolated from the rest of Mexico, the oppressive labor conditions of the coffee plantations had to be accepted by the great majority of the Chamulas, if they were to survive. In the late 1940s the national government, by extending the Pan-American Highway to San Cristobal, and continuing it on to the frontier with Guatemala some 150 km. to the east, took the first essential step towards incorporating the highland into the national communications infrastructure. The consequences for Chamula were far-reaching. In the early years, the actual construction of the highway, which was extremely labor intensive, provided the opportunity for wage labor for Indians throughout the highlands, who, in many cases, and almost invariably in that of Chamula, were able to return to their own homes after a day's work. In the years which followed, right down to the present day, the maintenance of the highway and the extension of the network of minor roads ancillary to it, have continued to provide work, although on a reduced scale. More importantly—at least in the long run—the development of the highway network has made it possible for local entrepreneurs within the Indian municipios to develop their own transport services, based on heavy trucks, used for the carriage of both passengers and freight throughout the whole highland area. In Zinacantan, adjacent to Chamula, the location of many hamlets actually on the Pan-American Highway has enabled the local population to open up new areas far outside the boundaries of the municipio, for the cultivation of maize for the national market.2 Chamula, just bypassed by the Pan-American Highway and so largely denied this opportunity for developing its exchange economy, has had to develop other means for taking advantage of the new infrastructure. In this process external political factors have played a dominant role, leading, at the final stage, to the emergence of class structure unique among the Indian populations of the highlands. As long as the absence of all but the most primitive communications isolated the highlands of Chiapas from the rest of Mexico, the state had neither the power nor the will to enforce its writ. It was only with the government of Lazaro Cardenas, who was president from 1934 to 1940, that the policies of the central govern-
ment began to have any impact upon the isolated Indian populations.

POLITICAL CHANGE

In Chiapas, Cardenas's reform program focused on Chamula, the Indian municipio then oppressed hardest by the dominant Ladino—or Spanish-speaking—population of the highlands. The Ladinos, concentrated in San Cristobal, had for centuries only been able to survive economically by exploiting the Indian populations of the hinterland. At the time when Cardenas came to office, the Chamulas had suffered the most from such exploitations, partly because of the adverse agronomic and demographic factors examined previously, and partly because of their close proximity to San Cristobal which made them easy prey to the local Ladinos. Here, one particular individual, Montezuma Pedrero, played a dominant role. His exploitation of the Indians had two sides, complementary to each other. First, he was a contractor to the coffee plantations for the supply of Indian labor. Second, he was the major supplier of the local rum, posh, to the Indian municipios. The liberal consumption of posh in the course of the religious festivals which occur throughout the year maintained demand at a high level. This in turn meant that the Indian consumers, to obtain the cash necessary to pay for it, were particularly easy prey to Pedrero and his subordinates as captive labor for the coffee plantations.

As far as Chamula was concerned, a two-part reform was effected under the Cardenas administration. First, the handful of Ladino shopkeepers actually located in Chamula were deprived of their right to sell posh. This action broke an essential link in the chain of supply to the Indians in the municipio. Twenty years later the Indians themselves had organized the supply, maintaining their distribution network by means of the transport services mentioned previously, and Ladinos never again retrieved any part of the action.
The development of bootlegging within Chamula, whose essential economic base was to be found in the government's failure to enforce the excise laws in the highlands, played a major part in the formation of a class structure. The reasons for this are complex, and are described in detail elsewhere (Crump 1982). Two factors may be taken to be of decisive importance. First, sugar cane, the raw material essential for the manufacture of posh can only be bought, strictly for cash, from Ladino small-holders located on the slopes of the Grijalva River Valley, some two hour's drive from Chamula. The climate prevents cultivation anywhere in the Indian highlands. The result is that the supply of sugar cane depends on transport by truck. (The only alternative, transport by mule, would take too long, since the sugar content of cane declines very rapidly after cutting.) The capital cost of a truck is extremely high for a Chamula, so that the handful of owners have quite disproportionate economic power. Second, the chain of production and distribution of posh has, by the prevailing local standards for the exchange economy, a long time span, which the relatively large number of local entrepreneurs involved can only bridge with the help of outside finance. This, in turn, can only come from the truck-owners, who therefore enjoy a lucrative, if somewhat precarious, double monopoly. This is the essential economic basis of the emerging class structure.

The present case, which is concerned with the growth of truck farming, and its social consequences, is more concerned with the second part of the reforms initiated in the time of Cardenas. This involved "the appointment, from among the handful of Chamulas who were literate in Spanish, of a number of municipal scribes whose job it would be to supervise the supply of labour to the coffee plantations, at the same time defending the local population against the depredations of unscrupulous planters"4 (Crump 1982:00 and Rus and Wasserstrom 1979:15). For the first time a section of the local population had received effective political recognition from the Ladino administration of the state.

Thus, in a process beginning in the course of the 1950s and continuing to the present day, the government acting through the Secretaria de Agricultura y Ganaderia (SAG),5 began to interest itself in the development of the agricul-
tural economy of Chamula. Having invested in terracing to prevent further soil erosion, the government encouraged the cultivation of crops destined for sale on the open market. The most suitable crops were hard fruit and vegetables, particularly cabbages.

For a market-oriented operation, the most suitable area was to be found in the neighborhood of Chamula center, where communications with the outside world were particularly good and the local population had lost almost all inclination to cultivate maize, even if it were still possible. However, the problem there was of capital investment. Truck farming, to be a viable economic operation had to be carried out on a scale much larger than that of the subsistence cultivation of maize at household level. At the same time, funds were necessary for the irrigation and terracing carried out under the auspices of the SAG.

The problem, which was as much political as economic, was essentially to select and establish a new class of entrepreneurs to be supported by the Mexican government. The process of selection reflects a clear political division within Chamula itself into two factions, whose existence had long been noted by the authorities of the state. The forces of economic integration, particularly represented by the opening of the Pan-American Highway, can be turned to the advantage of a community such as Chamula either by a conscious policy of collaboration with the government, with all that this may involve for the loss of cultural identity, or by a deliberate rejection of such collaboration, combined with the development of new enterprises in the so-called "informal" sector. The leaders of the Chamula community, who were well established in the local political organization, had the choice of becoming either Uncle Toms or mafia bosses. It is difficult to say how much the choice, either way, was governed by pure opportunism, but it was in any case perfectly clear to the government who had chosen its side, and it was this class--largely descended from the scribes appointed under Cardenas--which was rewarded by official financial and technical support. Not surprisingly, therefore, the nucleus was formed by the scribes, or their descendants, who a generation earlier had been entrusted with controlling the recruitment of Indian labor for the coffee plantations.
The difficulty facing the new entrepreneurs, once the necessary finance was guaranteed by government agencies, was simply to find the means to acquire land in an economy in which, according to customary law, land could only be transmitted by means of bilateral inheritance. This difficulty was in practice overcome by foreclosing land mortgaged as security for debts which the owners were unable to repay. In the hamlets close to Chamula center, where the highest density of population occurred, this was difficult. The land, no longer capable of being restored to the cycle of shifting cultivation, was of little interest to its owners, who could easily be persuaded to accept release from their indebtedness at the cost of losing any chance of redeeming their mortgaged land (Crump 1972:8).

The fact of the indebtedness itself can be quite easily explained. The chronic deficit of the traditional agricultural economy means that the individual Chamula, sooner or later, must run into debt. The emergence of indigenous money-lending means, nowadays, that the debts are owed to members of the local oligarchy, that is, the ruling social and economic class. The only possible security is a mortgage of the debtor's own land. In most cases the creditor has no interest in foreclosing, and the debt is paid off out of money earned from a season on the coffee plantations. Where, however, the land has prospects for truck farming, the position is changed, and foreclosure will be agreeable to both sides. The creditor can expand his business operations, and the debtor, with no viable alternative use for his land, is pleased enough to be spared a season's work plucking coffee beans, particularly if he has prospects of being taken on as a laborer on a new truck farm.

In practice the new owners obtained the necessary finance not only from the state development banks, but also from their own business operations—which include money lending on a quite considerable scale. In general the concentration of landholdings and the growth of truck farming are much favored by Mexican government policy. In Chamula, in particular, this sector being economically dependent on the government can also be relied upon for political support. This is mobilized through local cells of the Partido Revolucionario Institucional, which has been in power, in Mexico, for the last fifty years. This support is
particularly valued in Chamula, because of the considerable
countervailing power of those engaged in the manufacture
and distribution of posh. The hostility of the alcohol
fraction hardly requires explanation. The product supplied
by it was only competitive because no excise duties were
ever paid. The whole operation was never anything more
than illegal bootlegging: it could not have been viable,
economically, on any other basis.

The two sectors of indigenous exchange economy are
thus each represented by a political faction, and Chamula
politics is dominated by the conflict between the two
faction leaders. Both sectors are dominated by a small
entrepreneurial class, which corresponds, in political terms,
to a clearly recognized oligarchy. In the public arena the
conflict is focused upon the appointment to the more impor-
tant religious offices, whose holders, during their year in
office, are responsible for organizing the traditional series
of church fiestas. They enjoy, at the same time, a legal
monopoly, established as a part of the reforms effected
under the Cardenas administration, of the sale of alcohol
during the course of the fiestas. The political advantages
which this factor gives to the alcohol interests is counter-
acted by access to government patronage enjoyed by the
truck farmers. In practice, power would seem to be divided
almost equally between the two factions, and the struggle
between them is carried on at grassroots level throughout
the municipio. Government policy, now largely carried out
by a local development agency, extends to active interven-
tion on behalf of the truck-farming interests. To take but
one example, these now enjoy the legal monopoly on the
sale of soft drinks, which are gradually supplanting alcohol
in the fiesta cycle.

If the oligarchy represents a new class, the question
still remains as to the consequences of the new economic
order for the majority of the population, and particularly
that part of it which has forfeited its land to the truck
farmers. The answer is that Chamula still depends on
exporting seasonal labor to the coffee plantations for its
economic survival. Here it makes little difference as to
whether or not the individual Chamula has lost his land,
since the subsistence basis of the local economy collapsed
long before the growth of truck farming. In practice the
enforcement of national labor laws, combined with access by
public transport, has enormously improved conditions on the plantations, so that the individual Chamula can plan a fairly rational economic strategy for looking after his household throughout the year. The reason is simple enough. One knows now not only how much money will be earned, at a rate fixed by law, by working for a given period on a plantation, but one is also assured that the greater part of the sum earned can actually be regarded as take-home pay for the purposes of household budgeting.

Until recently the position was quite otherwise. The average Indian could only start work on a plantation after incurring a high level of indebtedness to a Ladino labor contractor, which represented a first charge on abysmally low wages, not effectively subject to any legal minimum. Not only would the plantation owner willingly collaborate with the contractor to see that every debt was fully repaid, but he would also perpetuate his laborers' state of indebtedness by charging extortionate prices for necessities consumed during the term of the contract. Work on a plantation was a pis aller offering nothing more than bare survival: There was no question of the employer paying the laborer the true value of his services.

In addition, both sectors of the indigenous exchange economy offer some local employment. A number of Chamulas work as day laborers, employed by the truck-farmers on land they formerly owned. Others, as already noted, obtained occasional employment maintaining and extending the road network, and there are even a handful of schoolteachers and minor officials with more or less permanent jobs. In general, however, the need to earn money on the coffee plantations is characteristic of all Chamulas save for members of the oligarchy. This test is indeed the best means of distinguishing this new dominant class.

The emergence of a landless peasantry can easily be a tendentious theme in the discussion of development economics. Chamula is a case of a traditional community whose only chance of survival depends upon almost complete integration into the national economy. The loss of land is acceptable to a population whose subsistence economy has not been viable for close a hundred years. There is no question of land reform restoring the status quo. The land
in Chamula is, as it always has been, owned by Chamulas. If it cannot support a subsistence economy, the only question is how it best can be used to develop an exchange economy. The growth of truck-farming supplies an answer. A really imaginative economic policy would concentrate on this factor to the extent of developing the present ceremonial and administrative center as the permanent residential location of a sizable part of the population. It could then be provided with the main services which so far are not to be found in any Indian community in Chiapas. This would help promote the growth of a small, but stable middle class, which is already beginning to take place, quite spontaneously. The links established in the last forty years, between this class and the traditional hierarchy based on religious office could be maintained, but this is a policy for the Chamulas to work out for themselves. It must in any case be emphasized that the approach, both of the Chamulas themselves and of the Mexican government, to the development problems of the municipio, has been rational and pragmatic. The average Chamulan is well aware of the presence and power of the local oligarchy, but he is more likely to associate it with the unprecedented prosperity of the whole community than with any form of capitalist exploitation. The burden rests upon those who criticize the way in which the economy has developed since the time of Cardenas to offer a better alternative.

NOTES

1. These are described in Crump (1976:152f.). What they meant for the Indian population is vividly portrayed in Traven (1971).

2. A detailed description of this development is to be found in Cancian (1972).
3. The only exception is that small-scale Ladino sugar-planters, in the area around Las Rosas, some 50 km. to the east of San Cristobal, now supply the panela, or refined sugar, to those engaged in the illegal manufacture of alcohol in Chamula.

4. The context in which this occurred is described in greater detail in Crump (1982:00).

5. In general the development and administration of the Indian areas of Mexico is in the hands of the Instituto Nacional Indigenista, which is an agency of the Secretaria de Educacion Popular.

6. This is the main theme of Crump (1976). See particularly Chapter 5, section vi.

7. Cancian 1965 is a study devoted to the finance of the church fiestas in Zinacantan. Although there is no comparable study for Chamula, see the discussion in Crump (1976:211-17).

8. In substantivist terms this can be seen as a conflict between the formal and the informal sectors of the economy: in Chamula this corresponds to the distinction, made by Erasmus (1967:377) between entrones who wish to participate in the larger society and encoqidos who prefer to seek their fortune in an enclosed community.

9. This now goes under the name of Proyecto de Desarollo Economico y Social de Chiapas (PRODESCH): the head office is located in San Cristobal.

10. It is interesting to note here Verrips's (1978) study of the traditional links, in a Dutch farming village, between the elders of the church, whose rights are at the center of Calvinist theology, and the village council, established according to Dutch law.
BIBLIOGRAPHY

Cancian, F.


Crump, S. T.


Erasmus, C. J.

Rus, J. and R. Wasserstrom
1979 Civil and Religious Hierarchies in Central Chiapas: A Critical Perspective. 43rd International Congress of Americanists, Vancouver, B. C.

Traven, B.

Verrips, J.
Vivo, J. A. 
1964 
CHAPTER TWELVE

LITTLE LANDLESSNESS, BUT ...

Anton Ploeg
State University of Utrecht, Netherlands

CONTENTS

1. Introduction
2. Subsistence Affluence?
3. Money Earning Possibilities
   3.1 Outside Agriculture
   3.2 Via Agriculture
      3.2.1 Enough Land?
         3.2.1.1 Man-Land Ratio
         3.2.1.2 Population Increase
      3.2.2 Land Suitability
      3.2.3 Wage Employment in Agriculture
      3.2.4 Labor
      3.2.5 Returns on Labor
      3.2.6 Marketability
      3.2.7 Sustainability
4. Concluding Remarks

372
371
1. INTRODUCTION

This paper attempts to analyze the economic position and prospects of small scale farmers in Papua, New Guinea, who form over 85 percent of its population. So far, landlessness has not become a serious problem in the country. Most people have access to land and know how to use it for agriculture. However, this does not entail that their economic position is secure, neither that the people themselves find it satisfactory.

The plan of the paper is as follows: In the first part I describe why Papua New Guinean farmers need more than just land and their present knowledge of agriculture to make a living; in the second I discuss a series of reasons why it is difficult to satisfy these needs, in the present, and even more so in the future.

2. SUBSISTENCE AFFLUENCE?

Fisk has coined the expression "subsistence affluence" to characterize the pre-colonial standard of living of the rural population of what is now Papua, New Guinea. The expression means that each community could satisfy its wants using only part of the resources, notably land and labor, at the disposal of its members. As Fisk has noted (1978:11,) in some areas population pressure has prevented such affluence, while adverse climatic conditions occasionally result in temporary food shortages.

The expression is less applicable today. As far as the first term is concerned, to say that rural Papua New Guineans are subsistence farmers gives a wrong impression of economic independence. It is true that they produce a large proportion of the food they consume, that they build their own houses and procure their own firewood, the main domestic fuel. But in the course of the colonial era the people have started to practice agriculture with steel tools which they have to buy; they buy western type clothing, kerosene for lighting, and a host of other commodities. They supplement their locally produced diet with imported
and much cherished foodstuffs. They have to pay direct taxes to help finance the buildup of infrastructure in their area. While it might not be completely impossible for them, or for at least a proportion of the rural population, to revert to a pre-colonial type economy, this would run counter to an intricate process of social and economic changes, which has entailed that people need to earn money, need to be able to market goods and/or services, in order to continue the way of life to which they have become accustomed.

Such a reversal would, moreover, run counter to the wishes of Papua New Guineans who see their way of life as far from affluent. They have reason to do so. A nutrition survey held in 1983 suggests that in a number of areas the growth of children is retarded due to malnutrition (Heywood 1985). The data do not show clear correlation with population density or incorporation in the cash economy: while the worst affected areas are almost all away from the centers of capitalist development, there are several other such areas which show above average growth.

Very many Papua New Guineans would like to considerably expand their cash earnings. D. Fergie reports (personal communication) that most inhabitants of Tabar Island, in New Ireland Province, are content with what they have, but they seem to belong to a small minority. The desire for much more cash seems regrettable to me, and I will return to this point in the concluding section of the paper.

To reach affluence Papua New Guineans use three main strategies. The first attempts a shortcut by ritual means. In Van Baal's terms (1960:109) that amounts to "approaching the new world with means and tactics from the old." The second employs the avenue of what in Pidgin English and Hiri Motu is called "bisnis," economic enterprise, mostly small scale or very small scale. It is appropriate to use the local name for the phenomenon, because it refers to Papua New Guinean understandings of how the western economic system, imposed upon them, does function. Undertaking bisnis is for many Papua New Guineans a try-out, a way of finding out if they really understand the workings of that system. Grossman, who worked in the Eastern Highlands Province in the late 1970s, more than twenty years after
the local population had been introduced to bisnis, found (1984:30) that at the time of his research the fact that one undertook bisnis still gave prestige. Whether or not it was successful did not yet matter.

Nevertheless, many want and expect bisnis to be a shortcut to affluence, just as are ritual strategies. Consequently, disillusion with it is widespread, and some have turned away from it to attempt ritual again (Allen n.d.:122). This shift is possibly more typical for the Sepik area than for the highlands. The third avenue, finally, is wage employment. Since the ritual avenue does not produce cash, I discuss in this paper only the latter two alternatives.

It is, however, not only the rural people themselves for whom a drastic increase in their cash earnings is desirable. It also greatly matters to the central and provincial governments. The larger the subsistence component in the rural economy, the smaller the tax base of the government. Currently, the government needs a widening of its tax base, since revenues from the two mines operated in the country are less than expected (Goodman, Lepani, and Morawetz 1985:30) and, anyhow, they are short-lived ventures. Another source of funds for the Papua New Guinea government is Australian budgetary assistance. For a country of its size, Papua New Guinea receives one of the highest levels of financial assistance, mostly from Australia (Australian Government 1985:147). Although Australian aid will go on, it seems likely that its gradual reduction will be continued. Hence it is of crucial importance to the government that the rural population earns more money and thus can bring in more tax.

It is clear, then, that the interests of the rural population and the authorities in bringing about an increase in cash earning production, run to a certain extent parallel. This raises the question whether conditions in the country are such that cash earnings can be increased, not only in terms of Gross Domestic Income, the primary concern of the authorities, but also in terms of the incomes of individual farmers, the primary concern of the people themselves. The matter is of importance, since if the mass of the small farmers, together making up a large, rural informal sector, will not allow the government to enlarge its tax income, either via levies on what it produces, or on taxes on what
it consumes, or in yet another way, the possibility is that the establishment of a class of larger scale farmers will be favored, while small farmers will be neglected and left to fend for themselves.

3. MONEY EARNING POSSIBILITIES

3.1 Outside Agriculture

Papua New Guinea is still overwhelmingly an agricultural country and the skills of its inhabitants are mainly agricultural. This is one of the reasons an urban, artisanal, informal sector has remained small. Another reason is the many constraints, especially legal ones, with which this sector until recently had to contend.

By 1980 just over 11 percent of the population lived in urban centers (Miskaram n.d.:78). After rapid growth in the 1970s, the rate of urbanization has slowed down (Skeldon 1982:108). Employment opportunities in towns expanded up till the early 1970s. If government revenues will rise, this will result, directly or indirectly, in an increase in employment in the government sector. As I argued above, it is uncertain if such increases will eventuate. It is also uncertain if employment in the secondary and tertiary industries will increase. In an essay discussing the prospects for industrialization Hughes concludes (1985:116) that in the short run they are small, and that over a longer period they depend on radical reforms of current economic policies. Goodman, Lepani, and Morawetz point out (1985:125) that the total employment in manufacturing in 1983 amounted to 26,000, less than the annual increase in the Papua New Guinea work force. They conclude that even rapid increase in manufacturing can provide jobs for only a fraction of that increase.

Since towns have grown so rapidly after the Second World War--the urban population has almost trebled since 1966 (Skeldon 1982:101)--, the majority of urban residents have been born in rural areas. Yet, a sizeable and growing number of them are likely not to return. In addition there
are the inhabitants of traditional villages which have become part of towns, and the descendants of migrants. Morauta argues (1979:7) their total figure is over 30,000. It includes a growing number of people born in towns who have not learnt the skills needed for village life. Morauta does not mention if permanent urban residents have lost land rights in their home areas, and, if so, how large is the proportion concerned. In a later publication, however, she describes a process through which urban residents may lose their land rights. Discussing Toaripi land tenure, she writes (1985:17) "If [Toaripi] neither use land, coconuts, or sago on which they have a theoretical claim by descent nor have active relationships with others who do, their rights lapse." The effect is that migrants who fail to find adequate employment in their urban place of residence and consequently find it hard to support their relatives in the rural areas, or even to visit them, are the most likely to become landless and so to become proletarians. At the same time, they constitute a category of urban residents much in need of rights to land.

Living conditions of many permanent urban residents appear to be difficult. Unemployment among them may be higher than among the urban population in general. Morauta's paper makes clear that there is a growing group of people who have no alternative to urban employment or who do not consider any such alternative. While they form only about ten percent of the urban population, and only about one percent of the total population, their presence makes it much harder for people currently living in rural areas to find work outside agriculture.

3.2 Via Agriculture

Given the lack of alternatives, most Papua New Guineans have to earn money in agriculture.

3.2.1 Enough Land? Two conditions seem to enable people to do so. Firstly, most rural Papua New Guineans live on their own land, and secondly, the man-land ratio is favorable. Only about three percent of the total land area has been alienated, in part for plantations. In the past they were owned or leased by expatriates or expatriate firms, nowadays also by Papua New Guineans. Plantations provide about one-third of the total wage employment in the country. However, since rural people turn to plantation
work primarily when they cannot earn cash, or sufficient cash, using their own land, I will first discuss land availability, and afterwards wage employment.

3.2.1.1 Man-land Ratio. Overall population density is just over seven persons per km². But population is unevenly distributed over the country and in some areas densities exceed 150/km². Land alienation has contributed to land shortage since it also is unevenly distributed over the country. The Tolai have lost a significant proportion of their land (Crocombe and Hide 1971:313); German land acquisitions near Madang have led to severe land shortage (Fahey 1984:235 ff); while more recently land acquisitions for the nucleus estate settlement scheme near Bialla, West New Britain, have left the local population land short (P. Guinness, personal communication). Finally, as mentioned above, urban growth has in part taken place at the expense of village garden land.

The Melanesian systems of land tenure, still in force in by far the greatest part of the countryside, entail that land is distributed, more or less evenly, over all members of the community, although between communities the distribution is often less even. Until now landlessness and near-landlessness occurs to a very limited extent. It is not a colonial introduction. For instance, in the pre-colonial era the inhabitants of the tiny islands south of Umboi, in the Vitiaz Strait, had to trade to survive. But they may have chosen to be traders rather than agriculturalists.

Precisely because so many Papua New Guineans have now taken to earning money, by growing cash crops or by grazing cattle, the demand for land has been and still is increasing. According to the 1980 census, about seventy percent of rural households grew tree crops for cash. Howlett draws attention (1980) to what she calls rural proletarianization. She includes under the term the phenomenon of wage employment by persons having land rights in their home areas. I would reserve the term for persons who are subject to the following two conditions. The first is that they are either losing their rights to land, or have rights to such a small amount of land that they cannot support themselves without additional means. The second is that they do not possess the skills enabling them to find secure wage employment. Such a category of
persons does occur in Papua New Guinea. Reay (personal communication) reports that in the Wahgi Valley--by no means the most densely populated area in the country--men have difficulties in getting land when they are members of land-short clans and have two or more elder brothers. The same holds for migrants returning after a long absence. Land-short men may attempt to secure land by cultivating ties with maternal kin or with affines. The matter is compounded by clans wanting to become or to remain "strong," by adding to their numbers--for instance to increase their voting strength--thus decreasing the amount of land available per head.

Above I have already referred to the process whereby Toaripi men can lose their rights to land. Morauta does not mention how many Toaripi have become landless. It is likely relevant that their home area is situated in a "low lying delta with its numerous waterways, saline swamps and its absence of good gardening soil" (1985:11), so that many have left, first to find economic opportunities elsewhere.3

With regard to the Tolai, a matrilineally organized people living in one of the most densely populated areas in the country and one of the most intensively used for cash cropping, Fingleton says (1985:244) that individuals may effectively lose land rights by long-term absence, combined with failure to participate in village affairs. Such individuals meet opposition if they attempt to exercise rights to their matrilineage land. Nevertheless, he reports (personal communication) that the same strictures might not apply to their descendants, who, indeed, may be encouraged by their relatives in the village to return.

When, as a result of virilocal marriages, children grow up on their father's land, arrangements may be made to meet their land requirements, commonly by insuring that they can continue to occupy their father's land. They then form the starting group of a new matrilineage segment. Fingleton (1985) extensively documents this process for Rakunat, a village close to Rabaul, recording a large number of transfers, often of very small plots, which took place over the last hundred years. The result has been an ongoing redistribution, within the village, of land from the comparatively land rich to the land short matrilineage segments. He concludes (1985:304):
My examination of a century of land tenure change at village level demonstrates both a commitment and a capacity to adjust customary tenure in response to the changing size and composition of the village, and the differential needs of all its residents.

Another mechanism which may lead to growing inequality in land holdings is the accumulation of land by local, agricultural entrepreneurs, in the literature referred to as "Big Peasants." Their occurrence is especially noted in the Highlands provinces. Adapting Big Men manipulation to the new economic opportunities of the colonial and post-colonial state, they have established plantations and small ranches, using land to which lesser men hold title. They use their profits to expand into other types of enterprises and to provide their children with above average education. The workers they employ may not be paid in money, or only partly in money. Wage rates may be lower than the official minimum rates, but, on the other hand, working hours may be shorter. Big Peasants aim at consolidating their holdings, for instance, by converting the title to a western, freehold one. They attempt to monopolize government services, thus widening the disparities between them and lesser men.

The phenomenon of the Big Peasants is a recent one. The crucial issue is whether they will be able to transfer their estate intact to their heirs. When they are, lesser men lose land, may become land short and ultimately landless. On the death of a Big Peasant, it is to be expected that those who have helped him build up his enterprises during his lifetime will claim part of the estate, since they gave their help in the expectation of future rewards.

Howlett considers (personal communication) that the heirs will have the political clout to resist such claims, given the positions of power and influence their level of education has helped them obtain. In the literature I have found one instance only of the death of a Big Peasant (Standish 1985:287-88). In this case the sons did not have the strong personality their father had had. His enterprises collapsed and "kinsmen wanted to withdraw their contribu-

380
tions." In my view such events will occur again after the death of other Big Peasants.

Furthermore, tenure conversion—a legally sanctioned procedure through which the Melanesian, non-individual title to a piece of land is converted into a western, individual one—is not enough to protect a Big Peasant's estate, since in village politics land tenure arrangements can become Melanesianized. Standish reports (1985:281-82) that the tenure-converted estate of an Eastern Highlands Big Peasant, also a prominent politician has been taken over by the original landowners, while the "Big Peasant" himself lost prominence. Fingleton found (1985:269ff) that blocks of land on resettlement schemes in the Tolai area, held by Tolai in leasehold, might in time become matrilineage land. Comparable developments occurred in the early 1970s on the Hoskins oil palm scheme, in West New Britain Province, where the government had become reluctant to use its powers of foreclosure and considered a more negotiating stance.

3.2.1.2 Population Increase. Moreover, population increase in Papua New Guinea has been, and still is, rapid. Goodman, Lepani, and Morawetz (1985:168 ff, 255) emphasize that the official figure of 2.3 per cent increase per annum may underestimate it. As they put it: "It is generally considered that the 1971 estimates were over-inflated, throwing doubt upon the slowing of the growth rate indicated between the 1971 and 1980 censuses." They also point out that other countries, with a level of socioeconomic organization comparable with that of Papua New Guinea, show higher rates of population growth.

There are several reasons why growth is likely to continue. Since it has been rapid for several decades, there will be in the coming years an equally rapid growth in the number of young, adult women; in other words, the number of potential mothers will increase. Secondly, the mortality rate is still high, but declining (McDevitt 1982:72), while, countrywide, fertility is not declining (ESCAP 1982:63). If mortality continues to fall, and fertility remains constant, the rate of population increase is boosted. Finally, the country does not have a population policy. After the establishment of provincial government, initiating such a policy has become a provincial affair (Muirden 1982:118).
An assessment of the capacity of land resources to absorb a growing population should also take into account that in many areas such growth has been reduced by migration. For example, annual population growth in Simbu Province, containing some of the most densely populated areas in the country, was 0.7 per cent during the period 1966-71 (Howlett et al. 1976:39). During the same period the number of people who had left Simbu Province increased annually by 11 per cent.

If in fact urban growth slows down, and rural employment opportunities remain at the same level, pressure on land will increase much faster in the near future than it has done in the past.

3.2.2 Land Suitability. Also when people have ample land at their disposal, it does not necessarily provide them with cash earning opportunities. The altitude of the terrain may be such that it is not suitable for any of the cash crops now grown in Papua New Guinea. Or it may be of poor fertility, or very hard to work with the technologies available.

Even more important in Papua New Guinea is that the transport network leaves many villages isolated. Of course this happens more often in sparsely populated areas where the costs of road construction, and road maintenance, are so high that in the foreseeable future they will not be balanced by the returns flowing from increased production. Proctor argues (1980:178-81) that in such cases the government should see the buildup of infrastructure as a social rather than as an economic service, and should go ahead with it. However, it seems doubtful if the Papua New Guinean government has the ample resources needed to make such large non-economic expenses. Another method, Proctor suggests, is to interest aid agencies. Again, few aid agencies seem equipped or inclined to carry out the lengthy, costly, yet unspectacular construction projects referred to.

3.2.3 Wage Employment in Agriculture. Having discussed land availability, I now turn to wage employment in agriculture. It seems unknown how many Papua New Guineans are so employed, although the several authors dealing with the topic agree that the number has fallen. Goodman, Lepani, and Morawetz (1985:86) estimate that
there were 36,000 workers in 1983 as against 45,000 in 1979-80. Dennis gives a much lower figure (n.d.:242), namely 34,000 for 1978. Bridgland's estimate (1981:20) is 48,000 for the "wage earning work-force" in export crops in 1981. In his view it is a conservative estimate. Dennis's figures refers explicitly to "unskilled labour employed on plantations," and so does not include workers on large holdings run by Big Peasants and those on middle scale holdings, such as managed by many Tolai and by block holders in settlement schemes. But also if the largest estimate is the correct one, the sector is far too small to take in more than a fraction of the growing work force in disadvantaged areas, the annual growth of which Goodman, Lepani, and Morawetz estimate at 16,000 (1985:87).

Papua New Guineans do not particularly favor working on plantations or large holdings. McKillop, in a paper call J "Managing Plantations in Papua New Guinea Today: Who Wants To Be a Labourer" (1981) argues that the plantation system did well in the authoritarian colonial order, but broke down in a less authoritarian context. He advocates subdivision of plantations into commercial family units. Heaney's survey to which I have referred already and which wa... published in the same collection as McKillop's paper, makes clear that many can hardly avoid becoming a plantation laborer, whether or not they want it. He echoes McKillop with regard to labor performance on plantations.

3.2.4 Labor. In the preceding sections I have noted that the man-land ratio in Papua New Guinea in many areas favors an extension of agricultural activities for cash purposes. The question remains if the labor resources are available to make this possible. The idea that subsistence affluence prevailed in Papua New Guinea suggests that this is the case, since subsistence affluence results from a surplus of land and labor. However, the empirical evidence from contemporary Papua New Guinea is contradictory.

Subsistence and cash earning activities appear to be linked in several ways. They compete for land and the tendency has been that the more easily accessible land and/or more fertile land has been allocated to cash purposes. The effect has been that garden land became harder to reach, or harder to work, or both, so labor inputs had to be increased in order to sustain output. As I pointed out
above (Section 2), bisnis activities carry prestige so people, especially men, are inclined to devote more time to them than to subsistence. Bourke argues (1983:9), on the basis of aerial photography, that the total acreage under cultivation has not increased appreciably, but that cultivation methods have changed. For instance, a crop of taro or yam may nowadays be followed by sweet potato. In several areas taro has been replaced by sweet potato, often of necessity due to the diseases by which the crop is affected, especially in lowland areas. Sweet potato gives larger crops for the same amount of labor and is more tolerant of low fertility and cold. Hence the replacement gives cultivators the opportunity to produce the same amount with less work and using a wider range of land resources. The same occurs when taro or yam is abandoned in favor of cassava, but in this case the diet suffers because of cassava's very low protein content.

While the slow increase in acreage under food crops and the shortening of the agricultural cycle imply that especially men can cut back on their labor input for food production—since the men tend to prepare land for cultivation—other trends result from increased labor inputs. In Papua New Guinea a wide variety of production techniques is practiced. Intensity of cropping is an important variable in these techniques. Bourke has shown that in the central highlands farmers have increased the acreage under intensive cropping. This has meant more output per acre, but, simultaneously, more work, especially for men.

More important, however, may be that the amount of cash cropping until recently has been underestimated. Bourke, again, draws attention (n.d.) to the magnitude of cash cropping for domestic purposes. He documents the growth in the number of rural markets and the emergence of rural wholesaling which allows a wider variety, and a greater bulk, of produce to be sold. According to his estimates the value of locally grown and marketed vegetable food, including betel nut, lime and peppers, exceeds K 50 million per year (Bourke n.d.:12). By comparison the value of small holder grown coffee, by far the most important cash crop, was about K 71 million in 1983 (Shaw 1985:163; Goodman, Lepani, and Morawetz 1985:87). Finally, Shaw estimates (1985:38) that locally produced and marketed animal foods are to be valued K 40 to K 60 million per year.
A proportion is produced by Papua New Guineans, but I do not know its size. The volume of marketed food production makes clear that labor input by Papua New Guineans is larger than hitherto supposed.

The changes in production techniques referred to in this section consist of shifts from one Papua New Guinean technique to another. The only change so far which meant import of technology was the replacement of stone by steel tools. For the rest, present day Papua New Guineans practiced cash cropping with technologies attuned to subsistence agriculture, with human physical effort being the only energy input provided by culture, and with a garden layout attuned to subsistence agriculture, with regard to both the size of the gardens and their distance from one's place of residence. Given the crucial role of human physical effort in such systems, it will have to return more output, if people want to earn more with their work, or earnings per unit of output will have to increase, an issue which I postpone discussing until the next section.

Gostin gives a captivating account of the efforts of the Kuni in the Central Province to engage in the cash economy. They resettled to a less isolated part of their territories and went to a great deal of trouble to adapt their social organization to the requirements of rubber cropping. They were helped along by mission and extension personnel. One of their motivations was that by means of cash cropping they wanted to relieve women especially from the monotonous drudgery of subsistence agriculture (Gostin 1985). It is a painful disillusionment to realize, then, that the returns of cash cropping may not be sufficient to do even this. Mitchell, at least, found that if the Nagovisi, in Bougainville, bought food with the proceeds of their cacao trees, they ended up with less than if they had used the land directly for food crops (1976:127), even when cocoa was at a high price level.

At this point it is useful to mention the work done by Bourke and D'Souza on the Nembi Plateau, Southern Highlands Province (1982). The plateau is densely populated with about 160 persons per km2 arable land in 1980. Cultivation is practiced from 1650 to 2100 m. Malnutrition is widespread. Bourke and D'Souza found that Nembi agriculture can be intensified in several ways: by introduc-
ing new crop varieties, new crop rotations, and by applying compost and fallow crops. They conclude: "an effective extension programme is urgently needed to assist the people in recognizing their problems, helping them find solutions to them, and passing on the results of the research programme" (1982:206). Shaw also recognizes (1985:130) the need for an effective extension service, but adds that the extension service of the Department of Primary Industry has lost direction and has become ineffective. It is a major task to ameliorate the situation.

While it is true that a great deal of cash cropping, especially growing of coffee, has been taken on without active support of extension officers, and at some stages even in opposition to their directives (M. Reay, personal communication), it is not so that cash croppers can do without their advice, for instance with regard to disease and rejuvenation of plantings. Bourke's and D'Souza's recommendations support the conclusions reached by the Asian Development Bank team headed by Ward which surveyed the potential of South Pacific agriculture (Ward and Proctor 1980; see also Ward 1984). The team advocates a comprehensive extension service, including management advice, for small holders so they can maximize their returns. If commercial agriculture is to satisfy their aspirations, such a service seems indispensable.

3.2.5 Returns on Labor. Extension undertaken by the Department of Primary Industry since the early 1950s has focused on the cultivation of cash crops for export, and, more recently, on the herding of beef cattle for domestic consumption. The early emphasis on export crops was a logical one, since at the time towns were small, so need for food crops were limited. Moreover, the extension officers were better acquainted with crops such as coffee, copra and cocoa than with Papua New Guinean food crops. Finally, the export crops were those grown on plantations and for which marketing outlets existed.

The disadvantages of these crops are their sharply fluctuating prices and their long term decrease in value relative to that of industrially produced commodities. Plantation owners, let alone small scale cash croppers, are price takers for their produce. They have to accept price levels as they are shaped by factors beyond their control.
By growing cash crops for export small holders become part of a world wide system of production and have to adapt to the way it evolves. Apart from distortions of market prices by governments and traders, Papua New Guinean growers receive per unit as much for their crops as other growers. The fact that they receive little is because they produce few units. They have to share the market with growers who use far more capitalized production methods and who, through the application of enormous inputs, can realize far greater outputs per producer and per unit of land. Measured in terms of additional energy inputs, these increases in output have been modest. It is not at all certain that such high input systems are sustainable, since in several areas of the world their effects have been adverse. The stimulus for the production drive may be that agricultural produce is generally underpriced, but as long as this situation persists, the only way farmers can increase their incomes is by increasing output.

Frustration over both low prices and fluctuation of prices is widespread among Papua New Guinea cash croppers. It has contributed to their rejecting several cash crops when returns proved unacceptably low. It has also led to people harvesting only partially or not at all during periods of depressed prices. In the present situation it is only increased output per unit of labor which can overcome this. This consideration prompted the Ward team to argue for the application to small or medium scale production systems of management practices originally developed on large holdings. They are to be backed up by research organizations. The team realized the magnitude of the shift from farms oriented towards subsistence with cash earning production added on towards farms oriented towards commercial production. The Epilogue to its report is written by Hau'ofa, who concludes (1980:486):

[ Islanders, in this paper: Papua New Guineans ] cannot have the basically "western" lifestyle based on high per capita GNP to which they aspire, without changing, in a very fundamental way, the system of social relations and community life, all of which arose from and are therefore appropriate to subsistence existence.
3.2.6 Marketability. The export crops grown in Papua New Guinea are grown in many other tropical countries. Demand grows slowly, in keeping with growth of world population and of spending power among the population. Production growth, however, proceeds unplanned, and possibly so fast that price levels come under pressure. Hence future incomes from export crops are uncertain.

Moreover, for several of these crops alternatives are sought by agribusiness. A synthetic alternative for rubber has hit the marketability of the natural product severely. For cocoa, an alternative has been developed and is in production, although so far on a limited scale. For coffee, research is still going on. Consequently, from this angle also, the future of export crop incomes is uncertain.

The market for domestic consumption has expanded more rapidly. There is a growing urban population, while, secondly, road construction has opened trade in produce specific to different ecological zones. Coconuts and betel are now sold in the highlands, highland vegetables such as cabbages and potatoes in the lowlands. An additional advantage of domestic food crops is that, in spite of the increase in market turnovers, their price has irregularly but steadily increased. Bourke (1983: fig. 2) shows that during the period 1970 to 1982 the price of sweet potato has about trebled on the Lae and Goroka markets. The price of taro increased even more, although with this crop the supply may have decreased (see also Epstein 1982:207). For sweet potato the main increase occurred after 1976, while the consumer price index for food over the period 1975-82 rose from 100.0 to 155.2 (Garnaut and Baxter 1984:130). Increases in the price of betel nut have led to protests among the urban population.

Bourke's analysis shows that Papua New Guineans have very actively responded to the new market openings provided by urbanization and the extension of the road network. While this makes clear there is considerable scope for the expansion of domestic production, the limited size of the urban population, and the limited purchasing power of the population at large, set limits to the expansion possible. It is unclear when these limits will be reached.
3.2.7 **Sustainability.** The last issue I consider is the ability of Papua New Guinea's physical environment to carry the increasing production load. While it is beyond doubt that this ability is limited, there is a lack of data to make a projection of how much scope for expansion there is. The CSIRO, the Australian Commonwealth Scientific and Industrial Research Organisation, has embarked on a massive study to find out exactly this (R. Hide, personal communication). Using the data base of the existing soil surveys, several sets of data are compiled for the entire country. They include the physical geography, soil characteristics, demographic data, and forms of land use, regarding both subsistence and commercial use. The results should be available by the end of 1986. Taken together the data will enable planners and officials to assess the viability of canvassed agricultural development projects, ecologically and sociologically. The assessment includes a consideration whether the scope for projects can be enlarged by making use of other forms of land management, and if extant Papua New Guinea expertise is likely to make such management possible.

4. **CONCLUDING REMARKS**

I have discussed a number of factors which make uncertain whether Papua New Guinean farmers can achieve the levels of prosperity they would like to attain. Among others, I mentioned growing population, unsuitable land, depressed prices, and market limitations. My conclusion is that it is unclear what the scope for expansion is.

In section 2, I mentioned in passing my regret at the desire among Papua New Guineans for more financial wealth. This is in part since I think it is likely that most will no substantially increase their earnings, and consequently may be frustrated in their desire. But it is also since I think that such a desire betokens a conception of life which is frustrating in itself as it identifies life enjoyment primarily with the enjoyment provided by material possessions, acquired in competition with others, rather than with less materialist and competitive experiences.
I am hesitant voicing these comments because I myself belong to a society in which mainstream culture comprises such values, in which the enjoyment of material possessions is a matter of course, and in which a decrease of the materialist emphasis is not in the offering. So as to avoid the stricture that such comments deny others what the commentator has ready access to, I add that they apply even more to our own society than to Papua New Guinea. Moreover, pre-colonial lifestyles of Papua New Guineans were also characterized by competition and the acquisition of material possessions, be it for distributive rather than consumptive purposes. Hence my comments call for a reorientation of values away from those of our own society, but also away from those of many pre-colonial Melanesian ones.

To finish I would like to stress that, compared with farmers in other agricultural countries, Papua New Guineans live under idyllic conditions. Most can live and work on their own land; they are not threatened by famines; their government does not swell its revenues by heavy levies on export and domestic cash crops; it does not attempt to promote the interests of industry or large scale farmers by taking from the small farmers.

But, that is comparatively speaking.

NOTES

1. The paper was written while I was a Visiting Fellow in the Department of Anthropology, Research School of Pacific Studies, The Australian National University. I would like to thank its members for their hospitality. I read a preliminary version of the paper at a departmental seminar and would also like to thank the attendants for their interest and comments.
2. Heywood calculated growth rates by reference to length and weight at 18 and 30 months of age. He allowed for different rates in areas of different altitude and scored the data per district, measuring the amount of deviation from the mean rate for the altitudinal zone in which the district is located (Papua New Guinea is divided into nineteen provinces, each subdivided into districts).

Table One compares his results with the migration patterns as formulated by Clunies Ross (1977a). The pattern which hampered subsistence production most was high outmigration of men, combined with much lower outmigration of women and children. It occurred in 9 of the 50 villages surveyed. Clunies Ross calls this pattern "high-Maprik," after one of the areas where it occurs. Since the migration survey was based on a sample of 50 villages in 10 districts, while the nutrition study was nation-wide, it is not possible to see if all the areas with worst infant malnutrition show high-Maprik migration. But it is possible to examine if the surveyed "high-Maprik" villages are located in districts with high infant malnutrition. Table One shows that this is not the case.

As far as population density is concerned, Maprik district is admittedly densely populated, but other such districts, for instance Gumine and Sinasina show above average growth rates for infants.
TABLE ONE

Infant Nutrition in Villages
With High-Maprik Outmigration

<table>
<thead>
<tr>
<th>Clunies Ross's Data</th>
<th>Heywood's Data</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>District</strong></td>
<td><strong>No. of Villages</strong></td>
</tr>
<tr>
<td>Maprik</td>
<td>3</td>
</tr>
<tr>
<td>Ambunti</td>
<td>1</td>
</tr>
<tr>
<td>Okapa</td>
<td>1</td>
</tr>
<tr>
<td>Goilala</td>
<td>1</td>
</tr>
<tr>
<td>Finschhafen</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>9</td>
</tr>
</tbody>
</table>

a Negative figures show below average growth. 
> +20 and < -20 are the maximum deviations Heywood tabulates.

3. Clunies Ross writes (1977b:21n) that an informant in a coastal village in the Malalaua district denied that anyone there had lost land rights. This is the district where the Toaripi also live, but Clunies Ross does not state if his informant was a Toaripi.

4. I appreciate Dr. Fingleton's perseverance in correcting mistakes in the above paragraphs.

5. Heaney, as quoted by Howlett (1980:205), "found that some workers in villages preferred the shorter and more flexible working hours, and the possibility that their children might become members of the big-man's clan."

6. Heaney has surveyed the labor force on two coffee plantations in the Wahgi Valley. Almost all were High-
landers. He tabulated as follows (1981:134) their opinions on the suitability of their land for coffee growing.

**TABLE TWO**

<table>
<thead>
<tr>
<th>Description of Home Climate and Soil Conditions</th>
<th>No Coffee at home</th>
<th>Have Coffee at home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home place too high, too cold, too bush, forest</td>
<td>50.0</td>
<td>5.7</td>
</tr>
<tr>
<td>Land not good: too red or too dry</td>
<td>18.4</td>
<td>49.1</td>
</tr>
<tr>
<td>Ground too stony</td>
<td>15.8</td>
<td>-</td>
</tr>
</tbody>
</table>

7. When it did concern itself with food crops in its extension work, it focused on rice, an imported food.
BIBLIOGRAPHY

Allen, B.  

Bourke, R. M.  

Bourke, R. M. and E. D'Souza  

Bridgland, L. A.  
394

Clunies Ross, A.


Conroy, J. and G. Skeldon (eds.)

Crocombe, C. and R. Hide

Dennis, M.

395
Denoon, D., and C. Snowden (eds.)

Epstein, T. S.

ESCAP

ESCAP Secretariat

Fahey, S.

Fingleton, J. S.
Fisk, E. K.  
1978  

Garnaut, R. and P Baxter (in consultation with A. O. Krueger)  
1984  

Goldthorpe, C. G.  
1985  

Goodman, R., C. Lepani, and D. Morawetz  
1985  

Gostin, O.  
1985  
Cash Cropping, Catholicism and Change: Resettlement Among the Kuni of Papua. Manuscript submitted for publication in the monograph series of the National Centre for Development Studies, Australian National University.

Grossman, L. S.  
1984  
Hau'ofa, E.

Heaney, W. H.

Heywood, P.

Howlett, D. et al.


Hughes, H.

Jennings, J. N. and G. J. R. Linge (eds.)
McDevitt, T.  
1982  

McKillop, B.  
1981  

Miskaram, N.  
n.d.  

Mitchell, D. D., II  
1976  

Morauta, L.  
1979  

1985  

Muirden, N.  
1982  
Proctor, A. S.

Shaw, B.

Skeldon, R.

Standish, B.

Walter, M. A. H. B. (ed.)

Ward, R. G.

Ward, R. G. and A. Proctor
LIST OF CONTRIBUTORS

S. M. NURUL ALAM (Ph.D. Purdue University), Associate Professor, Department of Economics, Chittagong University, Chittagong, Bangladesh. Dr. Alam's area of specialization is Bangladesh and the countries of Southeast Asia. He did his dissertation field work on marginalization and pauperization of peasants in Bangladesh.

G. N. APPELL (Ph.D. Australian National University), Senior Research Associate, Brandeis University. He has done field work among the Dogrib Indians of the Northwest Territories of Canada, the Rungus Dusun of Sabah, Malaysia, and the Bulusu' of East Kalimantan, Indonesia. His publications include the edited volume The Societies of Borneo: Explorations in the Theory of Cognatic Social Structure (American Anthropological Association 1976) and Dilemmas and Ethical Conflicts in Anthropological Inquiry: A Case Book (Crossroads Press 1978).

C. BAKS (Ph.D. Universiteit van Amsterdam), Vakgroep Planning en Beleid, Faculteit Sociale Wetenschappen, Rijksuniversiteit Utrecht. Dr. Baks has done field work in South Gujarat, India: the first time concerned tenancy problems; the second was on bureaucracy in a middle sized town; and the third was on the working of the Small Farmers Development Agency. Also during a stay at the University of Bogor, Java, Dr. Baks carried out demographic research.

THOMAS CRUMP (Ph.D. University of London), Associate Professor, Antropologisch-Sociologisch Centrum, University van Amsterdam. Professor Crump has done field work among the Maya tribes of southern Mexico and Guatemala as well as in Japan where he researched monetary institutions. His publications include The Law for Everyman (Collins 1963), Man and his Kind (Darton, Longman & Todd 1973), and The Phenomenon of Money (Routledge & Kegan Paul 1981).
MICHALE R. DOVE (Ph.D. Stanford University), Chief of Party (A), Winrock International Institute for Agricultural Development, Pakistan. Dr. Dove has done field work in West Kalimantan, South Kalimantan, the Outer Islands of Indonesia, and in Java. His publications include Swidden Agriculture in Indonesia: The Subsistence Strategies of the Kalimantan Kantu' (Mouton 1985) and the edited volume Peranan Kebudayaan Tradisional Indonesia Dalam Modernisasi (Yayasan Obor Indonesia 1985).

JAMES F. EDER (Ph.D. University of California at Santa Barbara), Associate Professor, Department of Anthropology, Arizona State University. Dr. Eder has done extended research in the Philippines: in San Jose, a truck-gardening community of Palawan Island, various communities elsewhere on Palawan Island, including research among the Batak, and in various other regions of the Philippines. Among his publications are Who Shall Succeed? Agricultural Development and Social Inequality on a Philippine Frontier (Cambridge University Press 1982) and On the Road to Tribal Extinction: Depopulation, Deculturation, and Maladaptation among the Batak of the Philippines (University of California Press 1987).

JACK GLAZIER (Ph.D. University of California, Berkeley), Professor, Department of Sociology and Anthropology, Oberlin College. Professor Glazier has conducted field work among the Mbeere of Central Kenya and among American Jewish communities.

MARY McCUTCHEON (Ph.D. University of Arizona, Tucson), Directorate of International Activities, Smithsonian Institution. Dr. McCutcheon has done research on the Palau Islands.

BARBARA S. NOWAK (Ph.D. State University of New York at Buffalo), Visiting Assistant Professor in Anthropology/English, State University of New York College at Brockport. Dr. Nowak has done research on the Hma1 and the Btsisi1 in Selangor, West Malaysia, and the Kolko Polek (Polish Circle of Women in Buffalo, New York.)
ANTON PLOEG (Ph.D. Australian National University), Socio-cultural Sciences, Sociological Institute, State University of Utrecht. Dr. Ploeg has done research among the Wanggulam, a group of Bokondini Dani of West Irian, Indonesia, in two resettlement villages in Papua New Guinea, and among the Kovai of Umboi Island, Papua New Guinea. His publications include Government in Wanggulam (Martinus Nijhoff 1969) and The Situm and Gobari Ex-servicemen's Settlements (New Guinea Research Bulletin No. 39, 1971).