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PLANTATIONS AND DEPENDENCY: A CASE STUDY OF RUBBER PLANTATIONS IN LIBERIA

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ABSTRACT

PLANTATIONS AND DEPENDENCY: A CASE STUDY OF RUBBER PLANTATIONS IN LIBERIA

By

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The primary purpose of this study was to examine dependency in Liberia, a typical plantation society. In so doing it served to illuminate various social and economic aspects of development. Drawing from the perspectives of different disciplines in its examination of plantations, it sought to formulate an integrated model of the plantation system within the framework of the Dependency School of thought, one that would balance internal and external relations of production. The study is historical and emphasizes the underdevelopment of Liberia as a dynamic process in which internal rural and urban institutions, external market relations, and agri-ecological factors reinforce one another.

The integration of subsistence and plantation production in Liberia was viewed in the context of a power and systems paradigm. Case data were drawn from documentary sources and used as the bases for the construction of submodels--labor, land, capital, organization, and agri-ecological factors--of the plantation system. These submodels were used in clarifying an adaptation of Ellen's model of ecological and socio-economic change (Ellen, Provisional Model of

Ecological and Socio-Economic Change in Social and Ecological Systems. London: Academy Press, 1979 edited by P. C. Burham).

In general, the study suggests conformity of Liberia to the plantation system as an archetype of the Dependency School, that is, the institutional, historical, and ecological factors that determine patterns of agricultural production and resource use are such that they result in the impoverishment of a country, in this instance Liberia.

Dedicated to Paapa.

And, to the memories of W<u>o</u>fa, Papa, Maame, Akosua and Kwasi.

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CHAPTER I

INTRODUCTION

Notwithstanding the attractions of an agriculturally based approach to studies of socio-economic change in developing countries, in general, and Liberia, in particular, there are many problems to be considered. The Dependency School of economic development stresses the inability of many developing nations, including those having plantation systems of agriculture, to support their populations and at the same time sustain economic growth. Also, the Dependency School underscores a relative scarcity of resources--physical and economic, and their articulation in social relations of production--as central to conflicts and interactions within the "plantation mode" of production. Yet such studies have typically emphasized external manifestations (EXOGENOUS ASPECTS) as dominant in shaping the character of a country's agriculture and society. This is often done without cognizance of internal characteristics (ENDOGENOUS ASPECTS) of the host society that make it amenable to the entrenchment of the plantation and its related institutions.

The introduction of the plantation system entails integrating it into an existing system of agricultural production within the host society. Typically, the endogenous system of agricultural production and its social and cultural norms may be characterized as "subsistence." Against this backdrop, the power exercised by the plantation is dependent, on the one hand, on the resources it commands and, on the other, on the latitude allowed by the character of the host society for the exercise of such power.

The present study seeks to bridge the gap between the exogenous and endogenous factors that combine to shape the character of the societies where the plantation system is dominant. Also, the competing and sometimes conflicting claims of subsistence and plantation production for natural resources (principally land) and their impact on the physical environment are evaluated as one result of the integration of the two systems.

A case study approach is used to outline and evaluate the historical antecedents and general social mechanisms that have governed the use of resources within both modes of production within a single country. Subsequently, comparative illustrations are made between the case study and other plantation societies.

Most studies of plantations have been concerned only with the New World and parts of Southeast Asia. While plantation activities in Africa date back hundreds of years, the continent is often mentioned only parenthetically--as the source of slave plantation labor. The present study attempts to redress this imbalance by concentrating on Liberia, an African country whose plantations are largely devoted to natural rubber production, an increasingly important export commodity of many developing countries. In addition, Liberia merits such attention in that it exemplifies the character of relations between small developing nations and the large industrialized ones.

Documentary sources have been assembled to yield both quantitative and qualitative data, which are analyzed to shed light on the ecological and historico-economic complexes that define the evolving uses of agricultural resources in Liberia. Perspectives from the disciplines of economics, agriculture, forestry, and sociology, among others, are presented to integrate the multi-dimensions of plantations and subsistence systems to yield a more integrative interpretation of underdevelopment in a plantation society.

Liberia: An Instance of a Plantation Society

In 1922, following the Stevenson Restrictive Act (Lawrence, 1931; Wolf and Wolf, 1936) by which Great Britain sought to monopolize world trade in rubber, the United States was forced to find new outlets to counteract the impending shortages and high prices. In what has been described as "a case of United States economic nationalism and an unavoidable expedient altruism" (Azikiwe, 1937: 31), American interest turned to Liberia around 1927. The political economy of Liberia at that time was in a state of crisis. Firestone Plantation Company offered a loan and concluded a concession agreement which forestalled the crisis, marking the opening of an era designed as "The Rubber Period" in Liberian history (Brown, 1941; Carlson, 1977).

It is true that iron ore has now replaced rubber as the leading export item, accounting for nearly 70% of all exports in 1976 as against 12% for rubber (Monrovia, 1978). However, the relative share of the two items in total exports distorts their respective importance in the Liberian economy. Iron ore production is capital intensive and has relatively minimal direct linkages with the rest of the economy; it accounts (1976) for only 10% of total employment. On the other hand, rubber production has been recorded as the major source of income and employment (Monrovia, 1978). More than one-third of the rubber produced in Liberia comes from "small" farms, with the remaining derived from plantations, mostly Firestone operations.

In studying Liberia as an instance of a plantation economy, it is not to suggest that estate agricultural production is necessarily the predominant economic activity. Rather, it is that plantations, in general, and rubber plantations, in particular, have played a central role in the evolution of the political economy of the country. In effect, the political economy of Liberia has evolved both as a response to and as a result of the demands of plantation agriculture. Liberia, therefore, is viewed as an instance of plantation society to the extent that the nation's dominant economic activities center on the production of raw materials, both agricultural and industrial, for an export market, influencing the internal and external relations of production.

Towards an Integrated Model of the Plantation

Drawing from the differing disciplinary perspectives, this study seeks an integrated model of the plantation that reconciles the divergent views of a plantation society stemming from "particularistic" studies. Focusing on the internal (subsistence) and external (plantation) characteristics and the dynamics of their integration in a historical context provides further clarification of the obstacles to socio-economic transformation of plantation societies. Also the history of rubber, in general, and plantation rubber production, in particular, have evolved within a framework of nations struggling for a scarce resource. Hence, the historical lessons that emerge from this study provide insights that may be pertinent to the world's current struggle with energy resources. Sociologically, the integrated model furnishes further clarifications of the Dependency School of thought within the framework of rural production systems and their power structures.

CHAPTER II

REVIEW OF SELECTED LITERATURE

The literature on plantations is extensive, showing the traditional disciplinary orientations: history, geography, economics, and anthropology, among the social sciences; agriculture and forestry, within the applied sciences. Of necessity, the theoretical import of these studies reflects the disciplinary and philosophical traditions in which they are steeped. This immersion imposes a tremendous burden on attempts at selection, synthesis, and focus. To render this maze of literature coherent in its collective clarifications of the relation of production and underdevelopment, the review has been divided into sections. The first part deals with plantations in general; the second looks at plantations within the framework of the Dependency Model and its intellectual undercurrents.

General Aspects of Plantations

Origin and Development

The plantation system is distinguished from other agricultural systems in terms of scale, labor use, types of crops, and demands for and sources of capital investment. The plantation is a large-scale agricultural operation that specializes in a single crop, geared towards an export market. Its capital investments are derived from external sources. Why plantations have been concentrated within the tropics is the subject of a great deal of controversy among geographers and cultural historians.

It has been suggested that the origin of plantation agriculture is associated with the invention of sugar refining. This explanation, advanced by Karl Ritter, has subsequently been "confirmed" by cultural historians (Waibel, 1931). Edward Hahn, on the other hand, argues that the plantation system is a specific form of hoe culture:

> Plantations are cultivated with hoes, as are the fields of Indians and Negroes. European influence, however, gives the plantation system its peculiar character: the European invests his capital and energy and brings together a number of hoe cultivators in order to produce for market such colonial products as coffee, sugar and spices (Buchanan, 1938: 175).

A third theory, attributed to Keller, is the "climatic theory of the plantation" (Waibel, 1942). This thesis states, briefly, that tropical agriculture is to be distinguished from that of temperate regions; plantations constitute tropical agriculture, while farms are to be found in the temperate zone. A fourth theory is advanced by Waibel (1941) who contends that the major difference between European plantations and subsistence agriculture lies in the purposes of agricultural production and the nature of the crops raised. Native production is usually geared toward home consumption, while plantations cater to an export market which requires considerable capital outlay.

Neither the invention of sugar refining, climate, cultural techniques, nor the scale of enterprise can exclusively account for the origin and the concentrations of plantations in the tropics, however.

> The fact that in the present world community plantation societies are grouped in or near the tropics...may be accounted on other than climatic grounds....Plantations are largely concentrated in the tropics, not because of climate, but because in the present world community, tropical regions constitute a highly important and accessible trade and agricultural frontier...where there are

> exploitable agricultural resources attractive to capital and which are nearer to consuming centers in terms of transportation costs than are the vast areas of sparsely peopled but potential agricultural lands in temperate zones (Thomson, 1941: 55).

The climatic theory of the location of plantations in particular is to be viewed with suspicion. It operates to justify an existing social and economic order, and vested interests connected with that order:

> The plantation, on the other hand, represents an intruding force from without which is political in character. It arises as a regulator of population movements and racial contacts in the interest of a planter in connection with the exploitation of agricultural resources for market (Waibel, 1942: 307).

Plantations and Socio-Economic Change

As regards the nature of the socio-economic impact of the plantation, Wolf comments:

> ...Wherever the plantation has arisen, or wherever it was imported from the outside, it always destroys antecedent cultural norms and imposes its own dictates, sometimes by persuasion, sometimes by compulsion, yet always in conflict with the cultural definitions of the affected population. The plantation, therefore, is also an instrument of force, wielded to create and to maintain a class structure of workers and owners, connected hierarchically by staff line of overseers and managers (Wolf, 1959: 136).

By the above attributes, Beckford (1972) has argued that the structure of the plantation system limits the possibilities of its proximate economic, social, and political variables contributing to the development of the societies where it is found. In this regard, the economy of Liberia, a relative newcomer into plantation production, has been described as buoyant with respect to growth but not development (Clower et al., 1966).

Some development economists suggest that the plantation can aid development (Baldwin, 1956 and 1963). Also Geertz, a cultural anthropologist, draws from his study of plantation society in Java the following conclusion:

> Even under admittedly exploitative, race-structure, export-oriented, and in the long run, completely unworkable colonial setup, the plantations came close to building a new sort of rural society in Modjokuto, and only the Great Depression, the inertia of the indigenous systems, and, most crucially, the inner contradiction of imperialism seem to have prevented them from doing so (Geertz, 1956: 28-29).

Also on the positive side, there are studies which stress the plantation as a nucleus from which plantation crop production is diffused and incorporated into subsistence agricultural activities, in the process aiding in the "monetization" of the rural sector of the underdeveloped economy. In Cameroon, it has been pointed out that besides the infrastructure provided by plantations, the spread of banana cultivation to the area occurred because farmers felt that they formed a part of, and shared the prestige of, a large-scale enterprise (Ardener *et al*., 1960). The development of "local" small-scale rubber farms has also occurred wherever rubber plantations exist. In some countries, small-scale rubber production accounts for a substantial share of total output (Ntiri, 1978). Rubber farms, it is suggested, have developed and survived in this highly competitive industry due to the communications, processing, marketing and research facilities provided by large plantations (Thomson, 1941).

Class Structure

Internal differentiation of developing societies has been fitted into various conceptual frameworks: the folk-urban continuum of Redfield (1941 and 1960); the Puerto Rican subcultures of Steward (1950); the hacienda-plantation comparisons of Mintz (1957) and Wolf (1966); and the typological constructs of Geertz (1963). As regards plantation societies, the typological constructs have centered around "the rural proletariat." The term was originally used in the context of the plantation by Van Lier (1950) in reference to the Caribbean. Its wider application has been based on the pioneering character of the plantation as a mode of agro-social organization (Mintz, 1974). The term has been employed, among other reasons, "to separate the concept of the modern wage-worker from an exclusively urban context...and to raise the question of rural proletarian consciousness in the light of the colonial (plantation, mine, oil well, etc.) experience." The rural proletariat is characterized as follows:

> A rural proletariat is endowed with some of its social characteristics by virtue of the demands made upon it by the plantation system....Plantation enterprises are, though rural, in some respects, industrial in character. They impose certain features of life-style upon their laboring populations without regard to the antecedent cultures of the working people; rural proletarians thus come to behave sociologically in ways associated with such economic characteristics as wage labor, dependence on imported goods, lack of productive property (especially land), and so on (Mintz, 1974; 300).

In addition to the rural proletariat are the "plantation aristocracy," those who own and/or manage the plantation, and the subsistence farmers. The rural proletarians and subsistence farmers may form conjunctive (but also competing) groups within the same society. The relationship between the two groups may be complex, due to the oscillation of individuals between the two groups. The character of social differentiation within the plantation economy is predicated, largely, on the counter positions of owner and worker, capitalist and rural proletarian, landed and landless. It is also predicated on the demands of plantation wage labor, on the one hand, and family labor for subsistence pursuits, on the other hand. By and large, it is a power relationship.

Migration of Plantation Labor

The dispersal of Africans, and to a lesser extent Indians and Asians, throughout the world has been occasioned largely by the demands of plantations for cheap labor. Beyond initial mass "migrations" and settlements which were induced through slavery, indenture and forced labor have been what may be termed secondary dispersals. Relatively low population densities of plantation areas of the New World, the relative availability of land resources, and a deliberate colonial policy combined to effect the relocation of plantation labor within and between colonies in the New World (Proudfoot, 1950). In the United States, the decline in the importance of plantations and the advent of agricultural mechanization both helped to push redundant plantation labor from the South to the industrial North of the country (Kennedy, 1930; Woodson, 1969). The two West African republics, Liberia and Sierra Leone, were originally established as homes for "burdensome" surplus plantation labor from the New World (Hargreaves, 1964). To Liberia, the early settlers carried with them the plantation institution of the New World.

Within Africa, plantations are located in relatively less densely populated areas (Ndaeyo, 1971). As a result, these plantations have resorted to various means of labor recruitment outside the plantation areas to fill their labor requirements (Ardener et al., 1960; Christy, 1911). Slavery, forced labor, and wage incentives have been employed at different times. Characteristically, the recruitment of plantation labor in Africa has resulted in population movements which are unlike the major migratory patterns of the continent. The labor force tends to move from one rural area to another rural area where the plantation is located. An exception is that under the rural plantation setting the migrants have to adjust to a "regimented" work life comparable to the demands of urban industrial life. So far as rubber plantations are concerned, the requirements are for male labor, a situation which accentuates traditional African division of labor by gender (Coleman, 1970; McEvoy, 1971).

Agri-Ecological Aspects

Plantations are crop specific and as such, they are open to the problems associated with monoculture--pests and diseases. But from an ecological perspective, plantations, or more specifically, plantation tree crops, may serve to benefit the solution of some of the problems associated with the complex yet fragile tropical environment which supports both subsistence agriculture and cash cropping (Ntiri, 1975 and 1976; Hunter and Ntiri, 1978). Rational adaptation of plantation tree-crop production and subsistence pursuits under the Burmese system, TAUNGYA for instance, holds the prospect of containing the depletion of vegetation, soil erosion and "desertification," all of which threaten agricultural pursuits in many tropical areas. Within Africa, in particular, it is interesting to note that while the spread of the Sahara desert continues to take valuable lands out of agricultural uses (Aubreville, 1947; Jacks and Whyte, 1939; Shantz, 1963), the Taungya system has been tried with considerable measure of success in many parts of the continent.

Besides the ecological problems of monocropping characteristic of plantation production, the system also presents serious environmental problems where it coexists with shifting cultivation, the predominant system of subsistence production. By taking away subsistence lands or monopolozing the most fertile soil to leave marginal lands for subsistence, deflected fallows, soil erosion, and depletion of plant nutrients combine with more intensive cultivation to destroy the land for agriculture (Hunter and Ntiri, 1978).

Dependency and Plantations

The intellectual undercurrents of the Dependency and Plantation Models are related to attempts to convey the unity of forms to be found in agrarian societies in their relationship to capitalism. This embodies the effect of capitalist penetration into subsistence economies and the mediation of the state in the extraction of surplus and in limiting political and social options through repression. In this regard, the key historical factor in defining the situation of contemporary Africa, Rodney (1972) has argued, has been its forced incorporation into an European-centered imperial system.

Galtung (1971), among others, seeks to explore the existence and persistence of inequality in all human conditions and the structural violence that accompanies it. He conceptualizes the nations of the world as polarized about a Center or falling nearer a Periphery, each in turn with its own center and periphery. The dominant system of imperialism fosters links between the two centers to exploit both the peripheries, but even more so for the exploitation of the periphery of the Periphery. In this sense, imperialism is conceived as

> ...a system that splits up collectivities and relates some of the parts to each other in relations of harmony of interest, and other parts on relations of disharmony of interest or conflict of interest (Galtung, 1971: 81).

There is harmony of interest between the center of the Center nation and the center of the Periphery nation. Within the Periphery nation the disharmony between its center and its periphery are greater than the corresponding relationship within the Center nation. Between the two peripheries (within the Center and Periphery) there is disharmony of interest. The Center corresponds to the developed nations while the Periphery constitutes the underdeveloped ones. In this regard, and for the purposes of clarifying underdevelopment, the world is viewed as an interacting structure so set up that inequality results and persists from a coupling, not in the interest of the weak (periphery of the Center and periphery of the Periphery), but instead between the two centers.

In this formulation, imperialism manifests itself in economic, political, military, communication, and cultural spheres to sustain "vertical links" of the capitalist Center to a bridgehead--elites, petit bourgeoise, etc.--within the center of the Periphery in order to oppress and exploit the masses within the two peripheries and, more so, those in the Periphery.

The foregoing view of underdevelopment and inequality within a world system reflects the perspectives of the Dependency and Plantation Models as well as social formations outlined as constituting the underdeveloped world. Underdevelopment and the prospects for the transformation of agrarian societies are viewed from a specific problematic: the relationship between capitalism and agriculture (Chaynov, 1966).

Dependency Model

The Dependency Model views underdevelopment within a world system as

> ... an historical condition which shapes a certain structure of the world economy such that it favors some countries to the detriment of others and limits the development possibilities of the subordinate economies...a situation in which the economy of a certain group of countries is conditioned by the development and expansion of another economy, to which their own economy is subjected (Dos Santos, 1968: quoted by Bodenheimer, 1971: 36).

As enunciated originally by Latin American scholars (Frank, 1972; Dos Santos, 1968; Quijano, 1967; etc.), the Dependency Model has been based on the historical experience of Latin American economies. These have been appendages of economic, political, military, social, and cultural relations that revolve around market arrangements in which Latin American nations function as exporters of raw materials, agricultural products, and other goods and services to complement the economies of industrialized (capitalist) nations. By the nature of their integration into the world capitalist system, Latin American nations find that their capacities for development are compromised. The manner in which such integration fosters underdevelopment is direct:

> The international system shapes development in Latin America by means of certain institutions, social classes and processes (eg., industrialization, urbanization). These aspects of Latin society become part of the infrastructure of dependency when they function or occur in a manner that responds to the needs or interests. It is through the infrastructure of dependency that the international system becomes operative within Latin America, and that the legacy of Latin America's integration into that system is transmitted and perpetuated domestically, thereby limiting the possibilities for development (Bodenheimer, 1971: 38).

The Dependency Model views foreign investments and aid as mechanisms for dominance. However, the infrastructure of dependency suggests more than external domination. Equally important are internal class and institutional structures which emerge as legacies of the specific functions of peripheral nations within the world capitalist system. The historical juncture in the development of capitalism at which a particular nation was integrated into the world system determined its character and functions. Amin (1976) outlines along these lines the historical processes that underlie the evolution of particular social formations in Africa.

There are three macro-regions in Africa which are distinguished by the period of their incorporation into the world mercantilist and capitalist systems (Amin, 1976). These regions are: (1) Africa of the Colonial Economy--economie de traite, (2) Africa of the Concession-Owning Companies, and (3) Africa of the Labor Reserves. Geographically, the regions broadly correspond, respectively to the West, Central, and the East and South Africa. The social formation that emerged within each region was predicated on the stage of development of its "productive forces" before the arrival of Europeans. During the mercantile period Africa became a periphery of the New World, which was in turn a periphery of the Old World, by supplying slaves. As a result, Africa lost its autonomy, and its social institutions began to be shaped by the requirements of mercantilism. The continent's full integration into the international capitalist system occurred in the nineteenth century after the slave trade disappeared. However, the actual shaping of the social formations designated became complete when the European partitioning of Africa was accomplished around the end of the nineteenth century.

Within the region designated as Africa of the Colonial Economy, the result was a social formation which retained its traditional appearances and yet remained integrated into the world capitalist system by way of the exchanges of agricultural produce against imported manufactured goods. In the Africa of Concession-Owning Companies, the plantation system became dominant and characterized its ties to the industrial West. The Region of Labor Reserves, it is argued, emerged when the colonial powers sought a large "proletariat" to exploit the region's mineral wealth. Amin sums up the development of underdevelopment in Africa thus:

> In all three social formations the colonial system organized society so as to produce, under the best possible conditions from the point of view of the metropolitan country, export commodities that provided only very low and stagnant reward of labor. Once this aim was achieved, there were no longer any traditional societies in contemporary Africa, but only dependent peripheral societies (1976: 332).

The dependent social formation is characterized by the predominance of agrarian capitalism, a local merchant bourgeoisie, a peculiar bureaucratic system, and incomplete proletarianization (Amin, 1976; 33). It is also linked to the Center capitalist system through technological dependence and social strata and classes integrated, through their consumption habits and an attendent ideology to the Center, a condition which serves to reproduce the system of dependence (Amin, 1976: 380).

The Dependency Model, as enunciated for Latin America and its interpretation for other parts of the world, views both development and underdevelopment as related. Both internally and externally, the dependency approach to underdevelopment is inherently a conflict model, and it is this attribute that sets it apart from other interpretations of underdevelopment. For instance, modernization, diffusion, dual, and other "linear cumulative" and "emulative" models seek orderly change and see instability as detrimental to development (Chodak, 1970; Leagans and Loomis, 1971).

Plantation Model

The plantation, a creation which is associated with European colonization, has persisted as an "economic system" defining the character of relations between metropolitan and peripheral nations. The Plantation Model has been conceptualized in historical-structural terms (Best, 1968). Its changing fortunes have been associated with the evolution of capitalism--from mercantile to industrial and finance capitalism as well as monopoly capital on a world scale (Beckford, 1979). Three periods are designated in the evolution of the plantation economy: the period from the seventeenth century to the middle nineteenth century, the terminal point corresponding roughly to the abolition of slavery; middle nineteenth century to the second World War; and, from World War II to the present. The corresponding historical phases of the plantation economy as designated by Best (1968), respectively are: Pure Plantation Economy, Plantation Economy Modified, and Plantation Economy Further Modified.

There have been significant changes in the character of the plantation economy with its historical evolution; however, the general institutional framework which defines its relationship to metropolitan center nations has persisted. This relationship has centered on: (1) the metropolis as either the exclusive or major market outlet of the plantation economy; (2) a division of labor that restricts the plantation to primary production with the bulk of "value-added" activities carried on at the metropole; (3) restriction of banking, financing, and monetary activities to the metropole; and (4) a preference system that ties the plantation economy to a particular center nation. It is argued, the nature of the relationship between the plantation economy and a metropole, as outlined, fosters underdevelopment.

The problematic from which the Plantation Model emerges is also associated with the Dependency School: externally propelled economies with change induced from metropolitan areas. However, a set of social relations, principally, as regards the uses of labor, set plantations apart from other dependent economies:

> A plantation economy then not only is defined by the nature of its production function and typical participation in international markets, but also by the distinctive mechanisms of labor force control which emerge from it. Where plantations are dominant, their manpower requirements are such that these needs, not only come to set the pattern of social relations on the estate, but have implications for the wider society (Mandle, 1972: 58).

A Critique of the Plantation Model

Both the Dependency and Plantation Models have emerged as a result of attempts to provide new insights into underdevelopment. Proponents of the Plantation Model in particular have linked Marxist and non-Marxist perspectives with a lowering of disciplinary barriers to provide a more integrated explanation of underdevelopment.

> Thus, for the Caribbean, at any rate, the theory of the firm, the theory of international economy and the theory of growth and development seem to require a single cogent statement. Related to this, the barriers between sociology, political science, economic history, anthropology and economics, as such, need a drastic lowering (Best, 1968: 323).

But in the formulation of the Plantation Model, nearly all social phenomena are directly linked to economic forms, without cognizance of the "structures of mediation" at the economic and superstructural levels. The failure to analyze the complex relationship between economic and other levels constitutes a serious shortcoming of the plantation model (Sudama, 1979). Beyond the lack of serious attention to the mechanisms by which the structures of dependence are maintained, the model puts too much emphasis on the external manifestations of the processes of dependence. Little attempt is made to look at internal processes such as "social forces" in order to outline relations of production and the location of people in the process of production. Beckford (1979) attempts to address this imbalance in the context of a synthesis of class and race as well as the mediations of state apparatus. He comments:

> My earlier analysis of plantation society has several weaknesses which I attempt to correct....Specifically, its handling of the class question was overshadowed by the emphasis on race; whereas what is needed is a synthesis of how race and class makes plantation society a sort of "special case" in the history of social formations....Plantation society is a society in crisis. That crisis stems from the inherent contradiction between white capital and black labor. The capital labor antagonism is central to all capitalist economies. But in plantation society the antagonism is heightened by the element of race. The constant situation of conflict places special responsibility on the state to invest in instruments of violence in order to contain the conflict (Beckford, 1979: 6, 12).

By addressing the related problems of the internal structures of the plantation society, individuals and groups cease to be passive. And, within this framework, the persistence of underdevelopment in the plantation society emerges not only as a result of external factors but, equally important, as a result of the internal dynamics of the plantation society. This line of analysis also leads to a crucial question: how does the plantation gain a foothold in a given society in the first place? Elsewhere Beckford (1972) suggests that plantations have, in general, failed to make strong inroads in societies which were well organized prior to European penetration. And where plantations have become the dominant system of agricultural production, this has been attained through accommodation to established traditions and customs. Sometimes persuasion alone has been responsible--negotiation with local chiefs and headmen--but more often, there has been a combination with superior military might.

Within the context of redefining the conceptual framework of the plantation society, latitude is provided to salvage fragments of the Plantation Model for the construction of others. Specifically, I will outline the following general proposition as the basis for the construction of such a model: In both the external and internal manifestations, the exercise of power within the plantation mode of production is dependent on resources and the social latitude allowed for the exercise of such power. Thus, the internal conditions (ENDOGENOUS FACTORS) within the plantation (host) society are just as important in perpetrating the plantation mode of production and its related social inequality as the external (EXOGENOUS FACTORS) forces that led primarily to the creation of that system. Within this framework, endogenous factors are examined to counterbalance the emphasis of dependency theory on exogenous factors.

The plantation economy as a "total system" is inadequate for the analysis of a great number of plantation societies, especially those where plantation and subsistence production coexist. Also, while the slave plantation system may be effectively viewed as a total system, the same cannot be applied to contemporary plantation societies. While vestiges of the Pure Plantation phase may be discerned in present-day plantations, they remain qualitatively different from those of the past. Finance capital and multinational corporations have replaced mercantile capital; this is a factor of considerable importance and difference in the evolution of the plantation economy.

The plantation model has been characterized as useful only at the static descriptive level and not useful as an analytical construct of the dynamics of underdevelopment of the plantation economy (Sudama, 1979). I do not share this view. The limitations of the model relate principally to an over-emphasis on external factors and overgeneralization across "historical phases" and different plantation societies. These serve as the backdrop for a reconceptualization of the model that I attempt.

CHAPTER III

THE NATURAL RUBBER INDUSTRY

Structure of the Rubber Industry

Rubbers are distinguished into two basic types: natural and snythetic. Natural rubber can be secured from a variety of plants--havea, castilloa, ficus, funtumia, landolphia, etc.--in general, plants that secrete substances including latex (Bonner and Verner, 1965). Most of these plants are to be found in the tropics. Synthetic rubber is derived from a variety of raw materials including petroleum, coal, and grain (Fieser and Fieser, 1960). The production organization of natural and synthetic rubber differ remarkably. Natural rubber production is less machine (capital) intensive and occurs under both capitalist and "pre-capitalist" modes of production (Edwards, 1977). Synthetic rubber, on the other hand, is produced under highly machine (capital) intensive conditions and within a framework of extensive social division of labor.

Labor requirements, in terms of numbers employed in the production of natural and synthetic rubber differ a great deal. This is illustrated by labor inputs for the synthetic industry in the United States and natural rubber production within Malaysia, the world's leading producer. Direct employment in the synthetic industry in 1967 amounted to 12,500 for an output of 2,000,000 tons of rubber. In the same year, 696,000 people were employed in Malaysia in the production of 938,000 tons of natural rubber (Allen, 1972). The natural rubber industry is much more competitive than synthetic. More than 90% of natural rubber production enters international trade, while only about 25% of synthetic rubber crosses international boundaries (Allen, 1972).

In terms of value, natural rubber is the fourth largest agricultural export from the developing nations. Since 1970 it has averaged about $1.5 billion per year. Export restrictions following World War I, and relatively low and stable petroleum prices during the 1950s and 1960s, resulted in increasing competition from synthetic rubber. And, from the perspective of natural rubber producers, expected annual expansion in demand for rubber, estimated around 5%, represents an uncommon opportunity for future growth (Grilli *et al.*, 1980). But such prospect has to be weighed against the profound structural changes that have characterized the history of the rubber industry.

Historical Background of the Natural Rubber Industry

The history of the rubber industry is laced with schemes aimed at the control of prices, production and marketing (Lawrence, 1931; Wolf and Wolf, 1936). The period following World War I was particularly significant with respect to attempts to control the production and marketing of raw materials in general. Sugar, coffee, rubber, tin, copper, and petroleum, among others, were subjected to one form of control or another. As an aftermath of the war, expanded production of raw materials to meet wartime conditions had to be adjusted to peacetime demand levels. However, a smooth transition was precluded by the Great Depression, which shrunk effective demand and paralyzed the entire machinery of international trade and finance. Primary producers were confronted with problems on two fronts: increasing production coupled with falling demand and thus, prices. Producers resorted to commodity restrictions as a way of creating artificial shortages and to boost prices. Brazil tried without success the physical destruction of coffee; the United States and Canada employed stock-piling of cotton and wheat, but were forced to abandon that approach; while Cuba's solitary attempt to curtail sugar production failed.

It was against this background of excess production and attempts to restrict the supply of primary commodities that the world entered its second global war. Natural rubber was one of the major commodities subjected to international regulations from the first world war through the onset of the second in 1939. Great Britain controlled, through its colonies, a bulk of the world's supply of rubber, while the United States served as the major market for natural rubber. Hence, restrictive measures such as were imposed by the former impacted profoundly on the latter with economic, political, and strategic implications (Bauer, 1948).

The history of the rubber industry has evolved within a framework of nations struggling over a strategic material. The two principal actors in that history have been Great Britain and the United States, with colonies of the former serving as the arena. This history has seen the evolution of the natural rubber industry from reliance on wild sources to organized production in the form of plantations and eventually, synthetic rubber. For the purposes of this study, the history of the rubber industry is outlined to encompass the "wild" and "plantation" phases. Synthetic rubber is discussed only to the extent of its impact on natural rubber production.

Wild Rubber Industry

Sixteenth century Spanish explorers brought to Europe specimens of the substance, caoutchauc, which they obtained from Indians of the Upper Amazon (Lawrence, 1931). The name rubber is attributed to Priestly, a British scientist who accidentally discovered that caoutchauc would "rub off" lead-pencil marks. Extensive use of wild rubber, however, was delayed until the discovery of the process of vulcanization by Goodyear in 1839, by which rubber retained its properties over a wider temperature range. From a slow start, the rubber industry expanded rapidly under the impetus of the invention of the pneumatic tire, the largest user of rubber, by Dunlop in 1888. A decade or so later, with the growth of the automobile industry, rubber production expanded rapidly.

Up to the end of the nineteenth century the demand for natural rubber was met exclusively from wild sources. In "nature," there are many rubber-producing plants which are distributed within various habitats. However, with a few exceptions, rubber-producing plants are restricted to the tropics (McFadyean, 1944). The four African countries of Ghana, Sierra Leone, Nigeria and Zaire, with the addition of Brazil in South America, accounted for the bulk of the world's supply of natural rubber from wild sources during the latter part of the 19th century.

The wild rubber industry was mainly in the hands of "native" producers who took care of all the intermediate processes from tapping to the conversion of latex into crude rubber. Transportation to consuming centers was organized by European traders and a few local middlemen. The extent of the exploitation and abuse of the "native" producers has been vividly documented for South America (Collier, 1968) and many parts of Africa (Lawrence, 1931). In present-day Zaire, the area from which a bulk of wild rubber came, King Leopold's Anglo-Belgian Rubber Company, in a period of 15 years amassed profits to the tune of 5 million pounds (about $25 million at the time, not subject to taxes) and expropriated 800,000 square miles of territory by the use of armed mercenaries (Edwards, 1977). The surplus generated from the wild rubber industry was not plowed back into the economies of the producing areas. But it has been suggested that the wild rubber industry was significant for the producing areas because it brought subsistence producers into a money economy.

The Wild Rubber Industry in Africa

In Africa, the wild rubber industry left its impact on the physical environment (destruction of vegetation and land resources) as well as on the economic and political lives of the people within the producing areas. Nevertheless, unlike previous trades--slaves, ivory, gold, etc.--which were heavily capitalized to exclude the bulk of Africans, wild rubber production engaged the services of many Africans. Since it required a minimum of capital investments, individuals could go into independent production. Also, wild rubber, compared with earlier African exports such as palm oil, has a greater value per unit weight. By this attribute, it was economic to produce wild rubber at distant places and transport it to coastal trading posts. Wild rubber thus provided scope for the participation of people from extensive areas and to bring a large number of peasants into an activity tied into the international capitalist market.

In Ghana, for instance, the wild rubber industry served as a transitional capitalist economic activity which linked the peasant with the coastal colonial economy and its metropolis (Arhin, 1972). The industry also served as the seedbed of economic institutions, many of which persist to the present day in Ghana. These include the systems of "hiring" land for production, share-cropping (abusa), the "purchase" of labor, and the development of a "class" of professional traders. The greater diffusion and absorption of labor in the wild rubber industry brought many Africans into a cash economy as rubber-tappers, porters, and traders. Equally important, migrants from non-producing areas took advantage of the industry and, in the process, spread a currency system of exchange (Dumett, 1971). The adoption of a currency system of exchange in turn freed agriculture from being practiced exclusively for subsistence and laid the foundation for peasant cash-cropping.

The political consequences of the wild rubber industry were as profound as its economic and environmental impact, if not greater. The exploitation of wild rubber in Africa coincided with direct colonial rule, the adverse effects of one compounded by the other. Ample evidence of the brutal exploitation of rubber and humans during the period of direct colonial rule has been documented for the former Belgian Congo, French Congo, Guinea, Angola, and the Gold Coast (Harms, 1975). Within the last colony (now Ghana), oral tradition underscores the twin inception of wild rubber exploitation and colonial rule: "Rubber tapping took hold in Ashanti on a significant scale only after the British imposed their rule in Kumasi" (Dumett, 1971: 93). The industry provided the colonial governments an avenue for easy tax collection to finance their exploits in Africa, while the military and police apparatus of the colonial governments ensured a passive populace amenable to exploitation. Although her findings are somewhat tenuous, Coquery-Vidrovitch (1972) has shown that in parts of the French Congo the volume of wild rubber output seemed to increase with the number of cartridges expended by the colonial authorities to subdue African resistance. Brute force was central to the system of rubber production; but contrary to conventional wisdom, the application of such force ended independently of efforts at reform.

> The end of the notorious concession companies in the [Belgian] Congo Independent States has generally been attributed to the efforts of English and Belgian reformers. Recent research on Abir, a major Congo concession company, has revealed that attempts at reform were ineffective, and that exhaustion of the rubber supplies had caused the rubber system in the Abir concession to break down by 1906, when serious debates on the Congo question were just beginning in Europe (Harms, 1975: 88).

The extent to which the interests of metropolitan powers and concession companies were interwoven is demonstrated further by the observation that in French Guinea, for instance, export revenues generated from wild rubber between 1898 and 1910 represented nearly two-thirds of all exports. There were also explicit written agreements stipulating the respective roles of colonial governments and concession companies. In the Belgian Congo the state (colonial) founded posts for companies, supplied guns and ammunition, and, in general, kept law and order within the rubber concessions. In return, the companies gave half of their shares to the state and recruited soldiers and workers for the state (Harms, 1975).

Between 1900 and 1910 when the price of rubber nearly doubled as a result of increasing demand, supply response could come in only one way: the intensification of tapping. In the process, wild rubber producing trees were damaged beyond recovery to further aggravate the gap between supply and demand. This development gave impetus to the cultivation of rubber along plantation lines, and also ended the importance of Africa and South America as the major sources of natural rubber.

Plantation Rubber Industry

Interest in the establishment of rubber plantations was centered in Great Britain and the Netherlands. The United States, the principal consumer of rubber was, however, not unaware of the looming importance of plantation rubber at the turn of the century. Samuel Colt, president of the New England Rubber Club which later became the Rubber Association of America, commented in 1905:

> The present demand for crude rubber is greater than the normal supply...relief must be looked for in increased production of rubber in those vast regions which are watered by the Amazon and the Congo....A little Yankee ingenuity could readily increase the production sufficient to meet our requirements....By systematic development and effort the production of Para rubber can be established on a permanent basis which will give it a position among raw materials practically as reliable as cotton or corn [Indian Rubber World, 31 (March 1905): 204].

Despite the view expressed by Colt, the United States remained silent while Great Britain and Holland wildly promoted new rubber plantations. American manufacturers who consumed a bulk of the world's rubber accepted the British initiative in particular as "evidence of the superior British talent for tropical agriculture" and as regards cultivated rubber specifically, "the seasoned fruition of a scientific program conceived by Wickham and his associates, and carried out with admirable British persistence for almost fifty years" (Lawrence, 1931: 16).

The stimulus for the development of rubber plantations and their geographic concentration in the East Indies has been attributed to:

a) Early government-sponsored research by the British and Dutch in their East Indian colonies;
b) The rising price of wild rubber;
c) Availability of suitable planting lands and favorable climatic conditions;
d) Adequate supplies of labor either within the planting territories or adjacent colonies;
e) The existence of transportation facilities (Edwards, 1977; McFadyean, 1944).

While early research efforts conferred advantages on the British and Dutch in establishing rubber plantations, their leadership has to be viewed more in terms of the benefits which their well-established colonial plantation institutions offered. Beginning in the seventeenth century, the two colonial powers could boast of numerous sugar plantations (among other crops) with an infrastructure that could be easily transferred. The Dutch, for instance, used a culture system by which the peasants made tax payments either by cultivating one-fifth of their lands in cash crops or devoting themselves to government work for one-fifth of the year. Hence, the same system that was used to establish cash-cropping and estate wage labor was at the disposal of rubber when it became an important crop (Geertz, 1963). Within the emerging rubber-producing areas, land was generally in relative short supply, contrary to conventional wisdom, while the availability of labor was definitely a limiting factor. Jackson has commented:

> To facilitate the growth of commercial agriculture in Malaya, three fundamentals were essential: capital, labor and accessible land on easy terms. All three were in relatively short supply during the nineteenth century...government had accepted the principle that if the desired expansion of European planting activities was to occur then some official effort to provide these essentials of development was necessary....Land regulations were introduced that offered large blocks of land on favorable terms designed to discourage speculation; loans, in some cases up to a total of $40,000, were made to coffee planters and others to permit them to develop their properties; and legislation was passed in an attempt to promote the inflow of immigrant Indian labor to provide a work-force for the new European estates.... The rapid expansion of rubber planting after 1900 is related closely to an intensification of Government encouragement (1969, 253).

In Sumatra, the Dutch had to fight long and hard in the 1870s to gain control of the northern part of the island, so that the area could be brought under rubber cultivation. This colonial war was significant not only because of northern Sumatra's suitability for rubber cultivation; more important, the opening of the Suez Canal had given a direct sea route to European markets, making the Malacca Straits and the exploitation of its adjacent areas more profitable than the Sunda Straits, far to the South. Equally important, the new rubber-growing areas were effectively protected from outside penetration. For example, in Malaya (as it was then), the British Treasury long prevented the issue of shares by Malayan public companies without its prior consent, in order to limit United States and Japanese investments in the Malayan rubber industry (Drabble, 1973).

The availability of labor as a reason for establishing rubber plantations in particular areas is not to be interpreted in its conventional sense. Labor was available to the extent that the same official system of compulsion previously used was at the disposal of rubber plantations. Such labor was either made available locally or extracted from traditional sources--India and China (Arasaratnam, 1970). Unquestionably, a most significant impetus for the establishment of rubber plantations was the profit motive, not in its speculative sense in particular, but as the driving force for capitalist investment.

Rubber cultivation, as it assumed great importance at the close of the nineteenth century, differed significantly from other cash crops and the associated plantations preceding it. Rubber cultivation was organized as a capitalist enterprise, combining both estate and peasant production. Plantation activities of earlier periods were highly speculative ventures. Rising prices led to very rapid expansions in the areas devoted to plantation activities, while declining prices resulted in immediate restriction in the acreage cultivated or a shift from one crop to another. In effect, the history of plantations preceding rubber was characterized by a series of booms--each associated with a different crop, extension of colonial frontiers--with plantation activities declining rapidly as particular crops became less profitable.

By the beginning of the twentieth century, however, plantation activities had passed from the pioneer (speculative) stage to one of capitalist enterprises backed by corporate capital and a dependent wage labor force. With this transition, neither investor, local government, nor labor could view the plantation as a speculative venture wholly dependent on the exigencies of short-term price fluctuations. The plantation now became an "investment trap" for all parties engaged in it. This evolving attribute of the plantation system characterized rubber plantations in particular, remaining central to an analysis of the industry. Equally, because of the relatively late date of inception, rubber plantations were in a position to exploit earlier plantation infrastructure and peasant production as well, which had been made possible by both the wild rubber industry and the system of peasant cash-cropping already established in many colonies. It is against this background--as well as the demands of the two world wars, official colonial attitude (especially Great Britain), and the needs of the United States for rubber to feed its industries--that the plantation rubber industry has evolved. The most significant factor in the evolution of the industry, however, remains its ties to the finance capital phase of international capitalism.

Up to 1913 the world had a deficit in rubber supply, as indicated in Table 3.1 and Figure 3.1. For the period preceding 1913 the deficit ranged between 2,000 and 11,000 tons. Prices were, logically, on the increase as a result. From 1900, the base year, the price index increased to a peak of 220 in 1911 before declining to 90 in 1918. Between 1914 and 1919 surpluses were recorded at a low of 4,000 tons (1918) and a high of 56,000 tons for 1919. Related developments in rubber cultivation were as follows: in 1900 there were 5,000 acres under rubber; five years later this had expanded to 150,000 acres, reaching a peak of more than 1.5 million acres in 1911. During the planting boom British capital was poured into rubber plantations, but after 1912 there was no net flow of capital from this source into East Indian rubber plantations (Edwards, 1977). The slack was taken up by Chinese traders and miners (these plantations were subsequently

Table 3.1 World Supply, Demand and Price Index for Rubber, 1900-1920

YEAR	SUPPLY (tons)	DEMAND (tons)	NET DEMAND	PRICE INDEX*
1900	44,000	53,000	- 9,000	100
1901	45,000	52,000	- 7,000	90
1902	42,000	50,000	- 8,000	90
1903	49,000	57,000	- 8,000	100
1904	53,000	64,000	-11,000	110
1905	56,000	70,000	-14,000	120
1906	63,000	74,000	-11,000	120
1907	74,000	77,000	- 3,000	120
1908	70,000	74,000	- 4,000	100
1909	78,000	86,000	- 8,000	147
1910	94,000	99,000	- 5,000	210
1911	94,000	99,000	- 5,000	220
1912	114,000	121,000	- 7,000	190
1913	120,000	130,000	-10,000	120
1914	123,000	121,000	+ 2,000	90
1915	171,000	160,000	+11,000	100
1916	214,000	188,000	+16,000	110
1917	278,000	250,000	+28,000	110
1918	220,000	216,000	+ 4,000	90
1919	400,000	344,000	+56,000	80
1920	342,000	373,000	-31,000	70

SOURCE: A. McFadyean, 1944: 20-21

*Calculation is based on London prices. 1900 is used as base year; inflation is not built into calculation, hence relative price for 1920 for instance is less than 70.

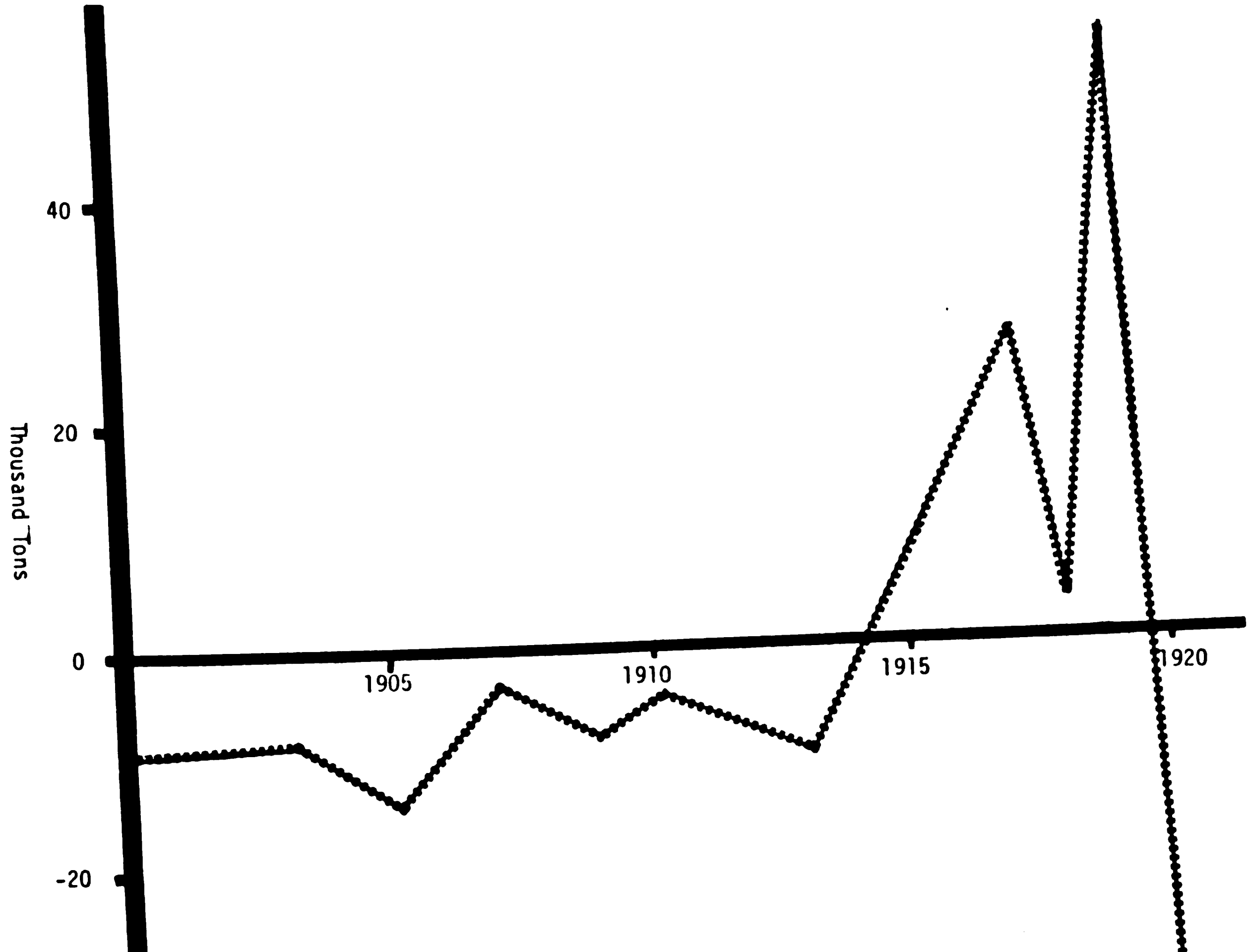

Figure 3.1 Net World Rubber Supply, 1900-1920

"purchased" by the British and Dutch to consolidate their hold on the industry) but more significantly, by peasant producers.

Table 3.2 Plantation Rubber: Estate and Peasant Production in Southeast Asia, 1909-1940

YEAR	ESTATE		PEASANT	
	ACREAGE	PRODUCTION (tons)	ACREAGE	PRODUCTION (tons)
1909	425,000	5,500	75,000	
1920	2,545,000	250,000	1,650,000	65,000
1930	4,020,000	465,000	3,930,000	335,000
1940	4,588,000	765,000	4,275,000	610,000

SOURCE: McFadyean, 1944:11

In general, during the boom in rubber plantations the British authorities favored estates over peasant cultivation. Estates were granted loans by British authorities and given preference in land allocations. As a colonial policy in the Federated Malay States, land adjoining roads could not be made available to peasant producers without official sanction (Edwards, 1977). Despite these sanctions, however, peasant production expanded, partly due to the peasant's capacity to combine rubber cultivation with other farming activities in the case of British colonies and, in the Dutch areas, as a response to the culture system.

Plantation rubber production continued to expand from 1905, when it made up 0.3% of all natural rubber exports, to 1920, after which it accounted for more than 90% of total production. Britain controlled directly in her colonies 69% of the acreage under rubber; this

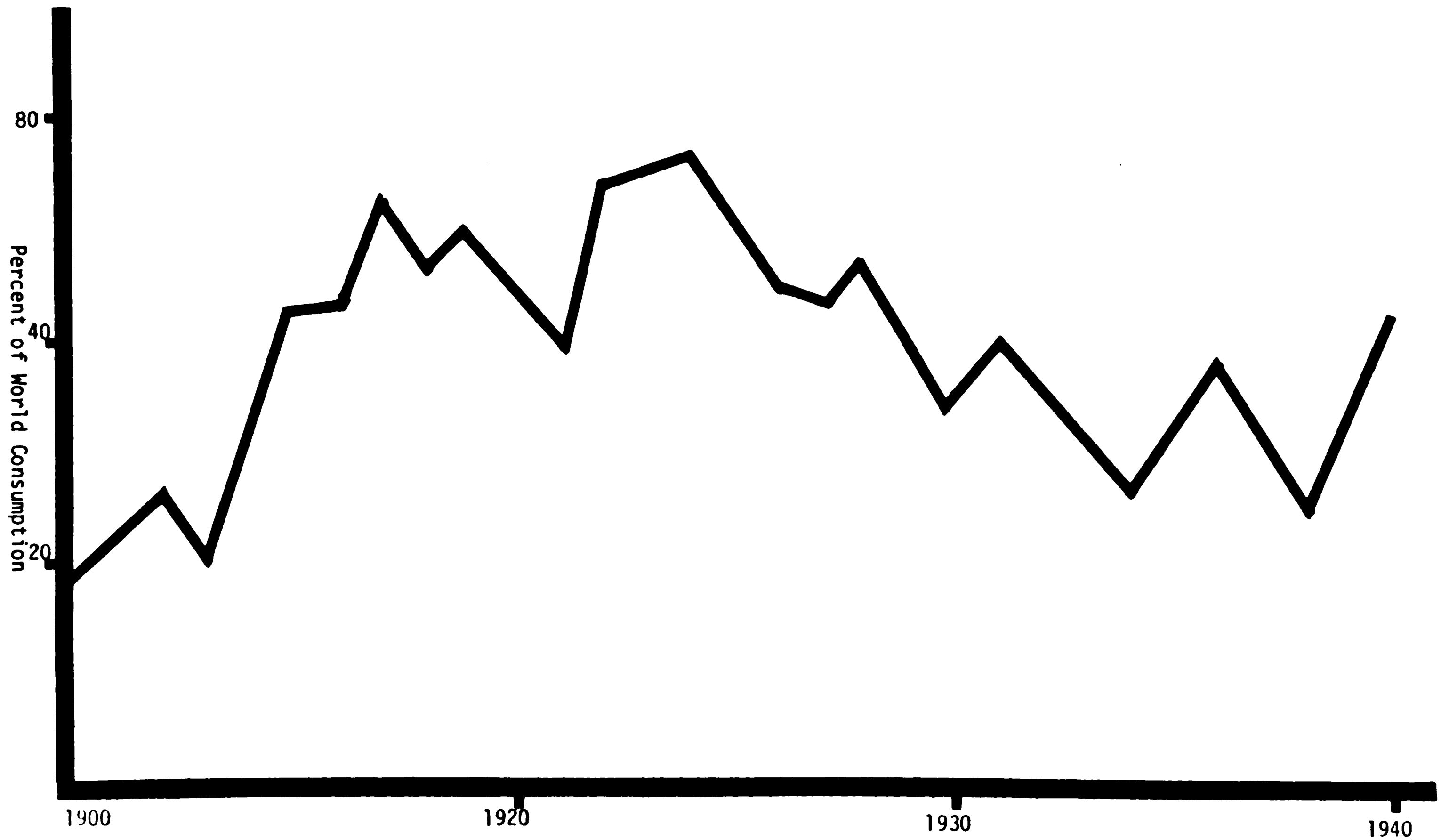

Figure 3.2 Trend in United States' Share of World Natural Rubber Consumption, 1900 - 1940

together with British ownership in the Dutch East Indies amounted to 75% of world total plantation rubber production. The plantation rubber industry at the onset of World War I was characterized by geographic concentration, mostly in Southeast Asia; the dominance of Britain as the principal supplier; and the parallel development of plantation and peasant rubber farms. The first World War brought to a head the conflicts inherent in the manner of the development of rubber industry--specifically as between producer and consumer, different geographic areas, and plantation and peasant production.

Regulation of Natural Rubber Industry

Worldwide rubber production reached a peak of nearly 350,000 tons in 1919 as a result of "frenzied" cultivation that took place earlier in response to declining wild rubber output and correspondingly high prices. Between 1901 and 1919, net average annual profits in the natural rubber industry ranged between 15% and 53%. By 1922, at a peak production level of nearly 380,000 tons, net profits dropped to 6% (Lawrence, 1931). On the demand side, American industries that consumed a bulk of the world's natural rubber output were saddled with expanding inventories and a declining demand for finished goods. Over-production and under-consumption fed on each other to undermine both supply and consumption markets.

Ordinarily, the interplay of market forces, leading to low prices, serves to clear a market under conditions of over-supply and under-consumption. But the years of the rubber boom and subsequent depressed market were not ordinary cases. On the one hand, Great Britain which controlled the world's natural rubber supply was struggling to generate revenues to meet debts incurred during World War I. And, on the other hand, rubber manufacturers in the United States were instituting desperate measures to recover from slumping sales, debts, and mounting inventories. The question as to who produces rubber and who uses it assumed new significance as the accepted superiority of Englishmen as tropical administrators and exploiters was pitched against much-vaunted "Yankee ingenuity."

In October, 1921, the British Rubber Growers Association sought the constitution of a special committee of inquiry into the state of the rubber industry. The request went to the Secretary of State for the Colonies, at that time Winston Churchill, who responded by appointing a committee headed by his personal Commercial Adviser. Except for the inclusion of two subordinate cabinet representatives, all the other members were drawn from the Rubber Growers Association. British rubber manufacturers were excluded from the committee (Lawrence, 1931). Committee members, predictably, saw the problems of plantation rubber as warranting governmental action. As a response, Winston Churchill launched the British Empire on a program to artificially restrict the production of rubber in October, 1922. But not without protests and counterproposals from within and outside the British empire. The liberal Labor Party parliamentarian, Swoden, noted:

> I am all for Empire development, but I cannot imagine anything more fatal to the safety of the empire than the policy of building a wall around the British Empire. The only solution of the problem is to throw open the necessary resources of the world for the equal use of all the people who require them (Quoted by Lawrence, 1931: 32).

From the United States came both protests and counterproposals aimed at saving the British plantation rubber industry in a manner that would at the same time safeguard the interests of United States industries. Among a number of measures debated both in the United States and Britain was one aimed at combining American and British capital to save the rubber industry. This idea was championed by an American, Edgar Davis, a man with considerable experience with plantation rubber production in Sumatra. His suggestion, which he carried to the British Rubber Growers Association, entailed the formation of an international rubber organization with the purpose of "rejuvenating and strengthening a distressed industry." However, it was interpreted in a different light by the British. The response of Thomas, a British parliamentarian, was typical:

> In 1921 and 1922 there was an effort to bankrupt our rubber producing concerns, so that people in America could have bought up the whole lot, wiping out the investments of British small shareholders and exploiting the situation (Lawrence, 1931: 32).

There were protests also within the United States against any collaboration with Great Britain in any manner that would stand in the way of free trade. Harvey S. Firestone was in the forefront of that protest. Notwithstanding internal British protests, those of the United States, and counter-proposals, a scheme for government regulation of plantation rubber production became a fact in the form of the so-called Stevenson Plan. Its impact on the world rubber economy and the extent to which it was able to attain its aims has been the subject of a great deal of discussion in economic history (Bauer, 1948; Firestone, 1926, 1931, 1952; Knorr, 1945; Lawrence, 1931). Before the impact of the Stevenson Plan could be felt, however, "contemplative" men in the United States, Germany, Japan, and later, the USSR, argued for the institution of measures that would make their nations independent of Great Britain and its colonies as the major source of their rubber. Research into synthetic rubber production was either stepped up or initiated with governmental support at the same time that locations for plantations were sought. Ford Motor Company started rubber plantations in Brazil; the French looked to Indochina, Africa, and Papua New Guinea; and at a later date, the USSR started the cultivation of rubber on collective farms, which in 1942 were estimated to total 600,000 acres (McFadyean, 1944). The most outstanding and perhaps the most successful attempts were in Liberia, for which credit goes to Firestone Tire and Rubber Company.

Dependency and Plantation Models Revisited

Twentieth century plantations have emerged as metropolitan corporate capitalist ventures. In addition to rubber, these ventures have included crops such as palm oil, bananas, and the extension of sugar cultivation in the Caribbean and to Pacific and Asia (Beckford, 1972). By and large, wage labor has replaced the systems of slavery, indenture, and forced labor. Land acquisition is also seldom effected through seizure; lands are secured primarily through direct purchases and lease arrangements. The prices and rents paid to native owners are, however, ridiculously low. The increasing incidence of peasant plantation-crop production, which occurs under the proddings of foreign plantation interests, is also a complete departure from past practices. Notwithstanding these differences, the essential attributes of the plantation, as an export-oriented system of monocropping that is externally financed, remain. Also continuing are the debates on the impact of the plantation on the host society and its economy.

These debates--they have been outlined in the preceding literature review--are elaborated here in the context of the history of the natural rubber industry.

The spread of wild rubber production and the establishment of rubber plantations were predicated on the coercion of the host societies for their labor and land resources. Production was also geared exclusively towards the requirements of metropolitan economies without reference to the host society's needs. Despite the use of violence by the colonial powers and concession companies, however, the inception of wild rubber production and its cultivation along plantation lines (as well as their "inherent system of unequal exchange") cannot be explained exclusively in terms of "external pressures." There remain nagging questions about which factors (or forces) within the producing areas themselves made the use of violence possible as a means of imposing wild rubber production and plantation rubber cultivation. Beckford's observation is partially revealing in this regard:

> ...the plantation failed to make strong inroads into those countries of Southeast Asia which had the most organized societies prior to European penetration. Even in the lesser developed societies the plantation had to make an accommodation to the established traditions and customs and could only gain a foothold by combining superior military might with negotiation with local chiefs and head men (1972: 97).

It must be emphasized that the acquiescence of traditional leaders and other groups within the host societies resulted also from their interest in their potential role as "middlemen." The fact that colonial rule in many parts of Africa could be effectively secured only simultaneously with the establishment of an "exchange economic system" suggests that internal economic interests (or perhaps disruptions) were important factors in fostering colonial rule and its associated violence, rather than the reverse. The Ashantis, for instance, effectively withstood the British and remained independent of them until 1900 when they were defeated and incorporated into the Gold Coast Colony, as Ghana was then known. As oral tradition has it, this incorporation coincided with the period when the wild rubber industry, the precursor of an exchange economy, gained a foothold in Ashanti (Arhin, 1972; Dumett, 1971).[1] The twin inception of colonial rule and a cash economy in Ashanti and elsewhere needs to be empirically evaluated. Did the inception of a cash economy weaken traditional authority, which had served as a bond to ensure effective collective resistance to colonial rule? To the extent that rubber producing areas were subdued, to what extent were internal forces (those whose interest coincided with colonial authorities) important? Specifically, what was the significance of the role of local leaders, middlemen, and an emerging "merchant class" in the process of political and economic dominance by external forces?

In their critique of the dependency model, Howe and Sica (1980) place the blame for the system of unequal exchange on the shoulders of internal groups, such as has been suggested. With respect to Latin America, they comment:

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[1]That the Ashantis perceived the wild rubber industry as detrimental is illustrated by an incident recorded by Christy (1911):

> A fetish priest at Takimah in Ashanti suddenly (1908) announced the imminent advent of a new "god" who was to bring riches to the poor and reduce the rich to abject poverty. At his coming the black man would dominate the whites. He let it be known particularly that any man found tapping rubber in the forest would on the "god's" arrival, be turned into an antelope. The official report on this matter stated: "Incredible as it may appear, this imposter succeeded in paralyzing the local rubber trade. He was eventually arrested and detained in Kumasi, and his fetish fell into disrepute."

> ...the ruling class was engaged in primary exporting, from which it drew handsome rewards. The rise of dependency emphasizing the "facts" that agriculture made for poverty and that foreign capital's only interest was in exporting surplus, was not contingent upon a radically new understanding of the international economy,...but upon the rise of the industrial bourgeoisie during international disruptions between 1930 and 1945. The economic and political interest of this class were embodied in dependency theory....*In a certain sense dependency theory's real basis was not the organization of the international economy, but the struggle between classes and factions within the periphery itself* (Howe and Sica, 1980: 247. Emphasis in the original).

But this interpretation of the role of internal group interests in fostering dependency is grossly exaggerated; it carries the argument to the other extreme. The need is for a balanced interpretation of the links between internal and external group interest as the basis for exploitation and the impoverishment of the periphery.

CHAPTER IV

THEORETICAL FRAMEWORK: THE PLANTATION AS POWER AND SYSTEMS PARADIGM

The Dependency Model of underdevelopment entails a power relationship between a periphery (plantation) and metropolitan nation which "tilts" in favor of the latter. Also, the persistence of underdevelopment of the periphery is accounted for by its being tied into a world capitalist system as a producer of primary goods. Hence, the plantation as a dependent economy may be viewed independently as either a power or systems paradigm. However, a more coherent framework of analysis may be achieved by viewing both power and systems paradigms together. In that regard, this study looks at power as constituting the dynamic core of the plantation as a system of interactions among distinguishable (or perceived) parts; namely, land, labor, capital, agri-ecological aspects, and organization.

Neo-classical economic models (as well as their modifications) are used as a means of clarifying both the static and dynamic core of the plantation system, which is inherently a conflict model. Historical and economic events are integrated with ecological phenomenon as a complex, and interpreted in their collective impact on the plantation society. The plantation and subsistence "modes" of production are portrayed independently and together to form the "core" of the theoretical model.

The chapter is organized as follows: first, an outline of the plantation as a power paradigm is presented; second, components of the subsistence and plantation systems are discussed; third, a context for a neo-classical analysis of the underdeveloped (plantation) economy is introduced; fourth, production conditions within the plantation and subsistence systems are outlined. These aspects are then pulled together using an adaptation of Ellen's (1979) provisional model of ecological and socio-economic change. The last part addresses methodological issues.

The Plantation as a Power Paradigm

The uses of resources within plantation and subsistence systems, as well as their integration, are viewed as relational social and ecological experiences. In this regard, inequality as between plantation and subsistence systems, within groups of people, and between individuals and groups, stems from the type and relative power enjoyed and exercised respectively with regard to land, labor, capital, and organizational resources. Correspondingly, the kind of compliance (as derived from the type of power that regulates the uses of resources within each system) is central to the dominance of one system of agricultural organization over the other.

This study assumes three sources of control (power) which serve as the foundation for social order (Etzioni, 1961), in this case, within the plantation and subsistence systems of agricultural organization. The three sources of control are coercion, economic assets, and normative values. These means of control translate respectively into power relations as: <u>coercion</u>--the application or threat of application of physical sanctions; remunerative--control over the rewards through the allocation of material resources; normative--the allocation and manipulation of real and symbolic rewards.

In the context of the foregoing, a conception of the manner in which the plantation may impinge on subsistence agriculture and mitigate its transformation to benefit internal groups is viewed as stemming from the power structures that underlie relations between the two. The exercise of power is dependent on the resources commanded respectively by the subsistence and plantation systems and their organizational structures. To the extent that the plantation mode of production and its related social inequality predominates, the internal power structure and relations of production within the subsistence system are contributing factors.

These related questions are important in viewing the relationship between subsistence and plantation systems in the context of power relations:

a) What is the nature of power relations respectively within plantation and subsistence systems of agricultural organization?

b) How do the respective power structures within the plantation and subsistence systems define independently and "collectively" the uses of land and labor?

c) What are the forces which led to the emergence and crystallization of internal groups whose power and influence are derived primarily from external plantation interests?

d) What are the historical, societal, and agri-ecological factors whose change accounts for compliance trends within the plantation organization?

e) Finally, what are the general propositions that may be derived from the foregoing with respect to plantation activities.

Relations of production as reflected in access to and the uses of land, labor, technology and capital, as well as the agri-ecological and organizational characteristics of plantation and subsistence systems, serve as central themes for the evaluation of the above questions.

Components of Subsistence and Plantation Systems

For the purpose of this study, the conception of the plantation has been derived from an interpretation of the plantation as "an agricultural estate operated by a dominant (usually organized into a corporation) and dependent labor force, organized to supply a large-scale market by means of abundant capital, in which the factors of production are employed primarily to further capital accumulation without reference to the status needs of the workers" (Wolf and Mintz, 1957). This is in contrast to the traditional subsistence system in which agricultural production is an extension of the social structure, integrating political, religious, and economic activities within customary land and labor rights (Geertz, 1956). The respective characterizations of the plantation and subsistence systems are ideal-typical. The growth of private property, "monetization" of peasant agriculture, urbanization and, in general, the integration of plantation and subsistence systems over time have significantly changed and blurred the dichotomy between the two. However, despite the strains imposed by one system on the other, each retains a cluster of its essential attributes to be viewed independently and within the framework of the ideal-typical models. Equally, the spatial variations in the level of integration provide scope for comparative evaluation of the two systems within a single country. Descriptions of components of subsistence and plantation systems are provided in tabular form (Tables 4.1, 4.2, 4.3, 4.4, and 4.5), together with explanatory notes on the consequences of the integration of the two systems of production. The appropriateness of the characterization of the various components in the context of the two systems of production, and the results of their integration, will be assessed in light of the case analysis.

Within the subsistence system, the use of labor is defined in terms of reciprocal exchanges, shared work, and communal work. The plantation, on the other hand, views labor as a commodity whose role is a matter of "indifference." The consequence of the introduction of the plantation is a shift in the "rights" for products defined by labor power to "rights" associated with the ownership of capital.

Table 4.1 Parameters of Labor Within Subsistence and Plantation Systems

Parameters	Subsistence System	Plantation System
I. Sources	1. Communal 2. Family 3. Peonage	1. Recruitment 2. Forced labor 3. Wage labor
II. Uses and Scope of Demand	1. Communal goods 2. Subsistence and wealth 3. Debt payment	1. Large labor requirements obtained locally or imported for the production of a single crop for an export market
III. Control	Community, kin or family	1. Plantation hierarchy 2. Contrived control due to absence of other economic pursuits 3. Migrant labor used to dilute labor power 4. Uses of local political apparatus
IV. Division	Ages and sex; both sexes are participants	1. Exclusively male adults 2. Unskilled
V. Power Relations	Normative	1. Coercion 2. Remunerative

Table 4.2 Parameters of Land Within Subsistence and Plantation Systems

Parameters	Subsistence System	Plantation System
I. Ownership	1. Communal ownership 2. Usufruct	1. Occupation by force 2. Purchase from chiefs
II. Scope of Demand	Labor and scope of subsistence needs limit demand for land	Extensive demand to ensure efficient use of capital and labor
III. Spatial Distribution	Spreads; access defined by communal or kin ties	Concentrated in particular areas
IV. Ends in Use	Subsistence production	Production for external market
V. Power Relations	Normative	1. Coercion 2. Remunerative

From the perspective of land, the "integration" of the plantation and subsistence systems may create spatial as well as structural problems. Spatially, the plantations may create dichotomy in the level of development of agriculture as between regions of a country. And, structurally, agriculture may be characterized by two sectors: a developed plantation sector which is highly capitalized and marked by intense economic activity, and a marginal agricultural sector (region) which is under-capitalized and underdeveloped. The plantation also breaks down the established relationship of the people to the land that is the basis for the productive organization of the subsistence system.

Table 4.3 Parameters of Capital Within Subsistence and Plantation Systems

Parameters	Subsistence System	Plantation System
I. Ownership	Local: Family and communal	Foreign and corporate
II. Uses and	Limited requirements for subsistence pursuits	Large scope for capital, demands for maximum return is the over-riding consideration
III. Protection and Control	Creation, protection and inheritance are defined by tradition	Controlled by foreign corporate body; protection is effected by influencing local political machinery
IV. Power Relations	Normative	Remunerative

While the supra-national nature of capital has been emphasized in Table 4.3, its implications for the host society may be more profound than the immediate interest of the investor to protect himself. More important, the markets from which such investments come are also the markets for the plantation product. This market may be regulated on the supply side through quotas, tariffs, prices, etc. The supply side of the market may also be structured to ensure rapid expansion to meet sudden shifts in demand.

Table 4.4 Organizational Aspects of Subsistence and Plantation Systems

Parameters	Subsistence System	Plantation System
I. Groups	Family, kin or community: functions defined by status, age, and sex	1. Owners 2. Management 3. Local labor
II. Relations	Defined and controlled by tradition	Gaps between owner, management, technicians, and labor
III. Mobility	Roles are differentiated and ascribed by tradition. Age and excellence ensure "upward" mobility	Distinctions between owner, management, and labor are rigid. Limited mobility within scope of a given group.
IV. Power Relations	Normative	1. Normative 2. Remuneration

From the organizational point of view, the gap between owners and local plantation labor is further heightened by the residence of owners outside the plantation society. The reduction of the participation and functions of the host-community to unskilled labor and work tasks that can be undertaken by anybody dilutes labor power and limits the scope for the acquisition of skills.

Table 4.5 Agri-Ecological Characteristics of Subsistence and Plantation Systems

Parameters	Subsistence System	Plantation System
I. System of Production	1. Shifting cultivation	1. Sedentary agriculture
	2. Labor intensive	2. Relatively capital intensive
	3. Multiple cropping	3. Monoculture
II. Technology	Simple and labor intensive. Patterned after requirements of the physical environment	Large investments in machinery, transportation and direct inputs into crop production
III. Crop	Multiple subsistence and cash crops	Single cash crop
IV. Risks	Spread over range of crops; relatively low	Tied to single crop; relatively high

There are inherent risks both social and technical that may be associated with plantation production as a monoculture. The risks and social costs relate to the host society being "trapped" into investments in a single crop whose fate is tied to the exigencies of outside plantation interests. As a monoculture, the plantation is also much more susceptible to insects and pests and is on the whole a much more fragile system compared to multiple cropping within the subsistence system.

Explication of Dual-Model of Economic Growth and Development

Under neo-classical assumptions of the dual economy (technological dualism, diminishing marginal returns, and surplus homogenous labor), capital inputs are insignificant in the subsistence sector. Technological progress is also minimal and land is assumed to be fixed under an extensive system of shifting cultivation. Both capital and technological progress are important in the "modern" sector. Under these assumptions, the transformation of the dual economy is envisaged as a shift of labor and other resources from subsistence into the modern sector. Such shifts, it has been argued, can be accomplished at no cost to the subsistence sector since it is assumed to be effected through a pool of surplus labor within that sector.

The usefulness of the dual model as an analytical tool has come under a great deal of criticism, both empirical and theoretical. Its critical assumption that the marginal product of labor within the subsistence sector is either negative or zero has been found to be empirically invalid. It has also been argued that by looking at a money (industrial) and subsistence sector as "discrete" components of the underdeveloped economy, relations of production and the associated inequality between the two sectors are masked. Along similar lines, the "dichotomy" between plantation and subsistence production, if emphasized as the framework of analysis, will submerge the "interdependence" of the two systems of production and their consequences. Figure 4.1, which is couched in terms of the integration of natural rubber and subsistence production, is used to explicate the foregoing argument.

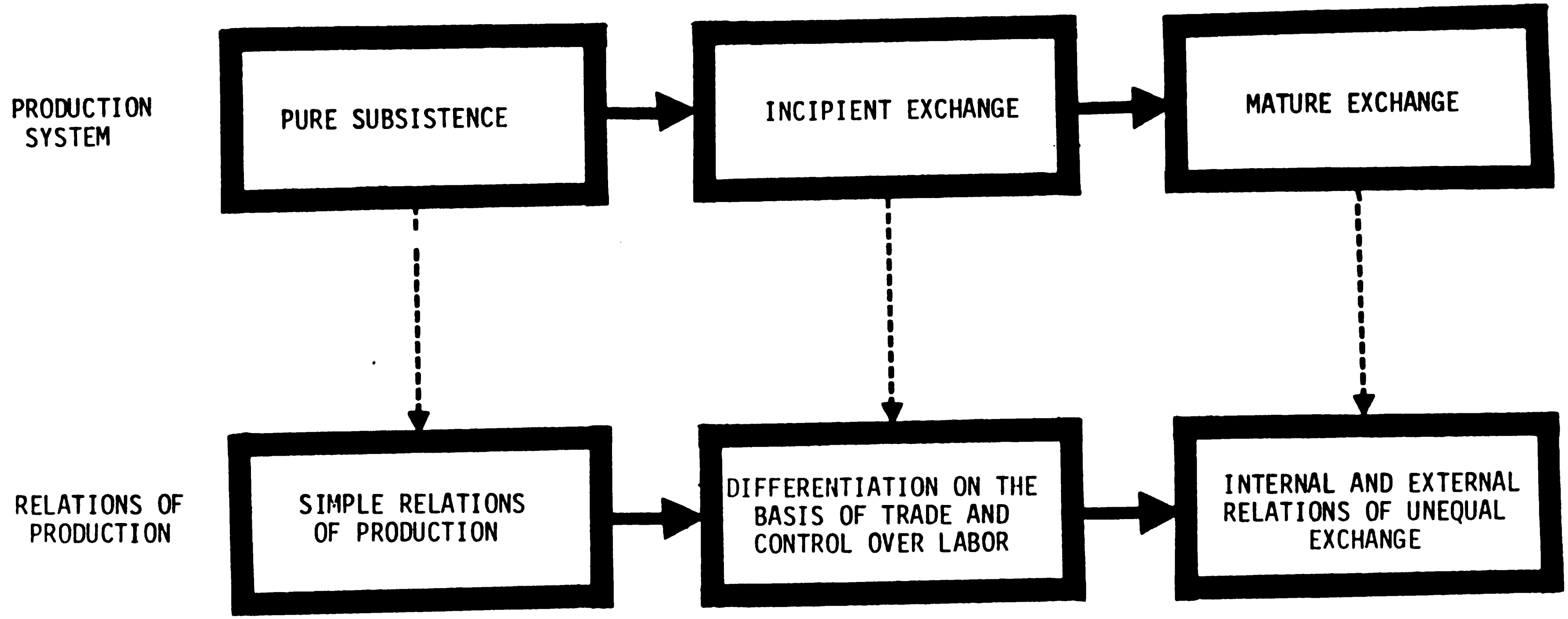

Figure 4.1 Production and Changing Relations of Production

At the juncture (phase) where production is aimed at "pure" subsistence, social relations of production, as manifested through the ownership of capital, use and access to technology, and division of labor are insignificant. This phase can be contrasted with an exchange (money) economic sector as outlined in the dual model. However, what the dual model designates at the subsistence sector corresponds more to phase 3 in the scheme presented. One will be hard pressed to locate in the real world an existing situation similar to phase 1. Phase 2 also belongs, largely, to the era of the inception of colonial rule Even if latitude is allowed for the dual model's delineation of subsistence and money sectors as ideal typical constructs, it still remains unclear what makes each sector, independently, a critical feature of the underdeveloped economy. This study looks at subsistence and plantation cash crop production as integrated activities. They are discussed separately only where the reference point is phase 1 of the scheme outline in Figure 4.1. The following explication of the Dual-Model of economic growth and development is outlined with such a framework.

Aggregate agricultural output, Q, within the plantation economy may be derived from plantation production, p, and subsistence production, s, thus:

$$Q = Qp + Qs \text{ - - - - - - - - - - - - - - - - } 1.$$

Income, Y, from total agricultural output, Q, at given price, P, levels is represented by

$$Y = PQ \text{ - - - - - - - - - - - - - - - - - - } 2.$$

Under neo-classical assumptions, the same homogenous labor, L, is employed for both subsistence and plantation production. The land area devoted to agriculture, $\bar{A}$, is assumed to be fixed and there are no significant technological changes in subsistence production. From these we arrived at a production function for subsistence thus:

$$Qs = fs\ (Ls, \bar{A}) \text{ - - - - - - - - - - - - - - } 3.$$

For the plantation both capital, K, and technology, T, are assumed to be important, hence:

$$Qp = fp\ (K, Lp, T) \text{ - - - - - - - - - - - - } 4.$$

$$T = T\ (K) = Tp\ (Kp) \text{ - - - - - - - - - - - } 5.$$

Capital input and technological progress ensure that the marginal product of labor in plantation production, dQp/dLp, is greater than dQs/dLs for subsistence production. Given rational behavior the tendency will be for labor to be shifted from subsistence into plantation production in response to higher earnings, $Wp/Ws \quad 1$. Aggregate labor allocation under these circumstances is:

$$L = Ls\ (Ws) + Lp\ (Wp) \text{ - - - - - - - - - - } 6.$$

The above relationship implies that a pool of "disguised unemployed" labor can be shifted from subsistence towards plantation production at no cost. In fact, it has been argued that such a labor transfer serves to increase aggregate income for both subsistence and plantation production. This relationship has been based on the Ricardian notion of subsistence farming as an extensive system with very limited potential for intensification. It also assumes relative wage levels within the two "sectors" as the major determinant of labor allocation. This will be assessed in light of the case data.

It is argued here that the integration of subsistence and plantation rubber production occurs in such a framework that it leads to the intensification of agriculture as a whole. Whether the resulting change benefits a given society is an important but a separate problem. Specifically, the adoption of rubber cultivation by the subsistence farmer--the crop, its cultural methods, and its processing on a commercial basis--represents a technological innovation that has to be accounted for in the production function for subsistence. This is accomplished by modifying equation 3 thus:

$$Qs = fs\ (Ls, \bar{A}, Ts) \text{ - - - - - - - - - - - - } 7.$$

Also, the plantation infrastructure--transportation facilities and marketing outlets--which are at the disposal of the subsistence system for rubber production, seedlings distributed to subsistence farmers from the plantation, and direct investments by farmers in equipment--tapping knives, cups, buckets, and chemicals used in coagulating latex--all represent capital inputs in subsistence rubber production. From these capital inputs we obtain the following technological relationship:

$$Ts = Ts\ (Ks) \text{ - - - - - - - - - - - - - - - - } 8.$$

which we can incorporate in equation 5 as:

$$T = T\ [Tp\ (Kp);\ Ts\ (Ks)] \text{ - - - - - - - - - } 9.$$

By introducing technology and capital into the subsistence system through rubber cultivation, the assumption that the marginal product of labor in subsistence will be equal to either zero or negative ceases to be valid. As a result, the transfer of labor from subsistence into plantation rubber production cannot be accomplished without costs. Such costs can be measured in terms such as decreased food production for domestic use. To make up for declining food production, the level of plantation rubber production has to be increased to generate revenue to purchase food from external sources. Figure 4.2 outlines the dynamics of this relationship.

There is a threshold beyond which economic incentives alone fail to ensure labor transfers from subsistence into plantation production. This is often "compensated" for through a system of compulsion to force labor out of subsistence production. This imposes further demands on the food supplies to further aggravate conflicts in production for subsistence and exchange.

The introduction of technological change and capital into the subsistence system also implies that land resources are no longer fixed. The subsistence production function becomes:

$$Qs = fs\ (Ls,\ \overline{A},\ K) \text{ - - - - - - - - - - - - - } 10.$$

In effect, land becomes "capitalized" and as a result finds its "most productive" use in rubber cultivation. As indicated in Figure 4.2, the "financial logic" of the integration of subsistence and plantation rubber production is such that increasing amounts of land area will be devoted to the latter. And, as a result, the system of monoculture characteristic of plantation rubber production gradually replaces mixed cropping practices within subsistence, with serious risk and environmental implications.

By modifying equation 10 to account for the capitalization of land through large-scale foreign plantation production and small-scale local production along commercial lines we arrive at:

$$Qs = fs\ [Ls,\ \overline{A}\ (K)] \text{ - - - - - - - - - - - - } 11.$$

This implies that part of aggregate income has to go to land as a capitalized asset of the plantation and small-scale producers within the subsistence system. The "out-flow" cuts into labor's share of

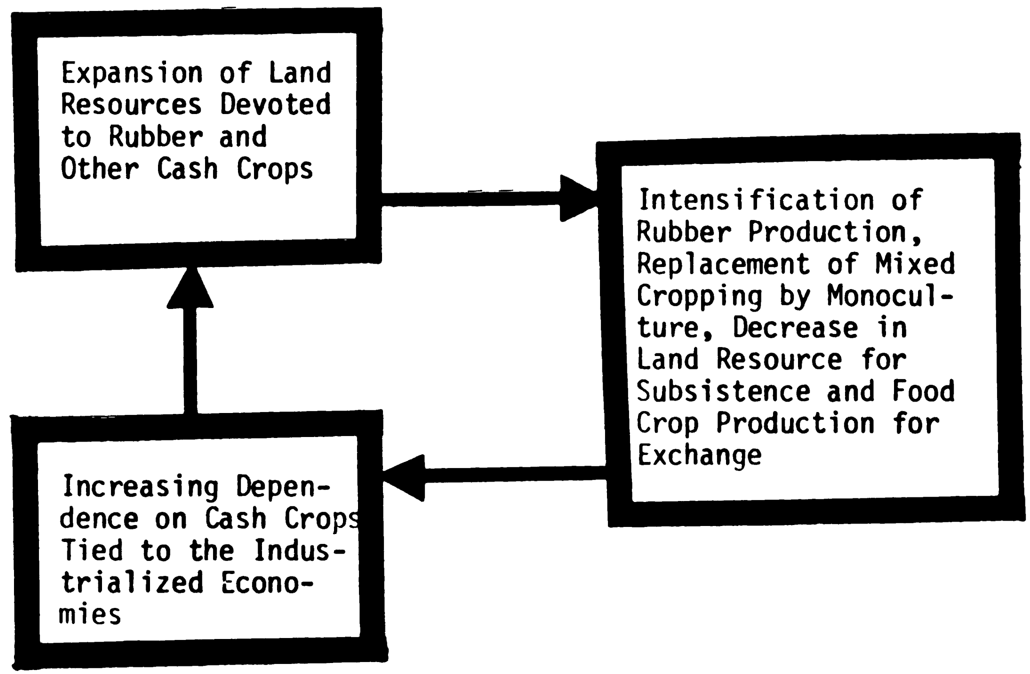

Figure 4.2 Flow of Land Use Pattern (Adapted from Ellen, 1979: 45)

income to aggravate the poverty of the rural population from which plantation labor is drawn.

In general, resource--land, labor, and capital--allocation between the two systems of production occurs for reasons other than the relative economic efficiency of each of the two systems. Specifically, non-economic factors intrude, such as a system of compulsion inherent in the use of plantation labor and land acquisition. Also the source of capital is an important consideration in how it is invested and the uses made of production surplus.

Equation 6 may be modified to account for the non-economic factors in the allocation of labor between subsistence and plantation production thus:

$$L = Ls\ (Ws,\ Fs) + Lp\ (Wp,\ Fp) \text{ - - - - - - - } 12.$$

where F designates non-economic factors used to either attract or compel labor flows into subsistence and plantation production. The equation incorporates remunerative (economic) power in the form of wages (W) and compulsion (coercion and normative power), represented by F. Regarding foreign ownership of the bulk of investments in plantation production, Singer comments:

> The question of ownership as well as of opportunity costs enters at this point. The facilities for producing export goods in undeveloped countries are often foreign-owned as a result of previous investment in these countries....If we apply the principle of opportunity costs to the development of nations, the import of capital into underdeveloped countries for the purpose of making them into providers of food and raw materials for the industrialized countries may have been not only rather ineffective in giving them the normal benefits of investment and trade but positively harmful (1950: 221-222).

The opportunity costs associated with foreign investments as outlined in the above quotation are reflected in consumption, savings, and

resource allocation patterns. Also, foreign investments may lead to outright exploitation; specifically, in the gap between aggregate and retained income. These points are elaborated through a critique of the growth model of Harrod (1948) and Domar (1957) which has been often applied to developing countries.

The Harrod-Domar model views the rate of economic growth, g, as a function of aggregate saving rate, s, with incremental capital output ratio, CR, where r is the rate of return on investments at a given level of aggregate income, Y.

$$g = \frac{dY}{Y} = \frac{S/Y}{dK/dY} = \frac{s}{Cr} \text{ ------------ } 13.$$

A major criticism in the application of the above model to developing countries, and in particular plantation economies, is that it makes no distinction between foreign (f) and domestic (d) investments. By aggregating foreign and domestic investments, outflows that go to outside capitalists are not accounted for and this distorts saving levels and the growth function of the developing economy as a whole. We may modify the growth model by incorporating

$$I = Id + If \text{ - - - - - - - - - - - - - - - - } 14$$

which distinguishes between domestic and foreign investments.

$$I = Id + If + Id\ (r, Y) + I\ (r) = Id\ (rd, Y) + If\ (rd/rf) \text{ - - - - - - - - - - - - - - } 15.$$

In the above formulation, foreign investment is dependent only on the rate of return, while domestic investment is a function of both the rate of return and aggregate income. Under these circumstances the relative rate of return to foreign investments is higher. And, the fact that a significant share is channeled towards transfer payments deprives the host society of the economic expansion that the retention of such revenue could generate under the Harrod-Domar model. The consequences of these transfers as they underpin the arguments of the School of Unequal Exchange, and the appropriateness of equation 15, will be explored and possible modifications made in terms of the case data.

The financial rationale of foreign investments in plantation agriculture is often at odds with the ends in subsistence production. Plantation rubber production defines the uses of land, the scope of investments, and technological choices in agriculture. The conflicts between subsistence and commercial (financial) agricultural production are heightened and perpetuated by the limited technical option that the plantation imposes. Decisions as to what to produce, how to produce it, and the scale of production are all determined to a great extent by past investments which serve to "trap" the plantation society into an international market as a producer of a single agricultural raw material. The state also comes to be dependent on this single commodity as its major source of revenue; the "interests" of the state in effect come to be tied to those of the plantation.

Neo-classical categories of "private" and social costs of production and consumption have been used as a way of measuring the impact of development projects and foreign investments on the welfare of developing societies. Unfortunately, in stressing the dichotomy between private and social costs, the relative impact of the latter (negative externalities) on groups within society is neglected. Some of the agri-ecological aspects of plantation rubber cultivation, as well as other common cash crops in West Africa, serve to illustrate this point.

In order to attract foreign investments or to encourage the cultivation of cash crops, many governments of developing nations have unwittingly accepted the negative externalities that they entail. From an agri-ecological perspective some of the negative externalities may be traced to the tendency for balanced cropping combinations being replaced partly by monocropping, or by hegemony of a few selected crops. Without the balances of "natural controls," simplified cropping patterns become vulnerable to weeds, selected pests, and diseases which can multiply to destroy the cash economy of vast areas. Where such havoc has been wreaked, its social implications have often been neglected. Instead, technical solutions in terms of temperate-zone agricultural protocols--herbicides, insecticides, new seed varieties, fertilizer, etc.--are sought. If these support systems fail, governmental reactions typically follow the pattern of responses to the plight of the cocoa industry in West Africa a few decades ago. The pattern favored three approaches: the burning of infested crops, demarcation of areas infested, establishment of buffers around them, and leaving the diseased trees to "self-destruction"; or, using the state's limited agricultural research facilities and talents to develop cocoa varieties resistant to the particular disease (Miller, 1962; Ndaeyo, 1971).

The differential impacts of such a development on the state, foreign investor, and subsistence farmer are significant. The costs to the state can be measured in terms of losses in foreign exchange and the provision of substantial subsidies (material and personnel) necessary to contain the crop infestation. Where foreign investments are involved, the decline in output resulting from infestation will lead to revenue and profit losses. However, foreign plantation operators can recover a portion of these losses by laying off labor and from the higher prices that will result from the decline in the product's supply. The choices of subsistence farmers and redundant plantation laborers may be limited to hunger or outright starvation.

Increasing incidence of acreages under plantation crops, especially semi-permanent cash crops such as rubber, may result in poorer and less varied diets for subsistence. The destruction of natural vegetation and its associated animal life over extensive areas deprives local populations of collectible and nutritionally significant food supplements such as wild edible roots, herbs, mushrooms, and wild animals as a source of protein.

The import of the foregoing is not to suggest that agri-ecological stability can be simply ensured and the food needs of agrarian population met by limiting agricultural practices to methods that are molded after a "natural" system. Rather, it is to argue that "introduced agricultural innovations" are a mixed blessing and they need to be comparatively evaluated with respect to their varied impacts. And, before replacing an existing agricultural system with another, the new system's intricate expression in social, economic, cultural, and environmental relations has to be anticipated and monitored. Figure 4.3, an adaptation from Ellen (1979), incorporates the above considerations, in addition to other facets that have been outlined in the context of neoclassical growth models. The model is at the same time both a power

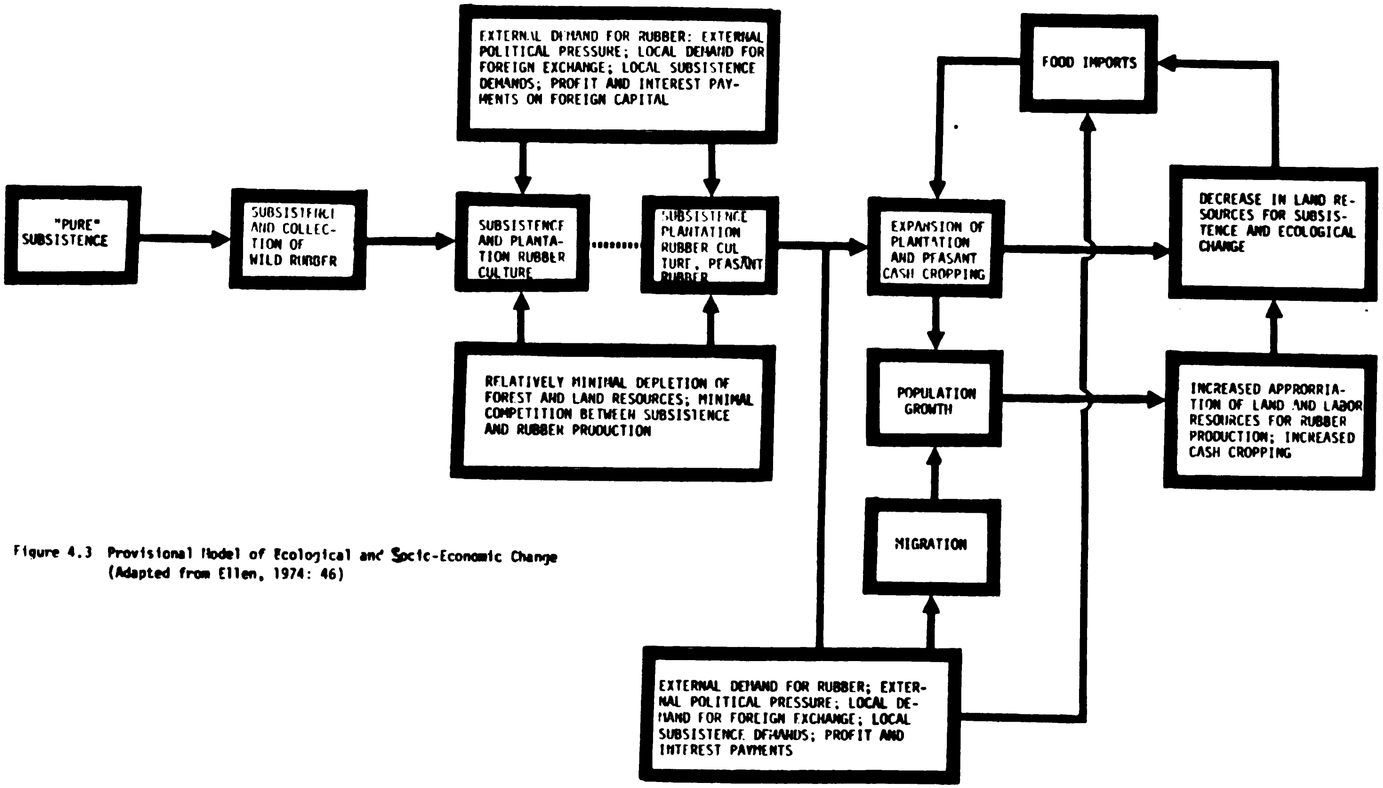

Figure 4.3 Provisional Model of Ecological and Socio-Economic Change (Adapted from Ellen, 1974: 46)

and systems paradigm. Its components are reviewed in light of the case data. The submodels thus generated are subsequently pulled together in an integrative model of Liberia as a plantation economy.

Methodology and Methodological Problems

The study outlined is complex and its success depends on compiling, evaluating, and integrating data from a variety of sources. Both primary and secondary sources are used. Data from primary sources fall in these categories: Documentary, Trade Statistics, Census, Biographies, Autobiographies, and Journals. Secondary sources include major published and unpublished works, specifically on Liberia, as well as those addressed to plantation and plantation rubber in particular. These sources are used with their limitations in mind.

Both running and episodic records such as exist on Liberia have largely been written from the perspective of colonial administrators, missionaries, or a small number of Africans under their tutelege. Besides this bias, the attention given to plantations, despite their social and economic importance, varied depending upon events and circumstances prevailing at given periods. For instance, plantation activities in Liberia followed soon after the settlement of American Blacks in that colony in 1822--but in the official correspondence between local administrators in Africa and the Colonization Society in the United States, minimal attention was given to the subject of plantations. Also, the creation of Liberia as an experiment in the capacity of blacks to govern themselves tended to bias the writing and reports of Liberian sympathizers and antagonists alike. For the most part, documents which either touch upon or deal directly with plantations date back only to the period preceding and, in particular, during World War I. Official sources and "credible" public documents on Liberia are limited; hence, normal research problems of selectivity give way almost wholly to the more difficult task of critically assessing such documents as exist (Brown, 1941).

Liberia shares the dilemma of many African nations in the absence of, or in the accuracy and credibility of, records of population, agricultural, industrial, and employment statistics. Values of investments and production statistics are also woefully distorted; they exclude important items of national income and economic activities within the so-called subsistence sector of the economy. Government publications are relatively credible sources for exports and imports in tonnage and monetary values. And, as regards rubber exports, since the bulk of production goes to the United States, figures of the Liberian government may be compared to those of the United States to evaluate their credibility. Despite their tilt to authors' subjective views, biographies, autobiographies, and journals may be fruitfully reconstructed to shed light on information from other sources.

Analysis of the data generated from both primary and secondary sources is done to yield quantitative and qualitative information on subsistence and plantation activities in Liberia as they relate to land, labor, capital, organization, and agri-ecological aspects. Census data, trade statistics, agriculture census, and field data collected and used in other studies provide the bulk of quantitative information. Content analysis of concession agreements, national and international commission reports on labor in Liberia, loan agreements, and biographies are reconstructed to reflect the types and nature of power relations within the plantation and subsistence systems and their implications for internal and external socio-economic relations. The findings serve as the basis of specific propositions, which are outlined and comparatively evaluated in relation to the characterization and generalizations about other plantation societies.

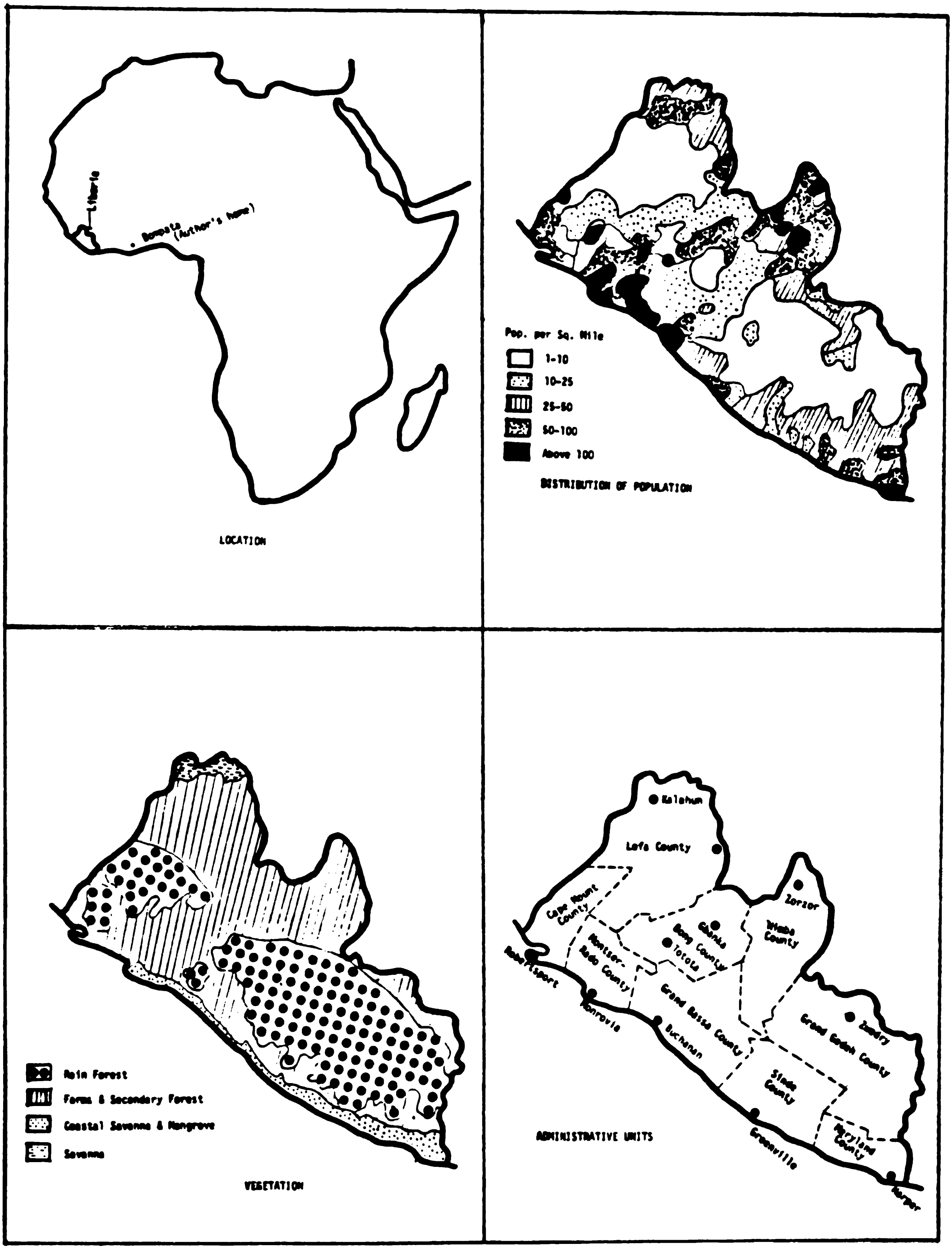

Figure 5.1 Location, Population, Vegetation and Political Map of Liberia

CHAPTER V

POLITICAL ECONOMY OF LIBERIA

Background

Liberia is located on the west coast of Africa. Its total land area of about 43,000 square miles (111,370 square kilometers) lies within latitudes 4^{o} and 8^{o} North. It is bounded on the southwest by the Atlantic Ocean and on the east by Ivory Coast, with Sierra Leone and Guinea forming its northwestern and northern boundaries, respectively. The population is estimated at 1.9 million, growing at 3% per annum, with a doubling time of 24 years. Per capita income is estimated at $196 and, on the basis of trends between 1960 and 1980 is growing at a rate of 0.8%.

There are two major seasons--a dry season lasting from November to April, and a wet season from mid-April through October. Annual rainfall averages 200 inches (508 cm) along the coast and diminishes to about 70 inches (178 cm) toward the north. The soils are porous, a characteristic which, combined with high temperatures (an average of about 80^{o} F. or 27^{o} C.) and heavy rainfall, leads to fast rates of leaching and soil decomposition. Beside a narrow strip of coastal savanna and mangrove swamps, the soils support a tropical rain forest which is found throughout most of the country, except where the activities of man have eliminated this climax vegetation. The environment is ideal for tree crops: rubber, cocoa, coffee, oil palm, banana, and kola are produced on plantations as well as "peasant" farms. Upland rice, cassava, and "kitchen garden" crops are the major subsistence crops. These food crops are raised as a communal enterprise by nearly 80% of the population. In terms of foreign exchange earnings, rubber and iron ore are the two most important products.

Liberia is Africa's oldest republic and can boast of never having been subjected to European colonial rule. But in several ways, Liberia is as much a product of colonialism as the rest of Africa (Porter, 1961). Similar forces, often antithetical, which have acted upon colonial societies and given them their peculiar characteristics have prevailed in Liberia. In the case of Liberia, however, political, economic, and social control of less powerful indigenous populations have been extended by a group--Americo-Liberians--who were internal to the African continent (Sundiata, 1980). The group collectively known as Americo-Liberians is constituted of blacks from the United States, the West Indies, and others freed from slave ships after abolition. Americo-Liberians make up 5% of the total population.

The Liberian settlement was sponsored by philanthropic organizations in the United States with the backing of the government. The motives of the sponsoring organizations, their members, and the United States government were mixed. They ranged from genuine Christian and humanitarian concerns to outright racist sentiments and a "crass desire to rid American cities of a group which had not been successfully integrated into America's 'melting pot' and whose presence set unwanted example of freedom to those blacks still in slavery" (Liebenow, 1980). The notion of resettling American blacks in Africa dates back to 1773 when Rev. Samuel Hopkins conceived the idea of blacks undertaking missionary work in Africa (McPherson, 1891). Hopkins' idea, despite initial successful preparations,had to wait due to the turmoil of the American Revolution. It served, however, as the inspiration for the settlement of freed slaves from British colonies in Sierra Leone in 1787, and the activities of American Colonization Societies that culminated in settlements along the Liberian coast, beginning in 1822. The settlements along the Liberian coast, unlike Sierra Leone which was conceived as a British colony, were to be independent of all European powers including the United States. Numerous difficulties were encountered by the first settlers. The indigenous coastal populations were hostile and the idea of free black colonies in a sea of European colonies did not sit well with the various colonial powers in West Africa. But the settlers' fortitude and the assistance of the American Colonization Societies helped them to survive annihilation by local populations and possible domination by the European powers.

The dominant cultural, social, political, and economic norms that the settlers brought to the new colony were those of United States plantations. The initial conception of the colony as a way of extending Christianity to the native population was also important. Despite numerous conflicts with the indigenous populations which have lasted to the present, Americo-Liberian hegemony was soon established through Christian zeal, backed by the force of arms supplied by the United States and sympathetic European nations.

> The Americo-Liberians imposed a set of dominant cultural norms for the new state which were roughly modeled after those of the society across the seas that had rejected them. These norms

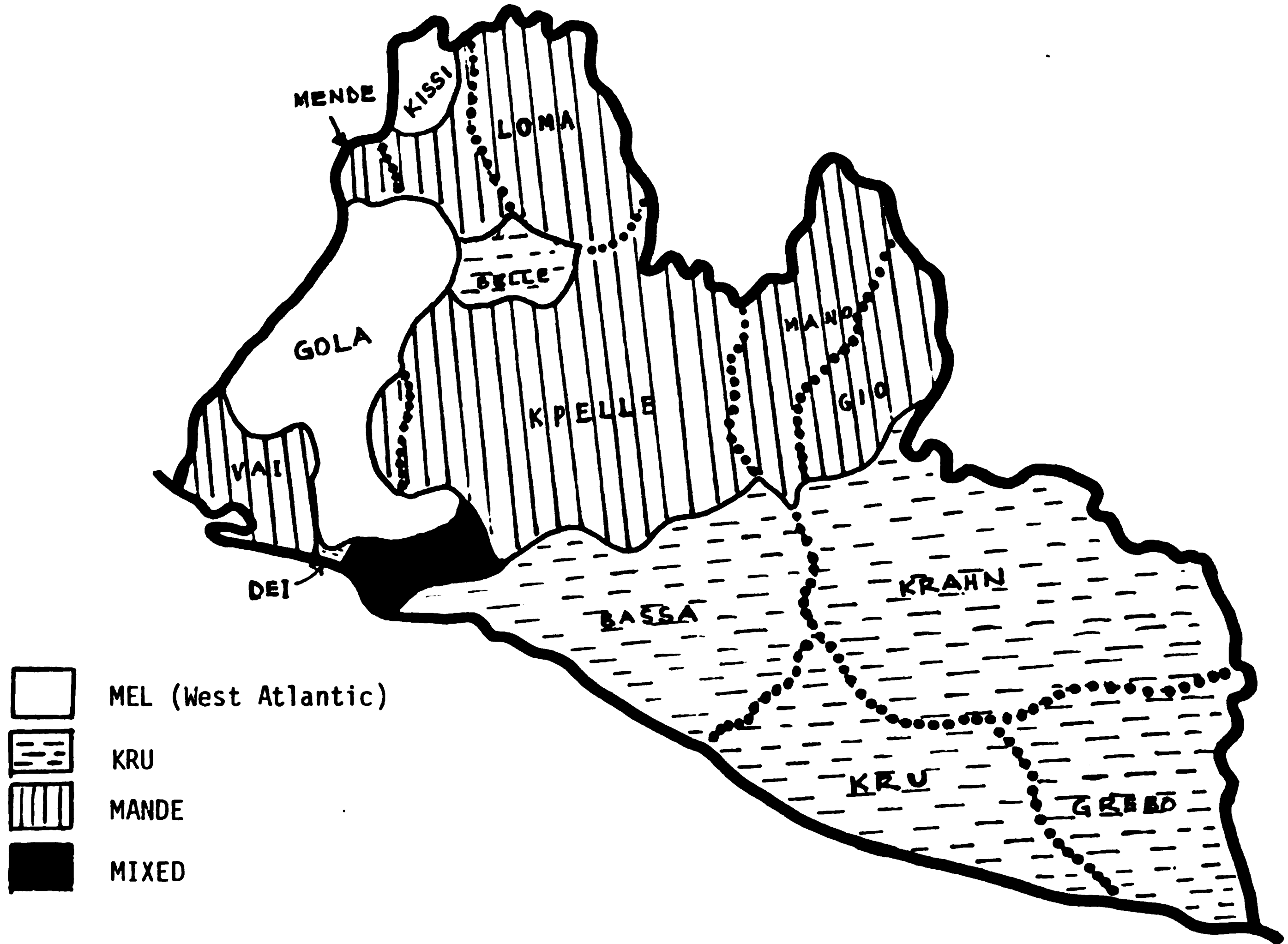

Figure 5.2 Map of Ethnic Groups in Liberia

> included the Christian faith...and the creation of a political system which superficially resembled that of the United States ....Nevertheless, the techniques developed for domination of the tribal people were largely of settler inspiration. Central to the dominance system was the maintenance of solidarity within the settler group itself. In the social realm, it meant that endogamy, or marriage within the group, was preferred over both formal and informal liaisons across the "tribal-civilized" divide....In economic terms, solidarity meant the monopolization of commercial activity by the settler group and the restriction of the concept of private ownership of land to that group as well. In political terms, it meant not only the exclusion of tribal participation in national politics, but it also led to the emergence of Africa's first one-party state....Complementary to its strategy for in-group settler solidarity were the policies developed with respect to the tribal majority....The only external contacts the tribal people were to have were with the Liberian commissioners, soldiers, and the occasional settler who had opted to "make farm" in the interior and to adjust his social relationships to fit the tribal circumstances.... Equally important to the control strategy, a tribal person lacked rights as an individual citizen, rather he was a member of a legally defined corporate group (Liebenow, 1980: 2).

There are three broad linguistic groups, Kru, West Atlantic, and Mande which are broken down into sixteen indigenous ethnic groups as indicated in Figure 5.2. Central to the organization of these ethnic groups (especially among the Mande) are secret societies--Poro for men and Sande for women--with political, religious, and educational functions. On the basis of social structure (segmentary type) there are ethnic groups in which political rule is exerted mainly by elders within kinship groupings. These include the Kru clusters--Kru, Grebo, Krahn, and Bassa, the Kissi belonging to the West Atlantic linguistic grouping and Gio of Mende linguistic cluster. Societies belonging to this segmentary type are characterized as stateless formations.

Typically, within these societies decisions affecting the community were made by a council representing the major lineages constituting the community. Each lineage head represented sub-groups within the lineage, each with its own head as a representative of household heads. Decisions tended to involve consensus and the system itself had very limited coercive power. Such a system appears to characterize more the Kru-speaking peoples of the rain forest than the Mande occupying the forest fringes (see Figure 5.1 and 5.2), who are considered by Rodney (1972) to be a relatively recent intruding group and appear to be more centrally organized. Nevertheless, as in other parts of Africa where stateless formations existed (for instance, Eastern Nigeria), it was subverted by government-appointed chiefs who served as the major contact point between the various ethnic groups and Americo-Liberian authorities. These chiefs were given regular salaries from the government to operate as the intermediaries for labor recruitments for government, private Americo-Liberian, and foreign concessions. Their services were also solicited either through rewards or coercion in tax collection and land expropriations. In addition to the division between Americo-Liberians and "native" Liberians are foreign concessions and their expatriate employees who live in "splendid isolation" from the two other groups. The concessions have developed various sanctions which ensure the participation of "native" Liberians in plantation production as wage laborers without creating any serious bonds between them and expatriate personnel. These sanctions combine aspects of traditional Liberian authority with those characteristic of industrial organizations. The use of kin ties to organize migrant plantation workers is especially significant in the range of traditional sanctions used on plantations. It is the practice to place laborers under supervisors who belong to the same kin group as the laborers or come from the same village. By so doing, the security of the supervisor's position in the plantation hierarchy and prospects for advancement become dependent on satisfactory job performance by his kinsmen (McEvoy, 1971). Should these traditional sanctions fail, then the industrial sanction of dismissal is applied. In effect, the mechanism of kin solidarity is used to keep "native" Liberians together, and the sanctions of dismissal employed to keep them in line and isolate them from the rest of the plantation community.

The foregoing developments have resulted in the emergence of three distinct groups with divergent interest in Liberia--Americo-Liberians, "native" Liberians, and foreign concession interests. The first group controls the state apparatus, the second serves as the source of cheap labor, while the last group controls capital and forms the upper level of the plantation hierarchy. Continuity in the dominance of Americo-Liberians as an urban elite is assured through various expressions of group solidarity as well as various mechanisms preventing "native" Liberians from making inroads into Americo-Liberian society. Christianity provides Americo-Liberians a cultural element distinct from the rest of Liberian society, education provides the group separate occupations, and family relations and marriage serve as a means of consolidating wealth and status among themselves (Shick, 1978). At the same time, statutory instruments either limit or exclude "native" Liberians from any meaningful participation in the economic and political life of their country. Americo-Liberian society has a caste-like character. While membership is open to all settlers, only a limited number of "native" Liberians have managed to gain real entry into it. This has been achieved through a combination of education and marriage into the settler community.

On April 12, 1980, the deep hostilities that lay underneath the relationship between Americo-Liberians and "native" Liberians erupted into bloodshed and a military coup by the latter. The seed for this coup had been sown earlier; it had been manifested in relatively limited but numerous protests throughout Liberia's 161-year history. The rallying point for "native" Liberian protests have been land, labor, taxes, and scarcity of rice, the main staple food. Indeed, the so-called Rice Riots of April 14, 1979, that broke out in protest to the increase in the price of rice, foreshadowed the upheavals of the following year.

Sections of this chapter are addressed to the mechanisms of control and dependence as they have evolved, on the one hand, between Liberia and external concession interests, and, on the other hand, between groups within Liberia. The relationships are examined in terms of their reproduction in the uses of land, labor, and capital within the production organization of plantation and subsistence agriculture. The data--both quantitative and qualitative--presented in this discussion serve as the basis of inferences drawn and integrated into the models outlined in Chapter four.

Labor in the Liberian Economy

Command over People as the Key to Economic Power

As was the case under feudalism with the ground, and in capitalism with machines, Conquery (1969) and Amin (1976) among others, argue that the wealth and power of pre-capitalist African "aristocarcy" were based on the monopoly of long-distance trade. In Amin's words:

> When the feudal mode of production is absent or embryonic and there are no simple commodity relations within a given society, the formation, thus reduced to the combination of an undeveloped communal or tribute paying mode of production with long-distance trade relations, is the "African" type (1976: 17).

This is in effect an extension of the Asiatic mode of production but with long-distance trade substituted for its essential links of major economic projects--irrigation, drainage, road construction, etc.--as the basis for the appropriation of the surplus necessary for the existence and hegemony of African "tribal aristocracies." This explanation is unsatisfactory for some pre-capitalist African societies, especially those which have been described as "stateless" (Horton, 1976), including Liberia.

In Liberia, as in other stateless societies of pre-capitalist Africa, the only recognized authority before colonization was that of the elders (town fathers) and not "chiefs," who were later creations of white (colonial) and Americo-Liberian administrators (Brown, 1941; McEnvoy, 1971; Mekeel, 1937 and 1939). However, the absence of "chiefs," and by extension state organization, did not preclude participation of the various ethnic groups in long-distance trade nor the use of such trade in some manner by the traditional leaders to bolster their wealth and power. But such uses of long-distance trade were mainly indirect. Access to and means of controlling labor constituted the primary mechanism by which "surplus" was extracted to foster the power and hegemony of traditional leaders. Even where a state apparatus was in place, as was the case with the Abron Kingdom of Gyaman in West Africa for instance,

> ...the wealth of the local aristocracy arose essentially from the surplus labor it exploited from its captives; it was this surplus labor which provided it with products which it introduced into long-distance trade; and if it held a predominant position among the local clients of this trade, this was because it controlled the greatest share of captive labor whose activity from Gyaman swelled the flow of long-distance exchange....Given the degree of development of productive forces attained by the economies such as those of these two social formations [Gyaman and Ashanti], the principal factor in the work process was labor-power. It was the only source of disposable energy, apart from donkeys used to carry loads. The instruments of labor were rudimentary; as a general rule, they were individual tools whose productivity scarcely varied; consequently, the impact of the labor-process, the size of the transformation of nature that could be produced, were a direct function of those human resources that could be assembled. Thus, it was command over men--and so the possibility of organizing their cooperation on a large scale--that was the key to economic power (Terray, 1974: 329-331).

Within the framework of kin-based social organization which characterized pre-capitalist societies of Liberia, the power to organize the cooperation of labor rested with the elders (town fathers) through instruments such as the Poro (secret) Society. But such mobilization could only stay within narrow limits--the size of the kin group, a single town, or a few cooperating towns. Basically, the kin-based organization implied a dispersal of labor force, and the only means of establishing bonds of direct, personal dependence--control over men--as a means to wealth was through "institutions" such as "slavery," peonage, and other forms of forced labor.

Slavery in Liberia was not, however, in its classic form--slave markets and slave dealers being largely absent--and it was largely inter- and intra-tribal domestic slavery. Three types of mechanisms of forceful labor acquisition have prevailed in Liberia: (1) domestic slavery or the pawn system, (2) forced or compulsory labor, and (3) exported labor recruited under conditions of compulsion (Brown, 1941). The social organization of some groups such as the Kpelle recognized three "classes" of people: free, serfs, and slaves (Strong, 1930). The evidence is ample to indicate that "domestic" slavery once existed in Liberia and that some societies in the area were organized around that institution. As the following review of the history of labor in Liberia will reveal, slavery and other forms of compulsory labor have been persistent features of the mechanisms of exploitation. The review also suggests that relations of "captivity" and "force" appear as dominant characteristics of the labor process in Liberia, and that their reproduction may be manifest in the history of "labor relations" in the country. The evolution of wage labor migration reflects the same system of compulsion.

Wage Labor Migration

The involvement of Liberians in wage labor dates back to the eighteenth century. Since the 1790s or a decade earlier, the coastal Kru and Grebo people were employed as paid hands on European ships. Later, this coastal Liberian wage labor (or more precisely labor in exchange for European goods) was extended to other activities such as mining, lumbering, porterage, and plantation agriculture. In geographical scope, Kru wage labor is reported to have extended to central Africa (as porters accompanying David Livingstone) and to both the Suez and Panama canal zones (Sundiata, 1980). Liberia's two leading exports during the nineteenth century were coffee and labor. With the decline of coffee exports in the early part of this century, labor became the leading and most important Liberian "export item." This early emergence of wage labor migration, its uses by some traditional leaders, and its regulation, for one reason or another, by

Americo-Liberians, have made it a major means of exploitation to enhance the power of traditional leaders and Americo-Liberians alike. Force has been central to the expropriation of labor by both groups, often through collaboration. When this failed, there were independent Americo-Liberian initiatives which were often in conflict with desires of traditional leaders.

> An 1865 Port of Entry law limited labor export and trade to six Americo-Liberian settlements.... The Kru and Grebo, the main groups migrating from the coast, protested that these settler attempts to derive economic benefit from the traditional patterns of employment imposed heavy burdens. For their part, the Liberian government [Americo-Liberians] charged that embarkation and disembarkation of migrant workers was "the cloak for a gigantic system of wholesale smuggling" and ordered vessels to deal with laborers at designated ports only (Sundiata, 1980).

Whenever it was advantageous, Americo-Liberians, through various mechanisms of compulsion, extracted native labor for their own use. This was also done through the collaboration of some traditional village elders who received material rewards. When the system of exploitation of traditional labor by village elders (through migrant wage labor "recruitment") either excluded Americo-Liberians or conflicted with their labor needs, however, the village elders were harshly dealt with. This power play with respect to labor lasted well into the first half of this century and, at various times, threatened the survival of Liberia as an independent nation (Azikiwe, 1932; Padmore, 1931; League of Nations, 1930). Inherent conflicts between Americo-Liberians and traditional leaders for control over "native" labor assumed crisis proportions at about the time when Firestone arrived in Liberia.

Earlier Liberian involvement in "wage labor" took place outside the country; principally in the port cities, mines, and plantations of Central and West Africa. In the latter part of the nineteenth century the Panama Canal Zone and the Spanish island of Fernando Po became the two principal points of destination. With the establishment of Firestone plantations in the 1920s, wage labor migration to outside areas dropped off as a result of official sanctions.

From its inception, and prior to the arrival of settlers, the kin system of social organization served as the essential idiom for the control and regulation of wage labor migration. The settlers, seeking to turn labor migration to their advantage, introduced Port of Entry Laws around 1840. These laws were intended to restrict both the embarkation and disembarkation of migrant laborers to specific points on the coast in order to regulate and tax the laborers (Sundiata, 1980). Formal participation of the Liberian government in labor recruitment and exports, however, occurred at a later date. In 1887 the Legislature signed a contract with the German firm, Woermann of Hamburg, which allowed the company to recruit and transport labor to foreign destinations (Brown, 1941; Kuhn, 1975). In addition, there were informal recruitments by the French and Spanish from which the government benefited through provisions of the Port of Entry Laws.

The labor recruited by the German firm through the instrument of 1887 went mostly to Panama where the French had a concession to attempt the long hoped-for canal. By the end of 1887 a total of 1,006 laborers were reported to have been sent to the French Canal Zone, for which the Liberian government received 2 dollars per head (Kuhn, 1975). During the first eight months of their stay 389 died. The plight of the remaining is vividly illustrated in a note addressed to the nearest United States consul by the laborers. It stated in part: "We don't want to stay in this country no more longer. The sickness of this country is not agree with us....Our agreement with Mr. Payne was if this country was not good for us he will take us back...." (cited by Kuhn, 1975: 50). The Liberian government remained adamant to requests for repatriation made through the United States consul in Liberia, noting that it was "the custom from time immemorial for Kroomen or other free tribes to accept work on vessels which visited the coast" and felt it had not the right to abridge that traditional enterprise (Kuhn, 1975).

Dispatches from the United States consul in Liberia to Washington at a later date (1888) indicated that the Liberian government was working to prevent further shipments of labor to Panama and the French canal. However, as late as 1897 contractors working from Sierra Leone were reported to have been shipping Kru labor to Panama by paying Kru chiefs one British pound per worker (Fyfe, 1962).

The most controversial labor "exports" from Liberia seem to have been the traffic to cocoa plantations on Fernando Po. Recruitments to these plantations were organized by chiefs and individual Americo-Liberians and began around 1900 (Brown, 1941). In 1914 President Howard of Liberia signed an inter-governmental labor agreement with the Governor-General of Spanish Guinea (which included Fernando Po) purporting to safeguard the welfare of Liberian labor, but more important, stipulating payments of headmoney to the government (Sundiata, 1980). In 1921 when Liberian authorities enacted legislation barring labor shipments from specified parts of the country, it did not affect the traffic to Fernando Po (Buell, 1928). Two individuals, David Ross (who served in the national Legislature) and Allen Yancy (Superintendent of Maryland County, 1920-1928) continued with recruitment and shipments until 1927, when the Liberian Secretary of State formally terminated the 1914 labor agreement with Fernando Po. This termination came about not because of the numerous reports of labor abuses, but rather by an impending demand for labor for internal use on Firestone plantations. For their efforts, Ross and Yancy are reported to have been paid $45 for each laborer in a group of 3,000 and a bonus of $5,000 for each additional group of 1,500 by the Spanish cocoa plantation owners (League of Nations, 1930).

Labor has been "exported" out of Liberia at the expense of the needs for internal development. In part, the efforts of the settlers in regulating labor may be seen as attempts to acquire cheap or compulsory labor for internal use on sugar and coffee plantations. Labor scarcity indeed seems to have been a very serious problem from the initial period of Americo-Liberian settlement. In the mid-nineteenth century, this scarcity of labor was filled in part by an apprenticeship system which was forced on Africans who were liberated from slave ships and settled on the Liberian coast. These liberated slaves (they came to be known as the Congos) were apprenticed to Americo-Liberians for seven years if they were adults, or until the age of 21 if they were male children. The girls were sent to mission schools. It is estimated that 5,000 liberated slaves, representing one-third of the settler population, were brought in to augment the new colony's agricultural labor force between 1850 and 1860 (American Colonization Society, 1864). The apprenticeship system was seen by many colonial officials, especially the British, as something bordering on slavery (Johnston, 1906).

By the turn of the century the scarcity of labor had assumed serious proportions. The unwillingness of many native Africans to succumb to the various systems of compulsion and excessive labor exports threatened the collapse of the Liberian economy:

> Indeed the worldwide depression 1890s and consequent precipitous price fall was largely responsible for the collapse within a decade of the agricultural sector in Liberia...planters, moreover, were facing increasing shortage of labor. In October, the Liberian Recorder noted that "the fine farms that once flourished on the St. Paul's River were all going down for want of laborers." Similarly, in December 1909, President Barclay observed that through "want of labor" one-third of the crop coffee could not be picked and was being lost annually (Akpan, 1975: 23).

The persistent labor shortages for private Liberian plantations as well as government projects was resolved through forceful labor recruitments sanctioned by the government. It was this same system of compulsion which was later used to fill the needs of Firestone plantations.

The institution of compulsory labor for internal use further undermined the authority of village elders and the sanctions of Poro (secret) societies over labor (Coleman, 1970). From the perspective of the government, the authority of the government-appointed "town chiefs" superseded that of the village elders. The role of the Poro society as an economic and "para-political" instrument was also banned. By these measures, a local "leadership" directly responsible to, and responsive to the Liberian government, was put in place to do its bidding. Also, with an increasing incidence of wage labor migration, the weight of tradition as the basis of the power of village elders was impaired and, in Wallestein's (1965) interpretation, the village elders had to accept a greater degree of deviant behavior in order to keep the little authority left for them. Placed in this position, traditional village elders could neither prevent forceful labor recruitments by government-installed chiefs nor prevail on their kin to refrain from voluntary wage labor migration.

Labor recruitment for internal uses were of two kinds: recruitment with wage compensation and recruitment without wage compensation (Clower _et al._, 1966). The first kind was for foreign concessions and private Liberian farms, while the second kind was for use on the private farms of national and local officials, public works--roads, schools, clinics, markets etc.--as well as porterage for government officials. Both kinds have been abusive, equally objectionable to those who were affected and, together with labor exports, became the subject of an international investigation in 1930.

Labor Investigation

In 1930 the League of Nations appointed a committee to investigate labor practices in Liberia. Its frame of reference was as follows: To investigate labor traffic to Fernando Po cocoa plantations, the condition of labor employed for road building and porterage, and the practice of pawning (League of Nations, 1930). The appointment of the committee and the report which it issued infuriated many people throughout the world (Buell, 1933). Blacks especially questioned the motives of the United States in its sanctioning and timing of the labor investigation. George Padmore saw things in these terms:

> American Finance Capital has long ago invaded Liberia. However, judging from the character of the report recently issued by the special commission which was appointed last April by the League of Nations to investigate the question of slavery in that country, Liberia seems doomed to definitely become a protectorate of the United States. Here again, we see the ruthless policy of Yankee Imperialism, which brutally exploits dictatorship

> over Haiti; and now reduces Liberia, the last independent Negro Republic in Africa, to the position of a vassal state (1931: 3).

Namdi Azikiwe of Nigeria interpreted the United States action thus:

> One wonders at the hypocrisy of the United States which, after failing to curb forced labor for private purposes within her territory, as was pointed out by the International Labor Conference, yet had the audacity to sign the Slavery Conversion ....The American note to Liberia dated June 8, 1929, charged Liberia with practice of what is tantamount to organized slavery, yet failing to keep her own house in order. If peonage is slavery and forced labor is slavery, the United States has no right to charge Liberia with slavery because the United States itself is a slave state (1937: 40-41).

The motives of the United States in urging the labor investigation were not altruistic, and it was also clear that France and Great Britain sought to capitalize on Liberia's internal problems for territorial acquisitions. The threat posed by these three powers was the cause for concern, especially among Blacks who saw the destiny of Liberia as presaging the destiny of a race (Azikiwe, 1937; Du Bois, 1925, 1933). Yet, while "outbursts" such as the foregoing expressed real and legitimate concerns, they tended to cloud actual problems of labor abuses in Liberia.

To make sense out of the circumstances surrounding the investigation by the League of Nations, these facts and events of the 1920s have to be examined:

1) British monopoly of natural rubber;
2) United States attempts to find alternative sources of rubber;
3) Marcus Garvey's efforts to settle Blacks in Liberia and the threat it posed to the United States as well as France and British colonial interests in Africa;

4) Conflicts between Firestone's labor needs and the exports of Liberian labor, especially to Fernando Po;
5) The reality of the existence of forced labor practices and Americo-Liberian interest associated with it;
6) The precarious financial position of Liberia;
7) And the threat of encroachment by France and Great Britain, and attempts of Liberia to secure its borders.

The Stevenson Rubber Regulation Act was enacted in 1922 by the British parliament for a dual purpose: as a mechanism of price control and a principal means of war debt payments to the United States (Chandhuri, 1972). The United States' reaction was to look for alternative sources of rubber. By 1923, Firestone Rubber Company--by some accounts with the backing of the United States government--had settled on Liberia as the place for the development of rubber plantations to counteract British monopoly. Negotiations between Firestone and Liberian authorities proved to be protracted. The underlying reasons were related to complex facts and events relating to an impending League of Nations labor investigation, which was eventually conducted at the end of the decade.

Firestone's attempt to establish rubber plantations in Liberia was seen as a "scheme conceived in hostility towards a British monopoly" and "with an anti-British twist" (Chandhuri, 1972). Within Great Britain, Harvey Firestone's Liberian scheme which he outlined in The Country Gentleman (April, 1926) under the banner: We Must Grow Our Own Rubber, was received with ridicule. For one thing, Englishmen, as experienced plantation and colonial administrators, saw Firestone's scheme of planting one million acres of rubber in Liberia as unworkable due to its large labor requirements. But there were also genuine concerns in some British circles that the Liberian scheme could make some dent in the British rubber monopoly. Again, there was the fear that Liberia as a whole was slipping away from Great Britain:

> Germany, Britain's only serious commercial rival in Liberia, had lost her rights and privileges at Versailles. It was time to stabilize whatever she had achieved during the critical days of World War I. This would be rendered impossible, if Firestone appeared on the Liberian scene (Chandhuri, 1972: 30-31).

The lines were drawn, and the United States was ready to do away completely (but subtly) with its fading sentimentalism towards Liberia and stake firmly United States' interests. However, negotiations between Firestone and Liberian authorities were stalled, while Marcus Garvey and his organization (Universal Negro Improvement Association) were making strides in their own negotiations to settle American Blacks in Liberia--a thorny issue for both the United States and imperial powers in Africa and elsewhere. The delicate problem of forced labor accusations leveled at Liberia also remained to be resolved.

Nine years before the labor investigation, United States officials had been made aware of the practice of forced labor. Again, in February 1928, members of the Harvard Expedition to Liberia complained formally to the President of the United States about the abuses of "the interior tribesmen" of Liberia (Strong, 1930). During the same year, the American Minister in Liberia, William T. Francis, informed the U.S. Department of State of conditions surrounding labor shipments from Liberia to Fernando Po and its implications for Firestone investments. But the State Department could not see how the "slavery business concerned either the United States or Firestone" (Sundiata, 1980). By June 1928, however, the State Department had changed its mind. A letter from William Castle (State Department) to the American Minister in Monrovia stated in part:

> I agree with you thoroughly that it would be unfortunate from many points of view if the question [labor investigation] were to be aired at this time in the League of Nations or other quarters, particularly in view of the critical attitude taken by Professor Buell in his recent book on the Native Problems in Africa....It appears that the method of the Liberian Labor Bureau in recruiting labor for Firestone has a tendency to result in conditions analogous to those of forced labor and are likely at some time to draw the well-merited censure of civilized opinion (cited by Sundiata, 1980: 44).

Buell's public criticism of the Firestone investment was indeed a factor in the concern expressed by the State Department. It is also likely that the note anticipated a petition presented in July 1928 to the League of Nations by Henry Junod, President of the International Society for the Protection of the Natives. The petition requested the commission to investigate the impact of Firestone activities on native labor in Liberia (Webbink, 1928).

Mounting public criticism in the United States, and pressure on the League of Nations for investigation and a confidential memorandum from the United States Consul in Monrovia, forced William Castle to warn the Secretary of State of the dangers of continued inaction on the part of the United States. "The close collaboration between Firestone Company and the State Department, plus the latter's fear of the existence of actual labor abuse, made it imperative to disavow collusion in any such practices" (Sundiata, 1980: 47). In

July 1929, the U.S. State Department informed Liberian authorities of its knowledge of the disturbing news regarding forced labor, thus paving the way for the League investigation.

The United States action which compelled Liberia to be subjected to inquiry by the League of Nations served as a preemptive strike putting the nation on the side of world opinion, largely to the exclusion of Great Britain from the limelight (Chalk, 1967). In getting Liberia to yield to an international inquiry, the United States and its interests had an opportunity to relieve themselves of any embarrassment. while at the same time being assured of Americo-Liberian cooperation in paving the way toward providing Firestone with an adequate labor supply (Chalk, 1967; Garvey, 1931; Sundiata, 1980). These benefits were reflected in the findings and recommendations of the League of Nations report issued in 1930.

The commission of inquiry found Liberian authorities to be involved in forced labor exports. It indicated the persistence of pawning in the Liberian interior, and concluded that government road-building projects were not well organized, wasteful of labor, and on the whole demoralizing for the indigenous population (League of Nations, 1930). These findings were enough to bludgeon the Liberian authorities into submission to the recommendations of the commission, which were clearly tilted to favor the United States and Firestone interests. The recommendations were for Liberia to abandon the policy of discouraging foreign investments (the reference is to Liberian statutes barring white ownership of land); reestablish the authority of chiefs; appoint Americans to administrative positions; declare domestic slavery and pawning illegal; cease the shipment of labor to Fernando Po and other foreign areas; and encourage the immigration of Black Americans--the last most likely a concession to Charles Johnson, a black United States representative on the commission.

The motives of the United States in sanctioning the Liberian labor investigation were complex, but the central role in the affairs of Liberia accorded the United States by the League of Nations is revealing with respect to these motives. Firestone's interests in both the investigation and its findings were clear. In 1931 the founder of the company conveyed his sentiment of "...deep appreciation of the firm stand which our Government is taking in demanding that Liberia take effective measures to abolish forced labor....As you know this has seriously interfered with our obtaining free labor" (Azikiwe, 1935: 206). But for the worldwide depression of the 1930s, which briefly interrupted operations, Firestone was set to change the face of Liberia--to a plantation economy, capitalizing on a history of forced wage labor migration.

Internal (Plantation) Wage Labor

Firestone's stated preference in 1926 was for a free labor market in Liberia (Taylor, 1956). However, the company's concession agreement with Liberia, dated October 1926, stipulates the assistance of the Liberian government in obtaining "adequate supply of labor." Article 2, section C of that agreement states:

> The Government further agrees that it will encourage, support and assist the efforts of the Lessee to secure and maintain adequate labor supply (Brown, 1941: 270).

In view of Firestone's stated preference for a free labor market, it is not clear why the above provision was included in the agreement. Possibly, it was aimed at the cooperation of the government in discouraging labor migration (voluntary or forced) to places outside Liberia, thus making such labor available to Firestone. For instance, in 1929, President King announced in his annual message that "...in view of the increasing economic need of the country, there is a definite limit to the number of laborers who could with the consent of the administration be permitted to contract for protracted over-seas service" (Azikiwe, 1932: 40). It has also been intimated that a free labor market would have put a lot of money in the hands of rural Liberians to undermine the hold of the government on the country's hinterlands. Recruitment may, therefore, be seen as a way of strengthening the government's hand in its dealings with the hinterlands. Also, a free labor market would have pushed wages to a point where private (Americo-Liberian) farms would have been priced out of the labor market (Brown, 1941). By some accounts, the intention of the government was to use the mechanism of recruitment to ensure that excessive labor migration to plantations did not disrupt the life of communities (Ghoshal, 1974). Again, without the government regulating labor to the plantations, it was felt the government would be left very little labor for public works (Leage of Nations, 1930).

Underlying the various interpretations of the motives of the Liberian government were the direct and indirect financial rewards that control entailed for the government, its officials, and government-appointed chiefs in the hinterland. Starting in 1927, the government received 2 cents per man-day from Firestone for the labor it helped to recruit. The figure was changed to $1.50 per man-year in 1955 and remained at that level until 1970 when recruitment was abolished (Clower et al., 1966).

Irrespective of the intentions of the Liberian government in assisting in labor recruitments and the stated preference of Firestone for "free labor," shortages (at artificially low wages) have been a perennial problem, often accentuated during peak farming periods. Short of adequate wage incentives, recruitment remained the only viable mechanism of ensuring adequate supplies of labor for Firestone. At the company's largest plantation, Harbel, recruitments accounted for more than 80% of the labor force in the 1960s.

Table 5.1 Sources and Method of Labor Acquisition by Firestone (Harbel Plantation), 1952

DISTRICT	EMPLOYMENT	RECRUITMENT	RECRUITMENT AS % OF AV.	COMPENSATION FOR CHIEFS	
				MONTHLY TOTAL	PER LABORER
Gbarnga	3,650	3,100	19.5%	$ 530	17¢
Saniquellie	3,500	3,050	18.5%	505	17%
Kolahun	2,500	2,450	13.0%	300	12¢
Tappita	1,900	1,850	9.8%	200	11¢
Salala	1,650	1,400	8.7%	245	18¢
Salala	1,600	1,500	8.5%	210	14¢
Voinjama	1,000	900	4.8%	65	7¢
TOTAL	15,600	14,450	82.8%	$2,055	

Source: Clower et al., 1966: 162.

In addition to the monetary incentives, averaging between 7 and 18 cents per worker each month, which the chiefs received for labor recruitment, sanctions were imposed for failure to meet their allotted labor quotas. These sanctions included fines, extra taxes, and in some cases the administration of physical punishment as well as public ridicule (Brown, 1941; League of Nations, 1930).

For a variety of reasons, recruitments have served as the major means of labor acquisition for Firestone's Harbel plantation. The enormous size of the plantation--140 square miles--is an important factor. The labor requirement is large; this combined with the plantations' requirements for large land areas precludes the allotment of land to laborers for their own farms. This is one attraction to the company's other relatively small plantation at Cavalla. Here recruitments (from one village) accounted for only 33% of the company's labor force for the period 1940 to 1968. This represented a considerable drop from the proportion from the previous period, 1932-1940, which was recorded at 51% (Coleman, 1970). The lesson here is that with the proper incentives Firestone could have acquired a large share of its labor force without recourse to recruitment and its associated abuses.

With the curtailment of labor exports Firestone became the largest user of wage labor in Liberia. The level of employment on Firestone plantations, as indicated in Table 5.2 has varied between 11,000 in 1939 to a peak of 29,000 in 1947. Up to 1955 employment by Firestone accounted for half or more of the total wage labor force. It will be safe to assume this to be true for the period between 1927 and 1947, for which employment figures are not available for Liberia's "money sector" as a whole. For the period during which comparable figures are available for both Firestone and Liberia, the dominant "status" of the company with respect to employment is clearly established. In 1950 Firestone employed nearly 70% of all wage labor in Liberia. By this control, it has been argued that the company was in a singularly advantageous position to effect the development of a free labor market using wage incentives as mechanism (Clower et al., 1966). However, as it has been pointed out elsewhere, such wage concessions were "precluded" by the opposition of Liberian authorities and independent rubber growers.

Table 5.2 Employment by Firestone for Selected Years, 1927-1971

YEAR	EMPLOYMENT BY FIRESTONE	TOTAL EMPLOYMENT IN MONEY SECTOR	FIRESTONE AS % OF TOTAL
1927	15,000	na	-
1939	11,000	na	-
1947	29,000	na	-
1950	20,000	30,000	67
1955	25,000	56,000	45
1960	22,000	82,000	27
1966	16,000	112,000	14
1971	15,000	na	-

Source: Ghoshal, 1974: 30

Table 5.3 outlines Firestone wage rates between 1950 and 1972. Wages increased from 25 cents per day during 1950-1954 period to 75 cents in 1972. Ghoshal (1974) views these wage rates as adequate,

relative to corresponding earnings within the "subsistence sector." This analysis is, however, meaningless due to the near-impossible task of measuring the opportunity costs associated with involvement in wage labor relative to subsistence pursuits. Forced labor, combined with official ban on unions within Liberia's agricultural sectors, may better explain the artificially low wages on Firestone and other plantations. Relative wages in other sectors of the economy support this contention. In 1969 the average monthly wage in all sectors of the economy was $71.17; in the mining sector where there are unions, it was even higher--$80.00; while agricultural workers received on the average $39.14 per month (Statistical Bulletin of Liberia, Dec. 1969). Firestone's dominant (monopsony) status with respect to labor in the agricultural sector is also important with respect to low wages on plantations.

Table 5.3 Firestone Daily Wage, 1950 - 1972

PERIOD	DAILY WAGE IN CENTS
1950 - 1954	25
1955 - 1957	30
1957 - 1960	40
1960 - 1962	45
1962 - 1963	50
1963 - 1966	64
1966 - 1972	75

Source: Ghoshal, 1974: 61

Beside taxes paid directly to the government by Firestone and other companies engaged in plantation production, wages represent the most important direct "benefits" from the plantations to Liberia and Liberians. Indeed, as plantation officials rightly argue, plantation wage bills represent the largest component of production costs and, by extension, significant "transfers" to Liberia. The total wage bill for all plantations in Liberia has ranged between roughly $10 and $11 million dollars per year. But the aggregate wage bill is misleading when viewed independently. It is less than net profits and its distribution among Liberians, and between Liberians and expatriate personnel, is highly skewed. It is not clear whether the gross inequality in the wage structure is due to practices within the foreign concession or the public (government) sector of the economy.

In 1960 there were 10,000 jobs out of 82,000 full time positions in Liberia which were classified as either skilled or professional. Fewer than 5,000 of these positions were filled by Liberians (Clower _et al._, 1966). This means that at least part of the salaries of half of all the skilled and professional workers were likely to be transferred abroad. Among Liberians the distribution of wages and salaries between various "classes" of employees is also highly unequal. The 25% of the labor force classified as semi-skilled, skilled, or professional in 1960 received 70% of all wages and salaries. It is also estimated that 5% of the income receiving units within the country get more than 90% of the total domestic money and "in kind" (Clower _et al._, 1966).

Table 5.4 brings out the inequality in the wage structure of the plantations. Total employment within the plantations has been

Table 5.4 Employment and Wages on Foreign Rubber Plantations, 1966-1971

YEAR	1966	1967	1968	1969	1970	1971
Total Employment	22,034	22,574	21,976	22,878	22,680	22,499
Liberians	21,763	22,302	21,734	22,643	22,450	22,279
Expatriates	271	272	242	235	230	220
Total Wages and Salaries ($1,000)	$9,943	$10,469	$10,508	$10,604	$10,852	$11,359
Liberians	$7,703	$ 8,235	$ 8,201	$ 8,413	$ 8,844	$ 9,095
Expatriates	$2,240	$ 2,234	$ 2,307	$ 2,191	$ 2,008	$ 2,254
Average Earnings of Liberian ($)	$ 354	$ 369	$ 377	$ 372	$ 394	$ 408
Average Earnings of Expatriate ($)	$8,266	$ 8,213	$ 9,533	$ 9,323	$ 8,730	$11,473
Average Liberian Earnings as Percentage of Expatriate	23.4%	22.2%	25.3%	25.1%	22.2%	28.1%
Liberian Employment as % of Total	99.0%	99.0%	99.0%	99.0%	99.0%	99.0%
Liberian Wages as % of Total Wages	77.5%	78.7%	78.9%	79.3%	81.5%	78.3%

Source: Ghoshal, 1974: 145.

around 22,000 for the period 1966 to 1971. Liberians make up 99% of this labor force but their share of total wages has ranged between 78% and 82%. The average annual Liberian earnings were $354 for 1966 and $408 in 1971; the corresponding figures for expatriates were $8,266 and $11,473. On the average, Liberian wages and salaries represented between 22% and 28% of expatriate wages and salaries.

Implications of the inequalities in the wage structure, among others, are explored later in the context of the neo-classical models introduced earlier. In what follows, the focus is on the impact of wage labor (migration to plantation) on Liberian "societies." Specifically, the impact involved the erosion of traditional authority, dislocations in rural production systems and associated social relations, and ecological changes brought about by labor transfers to plantations.

Adjustments to Wage Labor

Wages may be barely adequate, and the ability to save towards projects at the home village may be difficult or nearly impossible due to the high cost of living at the plantation centers (Warmington and Warmington, 1960). But there may be a variety of reasons, the most important during the early years of Firestone in Liberia being the system of compulsion. That there was such compulsion "... is amply testified by the physical scars carried by the elders and in the list of men beaten to death at the whim of soldiers and administrators" (Coleman, 1971: 57). In his study of "Gipo" migration in Liberia, the author again comments:

> When the first migrants left Gipo (1920-1932) to work at Firestone, they were leaving a town that had been completely defeated, psychologically and militarily, by the Liberian Army. The town was rebuilding and every available man was needed. Therefore, when travelers from the Gio tribe came through town on their way to the coast and told of the job opportunities at Harbel, the young men were forbidden to go by the town chief, Gbiakwei (p. 56).

The young men left anyway; their reason being that as long as one was going to be forced to work, one might as well make money doing it. If they stayed at home they were certainly going to be recruited for forced labor without wage compensation, and there were no guarantees that they would not be sent down for plantation work after that.

Pacification of the interior of Liberia and the imposition of taxes ensured the flow of labor to the plantations, private Liberian farms, and government projects. Later when rubber cultivation became incorporated into subsistence production, that also served as a further drain on labor for purely subsistence ends. By and large, wage labor migration (voluntary or forced) has emerged in Liberia as a social and cultural adaptation to an historical interplay of a system of compulsion, ecological and external market factors (McEvoy, 1971). Like every society that has been subjected to massive wage labor migration, together with the introduction of a cash crop such as rubber, the need arises for the re-allocation of resources with respect to traditional activities critical to the functioning of society (Hailey, 1956; Berg, 1965; McEvoy, 1971). Typically, responses have included the following:

-- Changes in the division of labor by age and gender;

-- Intensification of the activities of those left behind;

-- Re-allocation of labor for different activities;

-- Technological and economic reorganization involving, for instance, the adoption of new staple foods or switch to others within the environment which were previously deemed less desirable;

-- The adoption of new tools for traditional activities;

-- Reorganization of household (and sometimes villages) no longer viable as independent production units due to migration;

-- Traditional leadership's acceptance of a greater degree of deviance among the potential migrant segment of the population;

-- And, exchange of wage labor for substitutes for goods originally provided through mechanism of the previous socio-economic organization.

In addition to these adjustments within the source areas of migrants, others occur on the plantations. This has essentially involved the adaptation of the kinship system of social organization to plantation life. This is made possible by the fact that the foreign plantation setting, unlike the urban industrial situation, does not require a complete involvement in the "money economy" (Coleman, 1970; McEvoy, 1971).

The immediate impact of wage labor migration on the source areas is a reduction in the size of the population. In general, these areas come to be characterized by a preponderance of females within the age range 15-44 years. The reverse is true at the point of destination of migrants; males above the age of 10 are favored (McEvoy). To make up for the loss of male labor for subsistence activities, households, villages, and migrants have responded in several ways. First, many male migrants return home during the periods when their labor is most needed--time for the preparation of land for new rice farms. Figure 5.3 depicts labor shortages on Firestone plantations for 1957, 1959, and 1960. Shortages are most pronounced between March and

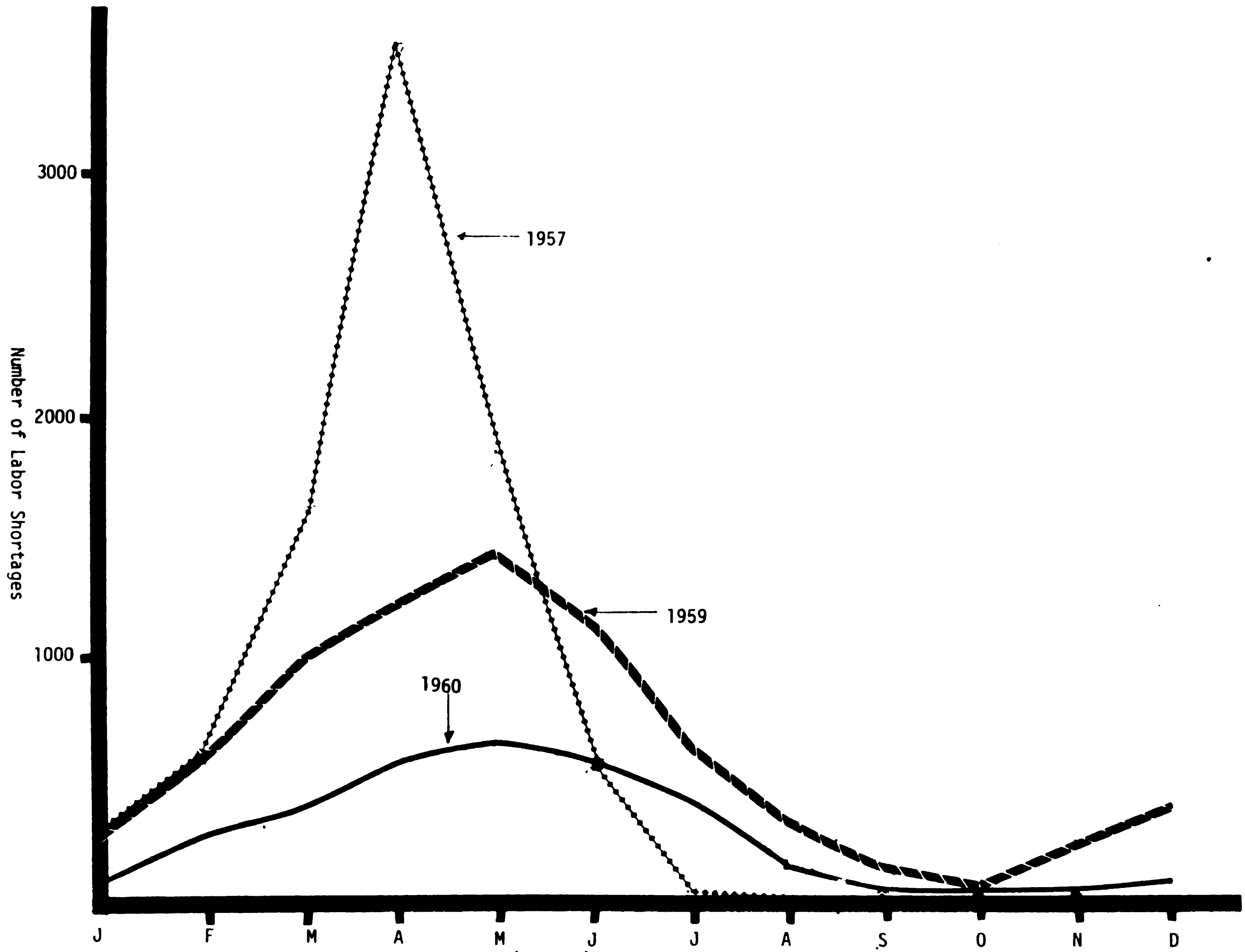

Figure 5.3 Labor Shortages on Firestone (Harbel) Plantation, Liberia

June--this is the period for rice cultivation--and shortages are least around October and December, after the rice harvest. At Firestone's Cavalla plantation, lands have been provided to laborers for rice farms as a way of avoiding chronic labor shortages during the rice-planting season.

In some cases, wage labor migration may deplete a household to a point where it is no longer a viable socio-economic unit, with respect to the remaining group's labor resources for subsistence activities. In that case, the remaining group may either be forced to migrate or join other kin to form a viable unit. Or the remaining females who serve as heads of households may try to maintain their households by providing for their subsistence by either calling on their ties with other households for male help or pooling their labor resources with other similarly placed women:

> If a woman with an absent husband is able to gather around her other women whose husbands are absent, they are able to succeed as a viable domestic unit in much the same way as male-headed households. It would appear that the chances of success are probably enhanced if the female heading the household enjoys relatively high status among other women in the village, or if her husband had or has influence within the village political or ritual organization (McEvoy, 1971: 310).

To survive, female-headed households often emulate their male-dominated social organization and have many of the demographic features of successful male-headed households. That is, there must be sufficient labor in a given unit to accomplish both domestic and agricultural work. Above all, these households must have some kind of recourse to kin networks for assistance if and when the need arises (McEvoy, 1971).

Despite the adjustments of the source areas to male labor migration, food crop production continues to suffer. This situation is further compounded by other demands for labor, including the adoption of cash-cropping by subsistence farmers. Involvement in cash-crop production as independent producers may be more rewarding than wage labor but, as it has been outlined elsewhere, land availability may serve as a limiting factor in addition to labor scarcity.

Irrespective of its impact and implications, wage labor migration--forced or voluntary--has emerged as an important economic activity tying many Liberians to external markets.

Land Use and Ownership Patterns

The word tenure implies that land is "held" under certain conditions. The occupiers may or may not be owners, and the owners may or may not be occupiers. Land may be held by landlords, leaseholders, or peasant proprietors. Land may belong to a kinship or local group, the individual members of which have rights of use only. It may belong legally to the state, but in practice the occupiers may enjoy all the privileges of proprietors. Land may be heritable and alienable, or heritable but unalienable (A Concise Law Dictionary, by P. G. Osborn).

Within many parts of Africa, specifically in the western region of which Liberia is a part, land customs admit only pledging and not the sale of rights to the land. This followed on the conception of land as the property of a given community, with rights of individuals extended only to its use (Meek, 1895). In all lands, there are residual rights extended to all descendants of the community, however remote and contingent the likelihood of some among the descendants ever having to exercise their usufructuary privileges. Yet, the reckless granting of land concessions by chiefs has been allowed on the assumption that their rights to make such grants followed from their authority over communal lands (Clawson, 1953; Musfund, 1967). English terms such as "rent" or "lease" have been employed to denote longstanding African practices which bear only superficial resemblance to those denoted by these terms. The gifts given by African villagers to their chiefs as administrators and custodians of communal lands have been assumed to be "rent," and the chiefs to be "landlords." Confusion is also created by loose translations of African terms, so that a word rendered as "purchase" may not mean "outright purchase" but "redeemable purchase"--a very different concept. To take a final example, there is the common practice of distinguishing tenures as either "communal" or individual, yet the two exist always within the framework of usufructual rights.

Within the African subsistence economy, land means more than a mere interest in the productive power of the soil. The same collective principles of land ownership extend to social relationships. The village, farms, and forests comprise the communal land unit; adequate supplies of all three "types" of land are required to ensure viable communal existence. The communal land unit--so constituted for dwelling, farming, and as source of raw materials, edible plants, and wild animals--is often in "harmony" with the social order and the physical environment. Waste lands as such do not exist, and to interrupt the system of land ownership and use upon that assumption is to upset the entire socio-economic order (Brown, 1941).

Among Africans there have been three modes of land acquisition: conquest, occupation, and ancestral rights. By the first, disruptions in the lives of communities have occurred in the past; however, ancestral rights of the conquered have been seldom terminated.

The foregoing comments, it is hoped, will shed light on the constant friction between "native" Liberians and the settlers, and later with foreign concessions over lands acquired through either "deeds" or seizure. For instance, when in 1821 some indigenous Liberian communities signed off 130 miles of coastal land, extending 40 miles inland to what they considered "their eccentric visitors," it was their understanding that the stay would not be too long (Johnston, 1906). Again, in recent times some village elders have claimed with respect to their lands given to a concession company "that they thought the Americans were coming to make a one-year farm for the United States president just as the Mano often did for the Liberian president" (Coleman, 1970: 100). Land tenure and its related problems in Liberia are complicated further by the co-existence of freehold tenure arrangements among Americo-Liberians and rights in land defined by communal right among "native" Liberians (Akpan, 1973).

Liberia's "contemporary" land tenure system revolves around the following principles (Clower et al., 1966):

1) Apart from benevolent organizations such as missions, only Liberian citizens (by which is meant Americo-Liberians) may own land by fee simple title;
2) Land may be purchased legally only through the government;
3) All undeeded lands, including "tribal" lands, are deemed public land;

and 4) Foreigners may own buildings on Liberian-owned land under lease arrangements not to exceed 21 years, with two additional options for renewal.

Clearly, the rights of "native" Liberians are limited and whatever rights they have with respect to land are superseded by the rights which the government accords itself. If property is defined as a bundle of rights, then technically, except for Americo-Liberians, nobody else owns land in Liberia. It look time, blood (of both natives and settlers), and United States assistance for Americo-Liberians to assert their dominant position with respect to land ownership.

In 1822, Jehudi Ashman assumed administration of the new colony with instructions from the American Colonization Society (Baltimore) to renegotiate with coastal Liberian chiefs for more land and additional "privileges" for the settlers (American Colonization Society, 1828). This instruction was carried through, together with other treaties signed in 1825 and 1826. Despite these treaties, hostilities between the "native" Africans and the settlers began soon after their arrival. Johnston comments:

> On November 11th [1822], at daybreak, the struggle with the natives began. The settlement was attacked by the De, the Mamba and the Vai. The assault was at first so overwhelming that many of the colonists fled in panic into the woods....On November 30th the Des once more began to assemble large forces in the woods around the apex of the peninsula, and on December 1st about a thousand of them attacked the stockade. Towards evening the enemy withdrew, and someone in or outside the palisade discovered the cause by sighting the approach of a British war vessel (1908: 138-139).

Notwithstanding such difficulties, more treaties were negotiated and as always were followed by hostilities. The acquisition of coastal lands continued through treaties and force. The pace of land acquisition was quickened by the realization of possible encroachment by British and French merchants who also sought to acquire lands from Liberian chiefs (Akpan, 1973). In addition, territorial expansion was seen by the Colonization Society and leading members of the settler community as a way of extending civilized Christian influence to the "natives" (American Colonization Society, Jan. 1827). To further territorial expansion for the above reasons, Governor Roberts signed treaties of amity and commerce with many of the neighboring chiefs in 1842. Four years later, Governor Russwurm who was in charge of the settlers in Maryland (Liberia) signed similar treaties with the local chiefs. These treaties placed the territories of the various chiefs under Liberian jurisdiction.

With the proclamation of independence in 1847, the Americo-Liberians declared all territories within the Republic which were not actually occupied by the "native" people to be state property. Americo-Liberians could purchase any of the lands so constituted at a minimum price of 50 cents per acre. The government also made grants of some of the "public lands" to soldiers who had sided with it in the numerous conflicts with the "native" population (Akpan, 1975). Administration of the territories acquired by the government was at first ineffectual. It involved the establishment of a chain of Americo-Liberian settlements and military posts at strategic points. Thus, within the interior areas at least, the impact of the government land acquisition on subsistence pursuits was relatively minimal. This, however, changed at the turn of the nineteenth century when the renewal of the European scramble for colonial territory forced the Liberian government to assume direct control of the Liberian interior. In 1904 Americo-Liberian district administrators, assisted by government-appointed chiefs and backed by militia, were put in charge of the affairs of the interior. In general, the methods used by the settlers to acquire land and the colony's territorial expansion were not dissimilar to those employed by the colonial powers in Africa, namely:

> ...by "purchase" with European trade goods, often of doubtful worth and quality; by voluntary cession of territory by smaller and weaker tribes...anxious to secure Liberian protection against powerful slave-raiding chiefs...by formal treaties of cession with some African chiefs...who hoped to profit from trade with Liberian settlers...and by forceful acquisition, especially after military victory over the African people gained mostly through the aid of American naval officers and men-of-war (Akpan, 1973: 221).

In addition, Americo-Liberian interests in land were enshrined in the constitution of the Republic. Article 5, sections 12 through 14 state:

> Section 12. No person shall be entitled to hold real estate in this Republic, unless he be citizen of the same. Nevertheless, this article shall not be construed to apply to Colonization, Missionary, Educational, or other benevolent institutions, so long as the property or estate is applied to its legitimate purposes.
>
> Section 13. The great object of forming these Colonies being to provide a home for the dispersed and oppressed children of Africa, and to regenerate and enlighten this benighted continent, none by persons of color shall be admitted to citizenship in this Republic.
>
> Section 14. The purchase of any land by any citizen or citizens from the aborigines of this country for his or their own use, or for the benefit of others on estate or estates in fee simple shall be considered null and void to all interests and purposes.

The above constitutional provisions did not address the interest of the "native" populations. Whites were barred from the ownership of land by Article 4, Section 13 which was amended in 1907 to read:

> None but Negroes or persons of Negro descent, shall be eligible to citizenship in this Republic.

The foregoing constitutional provisions have served as the basis of land annexations by the Liberian government, which were carried out at the beginning of this century. The Firestone agreement of 1926 stands out as the largest tribal land concession to foreign interests. By the terms of this agreement, the government leased one million acres of land, for 99 years, at 6 cents per acre for land actually under development and, with the stipulation that rent was to be paid on at least 20,000 acres after the first 5 years of the agreement (Planting Agreement No. 2, 1926). Other concessions have been granted to foreign companies since, which all together adds up to one-quarter of Liberia's total land area (Clower et al., 1966). As of this writing, nearly 6.5 million acres of Liberian lands have been given in concession to foreign firms. These include six rubber plantation firms accounting for 3.1 million acres, four iron ore firms operating on 500,000 acres, thirteen timber firms with rights to over 2.1 million acres, and other relatively small firms accounting for 700,000 more acres.

The impact of these grants of land concessions to foreign firms on some villages in the Mano area has been commented on by Coleman:

> In that year [1948] the first plantation manager arrived to begin work on getting farmers from the villages that had traditional rights to the land to leave after the 1948 rice harvest. The governmental agencies were asked to enforce the concession rights and soldiers were sent. Next a survey team arrived to establish the exact boundaries (Coleman, 1970: 98).

In one village, Yeibo, with a population of between 300 and 500 people, 75% of their farm lands were taken away. The inhabitants did what they had become accustomed too--they dispersed to the surrounding areas but this time with one harsh realization, that there were no more extra lands to be taken up as there were in the past. They remain landless. Another village, Gbeibini, located on the edge of the same concession lost 24% of its land. About that proportion of villagers have now turned to neighboring towns where they rent land for cash-cropping. Gipo village was the third to be affected immediately by the land concession. More than one-third of the people lost their lands. But luckily, they have managed to secure lands elsewhere.

Land appropriations from "native" Liberians have been made not only for the use of foreign firms. Amacheree (1974) has recounted farmer resentment towards the Liberian Produce Marketing Board in the Kisi area. Traditional lands have also been taken by Americo-Liberians for their own immediate commercial or speculative use. Often these are lands adjacent to, and made accessible by new roads. All these land acquisitions have had a serious impact on both subsistence food-crop production and lives in the communities:

> Liberia's ambiguous land tenure arrangements have had an effect on agricultural production almost directly contrary to what might have been anticipated on the basis of general principles. Private purchases of land near proposed highways, together with the planting of marginally productive rubber farms along new roads, has entailed the dispossession of former tribal occupants. Some have been forced to move off road sites into the bush, with consequent disruption of economic activities--reduced output of rice grown for subsistence purposes and a market reduction in cash-cropping by tribal farmers (Clower et al., 1966: 32-33).

The broad implications of Liberian's system of land tenure, as it has evolved to the present--commercialization of land, relative land availability to the "native" people--are later explored with respect to subsistence food production.

Finance: Government Revenue, Foreign Capital, and Loans

The mechanisms of generating revenues for investments and government expenditures are often at odds with the development needs of Liberia. Part of the problem lies with the restrictions imposed by external finance capital, but the Liberian economy has other peculiarities which also stand in the way of changes necessary to develop the society and its economy. Among these are the government's habit of deficit spending, hegemony of Americo-Liberians and "native" elites, the use of United States currency and foreign loans with stringent conditions.

The history of deficit spending in Liberia pre-dates Keynesian economics and its stimulative economic logic. Deficit spending has been resorted to by the government for the simple reason that it remained the only avenue opened to a country that has been persistently saddled with external debts and limited economic capacity to generate funds to meet its financial obligations. Also, by virtue of its use of United States currency, the government is not in a position to print money to meet its internal needs. Thus it must either resort to deficit spending, earn funds through taxes, or borrow from external sources. The incidence of deficit spending is outlined in Table 5.5. During 32 years of the 52 years covered by the table, government expenditures exceeded revenues.

Foreign Capital

Beginning in 1869 there were several attempts to raise internal capital to finance various ventures in Liberia. When these attempts

Table 5.5 Liberian Government Revenues and Expenditures, 1900-1966 ($1000)

Year	Govt. Revenue	Govt. Expen-diture	Deficit/ Surplus	Year	Govt. Revenue	Govt. Expen-diture	Deficit/ Surplus
1900	219	200	19	1933	463	384	81
1901	265	260	5	1934	468	572	104
1902	312	321	- 9	1935	620	506	114
1903	336	341	5	1936	770	708	62
1904	302	312	-10	1937	1,009	970	39
1905	297	302	- 5	1938	884	1,040	-156
1906	316	341	-25	1939	779	858	- 79
1907	336	346	-10	1946	2,337	2,307	30
1908	356	351	- 5	1947	3,216	2,784	432
1909	380	381	- 1	1948	3,057	3,450	-393
1910	410	411	- 1	1949	3,735	3,561	174
1911	441	441	0	1950	3,819	4,438	-619
1912	472	472	0	1951	9,981	9,746	235
1913	618	531	87	1952	8,852	10,782	-1,930
1919	350	321	29	1953	11,199	11,817	-618
1920	551	480	71	1954	11,777	12,853	-1,076
1921	490	452	38	1955	14,400	13,970	430
1922	508	488	20	1956	14,850	14,859	- 9
1923	589	573	16	1957	20,131	18,522	1,609
1924	670	657	13	1958	19,300	28,183	-883
1925	943	907	36	1959	23,736	30,379	-6,643
1926	895	896	- 1	1960	29,933	37,271	-7,338
1927	959	984	-25	1961	32,709	32,785	-76
1928	1,276	1,713	-437	1962	36,093	41,022	-4,929
1929	1,029	1,098	-70	1963	36,155	46,341	-10,186
1930	980	986	- 6	1964	40,000	40,100	-100
1931	483	702	-219	1965	42,300	56,000	-13,700
1932	476	635	-159	1966	46,700	64,500	-17,800

Source: Arthur S. Banks, Cross-Policy Time Series Data (Cambridge, Massachusetts: The MIT Press, 1971: 119).

failed, the question of admitting European investments into the country was raised in 1880 (Johnston, 1906). But it was not until 1894, with the establishment of the British owned Liberian Rubber Corporation that direct foreign (white) participation in the Liberian economy became a reality. "Massive" movements of foreign capital into the country, however, did not occur until 1927 when Firestone started its plantations. Later, in 1944, Liberia's policy of discouraging foreign investments was formally curtailed by President Tubman through the enounciation of an Open Door Policy in his inaugural address:

> We shall encourage the investment of foreign capital in the development of the resources of the country, preferably on a partnership basis and we shall accord to investors the necessary protection and fairness of treatment.

In substantive terms the above declaration of willingness to welcome foreign capital was backed by generous tax holidays, no restrictions on foreign exchange or trade, and unusually general concession agreements patterned after the one granted to Firestone. In addition, Liberian Corporation Laws provided any firms with majority alien ownership with exemptions on all income earned from non-Liberian sources, thus making the country a "profit haven." Foreign employees of concessions are equally favored: they are subject only to those taxes applicable to all residents of Liberia. Except for iron ore production, the Liberian government's participation in economic ventures is limited.

Current figures on foreign investments in Liberia are either unavailable or unreliable. Clower <u>et al.</u> (1966) placed the level of investments in all plantations at $60 million in 1962. These plantations are foreign owned. The government is part owner of all iron

Table 5.6 Economic Account of Concessions,* 1960 (million dollars)

RECEIPTS		EXPENDITURES	
PRODUCTION			
Sales of Final Goods and Services . . .	$67.6	Wages and Salaries of Africans . . .	$12.1
Sales of Investment Goods and Services . . .	31.0	Wages and Salaries of Non-Africans . . .	8.7
		Purchases of Materials. . .	24.5
		Depreciation . . .	5.0
		Surplus . . .	48.3
Total	$98.6	Total	$98.6
APPROPRIATION			
Surplus on production. .	$48.3	Taxes to government . . .	$13.4
		Rents and transfers (Liberia) . . .	0.3
		Transfers Abroad . . .	34.6
Total	$48.3	Total	$48.3
SAVINGS AND INVESTMENTS			
Depreciation . . .	$ 5.0	Gross Domestic Investment .	$31.0
Net Transfers Abroad . .	26.0		
Total	$31.0	Total	$31.0

Source: Clower *et al.*, 1966: 71.

*Figures are for all concessions: plantation, timber, and iron ore.

Table 5.7 Percentage Distribution of Production and Appropriation Accounts, 1960*

Distribution of Transfer Payments	Amount in Million Dollars	Percentage of Production Surplus
Taxes	$13.4	27.7%
Rents and transfer to other economic sectors	$ 0.3	0.6%
Transfers abroad	$34.6	71.6%
Total Surplus on Production	$48.3	100.0%
Distribution of Production Account	**Amount in Million Dollars**	**Percentage of Production Cost**
African wages, salaries and subsidies	$12.1	24.0 %
Non-African wages and salaries	$ 8.7	17.0 %
Purchases of materials (mostly from abroad)	$24.5	49.0 %
Depreciation	$ 5.0	10.0 %
Total Production Cost	$48.3	100.0 %

*Based on Table: Economic Account of Concessions, 1960.

ore production ventures, which were estimated at $350 million in 1962. But with or without government participation, these investments have minimal linkages with the Liberian economy. The bulk of the production surplus generated is transferred abroad with very little invested within the country. This is illustrated by Tables 5.6 and 5.7 detailing the economic account of all concessions for 1960.

Components of Table 5.6 are self-explanatory except for the two items, purchases of materials (on the expenditure side of production) and gross domestic investments, which need to be clarified. Out of $24.5 million spent by the concessions on purchases, only about $2.0 million was spent on domestic (Liberian) goods. The total investment of $31.0 million did not come out of the production surplus of $48.3 million but rather from fresh foreign investments, mostly in iron ore production. The percentage breakdown of the account of the concessions for 1960 is shown in Table 5.7.

The distribution of the production surplus was: taxes, about 28%; rents and transfers to other economic sectors, 0.6%; and transfers abroad, 72%. The financial drain implied by the large share of surplus transferred abroad has serious implications for the capacity of Liberia to develop. This is reinforced by the meager 0.6% of surplus channeled into other sectors of the economy. There are no meaningful linkages between the foreign concessions and the rest of the Liberian economy. Tax payments of around 28% of the net production surplus falls short of the 35% incorporated in concession agreements. On the production account side, payments to Liberian laborers represent the most significant direct transfers to Liberians and the

Liberian economy. However, as it has been outlined elsewhere, a significant share of payments to Liberian labor go into the purchase of imported consumption items including rice. The relative share of wages to Liberians is also very low, when compared to the 17% which goes to a few expatriates employed by the various concessions. In general, foreign investment in Liberia has involved large transfers abroad. For example, in 1968, net factor payments abroad were 30% of GDP or 64% of the total national income within the monetary sector (Yadi, 1972).

Taxes and Tax Revenues

A large share of tax revenues come from the concessions. In 1968, out of a total tax revenue of about $19.0 million, $12.5 million or 65% came from the concessions, mostly from Firestone and the Liberian Mining Company. Total tax revenues and the relative contribution of the two concessions are presented in Table 5.8 for the period 1951-1960.

While the concessions are the major sources of government tax revenue, Liberia's tax structure with respect to foreign capital is such that it does not enhance the income elasticity of the government's tax revenue or encourage the expansion of economic sectors outside the concessions. Also, Liberia shares the dilemma of many developing nations in its inability to influence the prices of the primary exports--rubber and iron ore--upon which tax revenues are dependent. These prices are determined by forces external to the Liberian economy and do not reflect relative supply and demand. While Liberia shares this problem with other developing nations,

Table 5.8 Tax Payments by Firestone and Liberia Mining Company (LMC), 1951-1960 ($ million)

Year	Total Tax Revenue	Firestone Taxes	Firestone as % of Total	LMC Taxes	Firestone and LMC as % of Total
1951	$12.8	$3.7	29%	-	29%
1952	8.8	2.9	33	-	33
1953	11.2	3.0	27	-	27
1954	11.9	2.7	23	$2.0	40
1955	15.2	5.5	36	2.9	55
1956	17.9	5.2	29	3.7	50
1957	20.1	4.1	20	3.7	39
1958	18.1	3.6	20	2.2	32
1959	24.5	6.5	27	3.2	40
1960	32.3	8.3	26	6.4	46
Total	$172.8	$45.5	26%	$24.1	40%

Source: Clower *et al.*, 1966: 134.

the nation's situation is further complicated by foreign ownership of the productive assets for primary production.

The inability of the Liberian government to use taxation as an effective instrument to generate revenue and, more important, aid development is related to: unusually generous tax holidays granted concessions, fixed tax rates which cannot be changed to reflect the nation's changing economic circumstances, exemption of foreign concerns from import duties, questionable accounting practices by concessions, and lack of audits by government representatives (Brown, 1941; Clower et al., 1966; Shoup, 1970).

Tax holidays to the concessions range from 5 years to nearly 17 years. While one can make a case for agricultural concessions which take several years to turn a profit, the same cannot be said for the mining companies. Since high initial costs and high rates of capital discount used by concessions effectively depress or eliminate all taxable income, the Liberian government may relinquish very little through "reasonable" tax holidays. However, when such holidays extend to 10 or even only to 5 years, in the case of mining concessions they entail the loss of considerable revenues by the government. In the case of iron ore and other minerals, there is the tendency for "cream-skimming" with minimum capital investments.

The freezing of tax rates at specific levels for a number of years for concessions means that should government revenue requirements call for higher taxes, such increases can be extended only to sectors and individuals outside the concessions. Tax increases to generate more revenue that exclude the concessions are often not feasible, however, since the concessions are the major source of tax revenue. Under these circumstances, the only option open to the government, short of renegotiating longstanding tax agreements, is to encourage the concessions to increase their output as a way of generating more taxable income on the basis of the existing tax rates. Similarly, when world prices for the primary commodities of rubber and iron ore fall, the only option for the government either to maintain its revenue level or increase it is through the expansion of physical levels of output. Again to meet high import bills in the face of mounting import prices, the physical volume of exports--primary goods--has to be increased.

Exemptions granted to the concessions from import duties have often been broad, and their consequences were perhaps not realized when they were granted. They have effectively eliminated one of the avenues for the development of other sectors of the Liberian economy as integral parts of the concessions. As pointed out elsewhere, nearly all inputs into the concessions, besides land and labor, are imported either directly or through subsidiaries of the concessions. This is done to take advantage of the tax concession granted by the government. The practice of a given concession doing business with itself or a subsidiary is also used by companies to transform taxable revenues into costs. An example is a concession in which the equity interests also own a portion of the company's debt and where part of the output is sold to those who hold another part of the enterprise's debt (Shoup, 1970).

The problems outlined serve to limit government tax revenues from the concessions and deprive the Liberian economy the opportunity for expansion and development. In addition, concession agreements which limit the access of the Liberian government or its representatives to audit company books, in Shoup's words "seems to be a dangerous practice for a sovereign state" (1970: 69).

Personal income tax and other taxes imposed on Liberians have been met with a spirit of non-compliance. There are two reasons for the refusal of many Liberians to meet their tax responsibilities. First, direct taxes such as hut taxes imposed on "native" Liberians are seen as a means of forcing individuals to participate in wage labor or sell part of the product of subsistence production. Before the concessions became a major source of tax revenue, a large share of the tax burden was borne by "native" Liberians. In 1933 they paid $51,000 out of $58,000 collected during the first nine months of the year. Their share of taxes in all taxes amounted to 38% in 1934 (Brown, 1941). Second, most leading Liberians see their role and status as relieving them of tax responsibilities. For instance, in 1967 nobody falling within the income range of $75-100,000 paid any taxes (Shoup, 1970).

Foreign Loans

After the April 12, 1980 coup, Richard Moose, U.S. Assistant Secretary of State for African Affairs, accessed Liberia's financial position as follows:

1) A $40 million debt was due during the month of the coup but the government's coffers were empty;
2) American investments in the country amounted to $350 million. These investments were owned by three plantation companies--

Firestone, Goodrich, and Uniroyal; one steel company--Bethlehem Steel; and three banks--Chase Manhattan, Citibank, and Chemical Bank. Outstanding loans to these banks amounted to $100 million;

3) Loans from the Agency for International Development totaled about $76 million;

and 4) Liberia was indebted to the Export-Import Bank to the tune of $12 million.

In view of these financial difficulties and the longstanding interest of the United States in Liberia, the Assistant Secretary of State outlined four measures to support "the long-term development" of the country. First, the United States was to assist Liberia in obtaining an $85 million loan from the International Monetary Fund; second, to encourage the military leadership to return the country to civilian rule and in the meantime protect human rights; third, to assure the military government of United States support for the country's security needs; and fourth, to grant Liberia an economic aid package amounting to roughly $12 million (U.S. Department of State, Aug. 19, 1980).

The economy of Liberia grew at an annual rate of 5% for the ten-year period ending in 1974. By the time of the April 1980 coup, however, the treasury was empty. A general world recession, declining prices for iron ore and rubber, and high import bills for petroleum products were contributing factors to Liberia's financial woes. But even without such difficulties, financial problems have been endemic to the Liberian economy (Brown, 1941; Taylor, 1956). Aid packages along the lines suggested by the United States have been administered in the past, always with the same ironic twist: increased indebtedness to foreign financial concerns and governments (Chalk, 1967).

Since the 1860s the Liberian government has on numerous occasions been on the verge of bankrupcy. The loans which have placed the country in these financially precarious positions have been obtained for reasons other than sound economic reasoning. The first recorded loan of half-a-million dollars was negotiated with the assistance of the British Consul in Monrovia in 1871. The loan was granted by a London banking firm at a discount of 30% and 7% interest to be repayed within fifteen years. Only one-fifth of the loan was actually given to Liberia but the full amount was refunded by 1912 (Christy, 1931). A second loan of one-half million dollars was negotiated in London in 1906 at 6% rate of interest. To safeguard British interests, Liberia was compelled to accept British officials to head both the country's customs and frontier force. Due to poor management and a stagnant economy, Liberia was unable to meet its debt payments so that in 1912 another loan amounting to $1.7 million had to be raised to retire the 1906 loan. The new loan was negotiated through European (Britain, France, and Germany) and American banks at 5% rate of interest to mature in 1952. The conditions attached to this loan were stringent; they placed the affairs of Liberia squarely in the hands of the four western nations. Interest and principal payments on the loan were to have first claim on Liberia's customs duty, rubber taxes, and head money collected from "native" Liberians. The collection of these monies was placed in the hands of United States, German, British, and French officials. With the onset of World War I and its economic disruptions, prospects of Liberia meeting her loan obligations were destroyed. But Liberia, having declared war on Germany, was placed in a favorable position to ask for United States assistance within the framework of Liberty Loans (Padmore, 1931). At the end of the war, however, sentiments in the United States changed and Congress refused to give its endorsement for the loan. Again, Liberia hung on the verge of bankruptcy, and with the additional burden of securing its border from encroachment by Britain and France. Firestone Rubber Company came to Liberia's "rescue" but not without the resistance of Liberians as well as outsiders who saw a Firestone loan as damaging to the nation's sovereignty (Buell, 1928; DuBois, 1925; Padmore, 1931; Chalk, 1967).

Negotiations for the Firestone loan were part of the company's general agreement with the government to lease land for rubber cultivation. Firestone's reasoning in making the loan a part of its Planting Agreement with the Liberian government was to ensure payment of the outstanding loan of 1912. British and French presence in Liberia as well as their collective role as financial administrators was contingent upon the 1912 loan. Thus, by paying off the loan, Firestone hoped to end British and French influence in Liberia and substitute its own influence. Despite both internal and external resistance to the Firestone loan, the company prevailed, in part through pressure exerted on the Liberian legislature by the United States government which was interested in Firestone's Liberia venture for its potential as security in natural rubber for the United States. In January 1925, the Liberian legislature tentatively approved the loan agreement. The final agreement authorized a loan of $5 million at 7% rate of interest with a lien on Liberian customs which was to be applied first to the cost of collecting custom duties--including an annual salary of $50,000 for American administrators, then towards servicing the loan. What was left over was then paid to the Liberian government (Buell, 1928). This arrangement presented the government with difficulties in securing enough revenues for even its immediate administrative overhead expenses, let alone investments in social and economic infrastructure. To lighten the burden, the loan was renegotiated in 1935. The interest rate was reduced from 7% to 5% with the stipulation that no servicing charges were to be paid during those years when government revenues were less than $450,000 (Brown, 1941).

The dual legacy of humiliation and dependence associated with loans culminating with the Firestone agreement of 1927 is enshrined in a statue of President Tubman erected in 1956 to commemorade liquidation of the Firestone loan. The monument bears this inscription:

> This monument erected by the people of Liberia is dedicated to the great relief brought to the country by the Tubman administration in the retirement of the loan with its humiliating and strangulating effects on the economy of the Nation.

At the dedication of the monument, President Tubman defended his predecessor who signed the 1927 loan agreement by pointing out that, despite all of its objectionable aspects, the loan had helped to secure the nation's borders and eliminate all incidents that threatened its sovereignty. In one author's words: "It is that definition of sovereignty which worries many Liberians today" (Chalk, 1967: 32). The preceding table which outlines other loan agreements after 1927 bears testimony to this. Table 5.9 brings into question whether the first

Table 5.9 Selected Foreign Loans to the Government of Liberia 1871-1980

Year	Amount ($ million)	Source	Intended Use
1871	$ 0.5	Britain	
1906	0.5	Britain	Roads, socio-economic reform
1912	1.7	U.S., Britain, France, Germany	Pay 1906 debt
1918	5.0	United States	Terminated in 1921
1927	5.0	United States (Firestone)	Pay previous debts
1944	1913	United States	Port of Monrovia
1951-55	22.7	United States	Roads, ports and water
1949-60	12.1	United States	Electric power
1959	3.0	United States	Telecommunications
1962	4.8	United States	Hydroelectric project
1962	8.6	United States	Livestock development
1980	$ 85.0	I.M.F.	2 year stabilization program

Source: Coleman, 1970: 44; Clower et al., 1966: 363; Christy, 1931: 526; U.S. State Department, Aug. 19, 1980: 2.

loan dated 1871 was repaid or can ever be repaid. A large share of government revenues, amounting to 30% in some years, are allocated for debt payments (U.N. Economic and Social Council, 1978). Also, by granting Firestone a huge land concession for rubber cultivation and the acceptance of the associated loan with its stringent conditions, Liberia opened itself up for a new phase in its economic history in which its prosperity (or a lack of it) has become dependent on foreign investments.

Rubber in the Liberian Economy

Before the 1880s when West Africa became an important source of wild rubber, the existence of rubber-producing plants in Liberia had been indicated (Johnston, 1906). But any systematic exploitation of wild rubber did not start until 1894 when a British firm, which later came to be known as the Liberia Rubber Corporation, was granted a concession by the government as the sole exporter of wild rubber. The company was charged with responsibility for the collection of royalties from all producers in the country. These royalties were pledged towards payments of Liberia's foreign debts which at the time amounted to one-half million dollars.

The Liberian Rubber Corporation opened stations in the interior of the country which were manned by British foresters. The foresters served as the link between the company and Liberian producers who worked either as independent producers or as laborers who collected wild rubber for wages ranging between 9 and 12 pence per day. Returns to independent producers averaged between 24 and 32 pence per day, hence many Liberians preferred working as independent producers.

The abundance of rubber-producing plants, the relatively simple technique of wild rubber collection, and the fact that anybody could participate in the industry by obtaining the proper license from the Liberia Rubber Corporation encouraged many "native" Liberians to take up wild rubber production (Christy, 1911). In addition, rubber's relatively low transportation cost made its production more attractive than other products. A load of rubber transported to the coast fetched 30 shillings as against 4, 10, and 14 shillings for similar loads of palm kernels, palm oil, and coffee, respectively (Johnston, 1906).

Wild rubber was first exported from Liberia in 1883-84. The volume of export was about 136,000 pounds (McEvoy, 1971). By 1908 the figure stood at 170,000 pounds (Christy, 1911). Due to its relatively late start and the abundance of rubber-producing plants, the Liberian wild rubber industry was still bouyant when production from other parts of West Africa was declining as a result of over-production and damage to rubber-producing plants. By the early decades of the twentieth century, however, Liberia's wild rubber industry shared the fate of all wild rubber producing countries; it had succumbed to intense competition from plantation rubber.

During its short lifespan, the wild rubber industry left an indelible imprint on "native" Liberians without interrupting their subsistence pursuits. Rubber tapping was done primarily between the months of October and March when it least interfered with male subsistence responsibilities. Also, unlike wage labor migration which was restricted to the coast, the wide distribution of rubber plants afforded the interior population an avenue of participating in a "money economy."

The first rubber plantation in Liberia was established on an 1,500-acre tract of land leased to a British Company formed by Sir Henry Johnshen in 1910 (Christy, 1931). The company's capital investment, which was estimated at 100,000 British pounds, did not fare well and was abandoned after World War I (DuBois, 1933). In the 1920s when Firestone signed a lease with the Liberian government to cultivate rubber, the land concession included the area covered by the British plantation (Chandhuri, 1972).

Firestone in Liberia

The British rubber monopoly, as it has been described, was a sore issue with the United States' economic needs and security. The rubber and automobile industries, kingpins in the United States manufacturing system, were especially vulnerable, and their interests could not be separated from that of the United States as the emerging industrial giant of the world. Harvey Firestone, acting in concert with Henry Ford and Thomas Edison, and with the backing of the United States government, had exhausted nearly all avenues and sites, ranging from South America to Florida in attempts to develop independent sources of rubber for the United States. Finally, in 1924, Firestone wrote to Ford: "Everything looks wonderfully favorable for a great development"; this was in reference to Liberia as a potential site for new rubber plantations (Lief, 1951). Two years later, Firestone Rubber Company concluded agreements with the Liberian government with the following provisions:

1) A grant to Firestone of the right to lease as much as one million acres of land for 99 years for a rent of 6 cents an acre per year. The company was to pay a revenue tax of 1% on the New York price for rubber.
2) A Firestone subsidiary, Finance Corporation of America, was organized for the issue of 2.5 million in 7% gold bonds to the Liberian government. As part of the agreement, the President of the United States was to appoint for Liberia a financial advisor to supervise all of Liberia's revenues. The National City Bank of New York was to be Liberia's fiscal agent, receiving all rents, revenue taxes, and other fees from Firestone directly.
3) Under the terms of the agreement Firestone undertook to build a harbor at Monrovia, the capital of Liberia (Firestone Rubber Company, 1956).

The terms of the agreement were received with indignation throughout the world, Britain included, but for other than altruistic reasons. Very little attention was paid to these protests. The immediate problem, from the perspective of Firestone, was to ensure that no stone remained unturned in making the Liberian venture a success. Together with Henry Ford, Firestone financed the Edison Botanic Research Corporation to explore and experiment for the most suitable (high-latex yielding) rubber trees for the Liberian plantations. Members of the Peabody Museum at Harvard University were also contracted and dispatched to Liberia to conduct an ethnographic study "to determine what elements in the culture of native Liberians should be fostered and developed as they are introduced to modern civilization and development" (Lief, 1951; Strong, 1930). In plain language, the objective was to survey the extent of the pool of labor available in Liberia and ways of "tearing" such labor away from subsistence production.

By developments following the Firestone agreement, Liberia came to be fully incorporated into the world capitalist economy as a major producer of rubber. Liberia now ranks as the sixth largest producer of rubber with the bulk of its production going to the United States (Ghoshal, 1974). Besides Firestone, there are presently five other foreign concessions engaged in plantation rubber production. Independent Liberian farms, accounting for more than one-third of total output, have also developed as "extensions" of the rubber plantations.

The broad implications--economic, social and ecological--of the establishment of rubber plantations in Liberia will now be explored. Specifically, the account to be presented will illustrate the negative impact of rubber plantations on the economy of Liberia and its articulation in social relations. This is a departure from the contention of Clower _et al_. that

> The economic backwardness of Liberia is attributable neither to lack of resources nor to domination by foreign financial and political interests. Rather, the underlying difficulty is that traditional leaders of Liberia have not permitted those changes necessary to develop the society and its economy (1966: 4).

While the hegemony of Americo-Liberians and "native" Liberian elites are important explanatory factors in the underdevelopment of Liberia, they cannot be viewed independently of the external economic, social, and political systems of dominance that they, unwittingly perhaps, serve. As I hope to illustrate, levels of plantation production are determined by factors other than the needs of the "bridgehead" in

Liberia. Where and when production incentives--cash bonuses, distribution of free planting stock--are instituted, they came as a result of the needs of the United States or, more precisely, of Firestone. Conversely, when there is a glut on the world market for rubber, the ensuing contraction in production is dictated by factors other than those within the Liberian economy. Granted, world market forces, independent of the desires of Firestone and outside the company's control, may account for the need for either expanding or curtailing the level of rubber production. But this does not detract from the fact that the company is always in a position to make production adjustments to safeguard its profits. Liberia, for its size and dependence on rubber, lacks any such leverage.

Table 5.10 and Figure 5.4 present a profile of the share of Liberian exports which are accounted for by rubber. Up to 1960 rubber was the single most important export item, accounting for 91% of all exports in 1945. This figure is significant not for its size but the story behind it. During World War II the Japanese had cut off rubber supplies from Southeast Asia, and as a result the United States and her allies had to turn to Liberia. Under a scheme financed by the United States government and administered by Firestone, Liberian rubber producers were paid 15 cents per pound for any rubber they could produce above their normal capacities (Ghoshal, 1974). Abandoned rubber farms were rescued and new ones started. As a result, Liberian rubber production accounted for one-third of United States' needs (Clower _et al._, 1966). The reverse was true during the depression of the 1930s. Fervent activities by Firestone following its agreement of 1926 with the Liberian government came to a complete

Table 5.10 Share of Rubber in Total Exports for Selected Years 1941-1967 (million dollars)

Year	Total Exports	Rubber Exports	Rubber as % of Total
1941	$ 5	$ 4	80 %
1945	11	10	91
1950	28	19	68
1951	53	49	91
1952	37	30	81
1953	31	21	68
1954	26	19	73
1955	43	32	74
1956	45	31	69
1957	40	27	68
1958	54	26	48
1959	67	31	46
1960	85	38	45
1965	135	29	21
1967	$ 158	$ 27	17 %

Source: Clower *et al.*, 1966: 146. D. Franklin Neal, "Liberia's Foreign Trade Pattern, 1940-1968" *Liberian Studies Journal* 4 (1) 1971-72: 1-21.

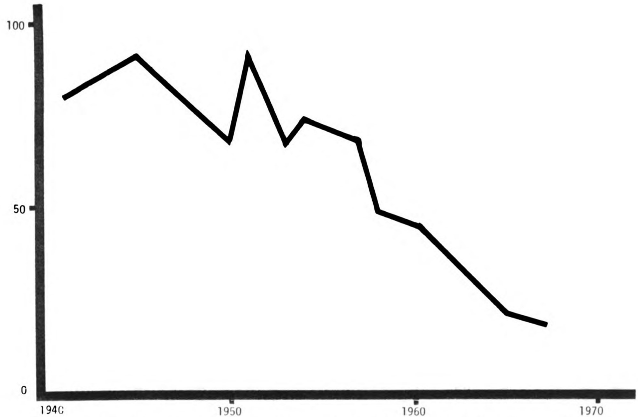

Figure 5.4: Percent Share of Rubber in Total Exports of Liberia, 1941-67.

stop. Production dropped from about 230 long tons (506,000 pounds) in 1929 to 28 long tons (61,600 pounds) in 1933 (McFadyean, 1944).

Pricing is another aspect that lies outside the control of Liberia and Liberian rubber producers. Firestone enjoys a monopoly status that gives it leverage in setting prices for the rubber produced by Liberian farmers.

Table 5.11 Purchases of Rubber from Liberian Farmers by Concessions 1969-1971 (million lbs.)

Year	Firestone		Goodrich		Allan Grant		Total
	Quantity	%	Quantity	%	Quantity	%	
1969	32.1	68.0	1.4	3.0	13.8	29.0	47.4
1970	37.1	67.4	1.8	3.3	16.2	29.3	55.2
1971	38.4	67.8	1.9	3.3	16.4	29.0	56.6

Source: Ghoshal, 1974: 82.

Rubber prices paid to Liberian producers are set at the beginning of each month by Firestone on the basis of world market price. Deductions are made for finance charges, purchasing expenses, packing, storage, freight, and insurance. These amount to between 8 and 10 cents per pound of rubber. There are several interesting factors about the system of pricing by Firestone. First, by the sheer size of rubber purchases by Firestone in Liberia, the company enjoys a monoposony status which the other rubber concessions are not in a position to challenge, in the remote possibility that they so wished. Second, the world price of rubber used by Firestone is based on prices prevailing in Singapore (Ghoshal, 1974). This choice inflates transportation costs. Singapore is about 10,200 miles from New York while the distance from Monrovia to New York is roughly 4,200 miles. Thus, in real terms the company's "book" transportation charges are twice what they ought to be. Compared to Malaysia, the expenses charged to Liberian producers are deemed excessive, and this has been a constant source of friction between the Liberian government and Firestone (Morris, 1969).

The monopsony status of Firestone with respect to rubber purchases from Liberian farms and the economic gains it entails for the company have increased over the years with the expansion of rubber production on independent Liberian farms. The share of these farms in total production for the period 1944-1970 is outlined in Table 5.12.

Production expansion on Liberian farms began in the late 1940s partly as a result of incentives provided by the United States government. By the end of the decade production increased from 658,000 pounds to nearly 3,000,000 pounds in 1950, representing an increase of more than 300%. The most significant development, however, was the relative share of these farms in the total production. From a meagre 2% in 1944, Liberian farms were accounting for nearly 40% of the total production by 1970.

On the surface, the expansion in Liberian rubber farms may be attributed to the pioneering character of plantations. A closer inspection of the evidence, however, indicates that while Firestone has been instrumental in the adoption of rubber cultivation by

Table 5.12 Rubber Exports from Firestone Plantations and Liberian Farms, 1944-1970

Year	Total Exports (1000 lbs DRC)	Firestone		Liberian Farms	
		Quantity (1000 lbs)	As % of Total	Quantity (1000 lbs)	As % of Total
1944	35,429	34,771	98.0	658	2.0
1945	52,030	51,242	98.5	788	1.5
1946	49,203	48,268	98.0	935	2.0
1947	47,787	46,669	97.6	1,118	2.4
1948	54,904	53,624	97.7	1,280	2.3
1949	59,328	57,558	97.0	1,770	3.0
1950	66,591	63,866	96.0	2,725	4.0
1951	76,944	72,588	94.3	4,356	5.7
1952	78,148	72,727	93.0	5,421	7.0
1953	78,398	72,506	92.5	5,892	7.5
1954	82,101	75,755	92.3	6,346	7.7
1955	86,110	78,498	91.2	7,612	8.8
1956	88,795	80,545	90.7	8,250	9.3
1957	82,216	73,264	89.0	8,952	11.0
1958	94,869	83,812	88.3	11,057	11.7
1959	95,212	82,983	87.2	12,229	12.8
1960	94,722	80,796	85.3	13,926	14.7
1961*	94,500	79,000	83.6	15,500	16.4
1962	94,000	77,000	82.0	17,000	18.0
1963	93,300	75,000	80.4	18,300	19.6
1964	97,100	78,000	80.3	19,100	19.7
1965	105,400	78,000	74.0	27,400	26.0
1966	111,700	78,000	70.0	33,700	30.0
1967	126,500	91,000	72.0	35,500	28.0
1968	122,700	86,000	70.0	36,700	30.0
1969	140,500	93,000	66.0	47,500	34.0
1970	150,200	95,000	63.0	55,200	37.0

Source: Clower et al., 1966: 154; Ghoshal, 1974: 34-35.

*Total exports for 1961-1970 derived from sum of Liberian and Firestone exports.

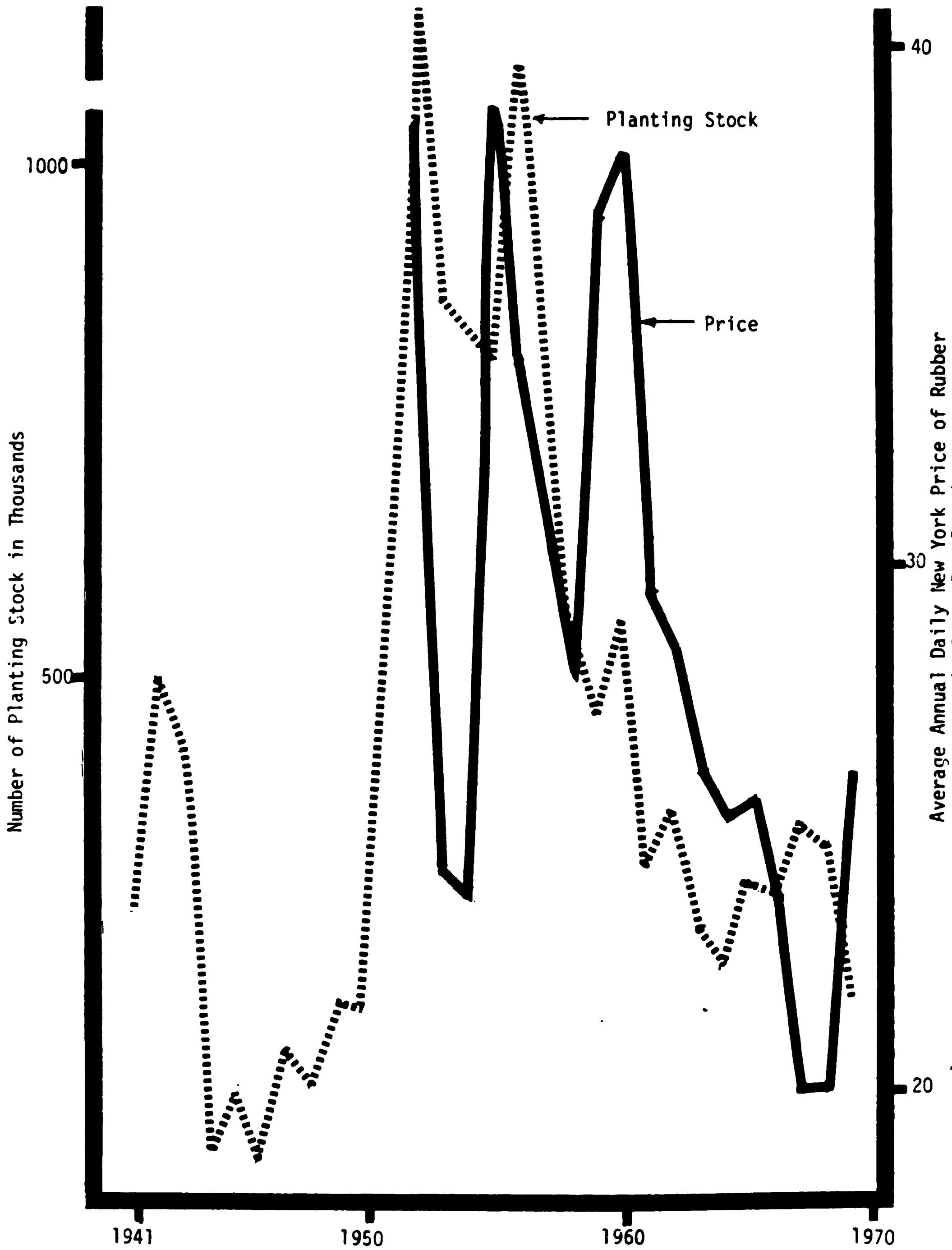

Figure 5.5 Trends in Natural Rubber Prices and Distribution of Planting Stock to Liberian Farmers, 1941-70

Liberians, the acceptance of this innovation may be for reasons other than what the literature on plantations postulate. That is, the plantation acts as a nucleus from which plantation-crop production is diffused and incorporated into subsistence production and, in the process, the monetization of the latter (Ardener *et al*., 1960; Geertz, 1956).

In Figure 5.5 the price trend (New York) is superimposed on the distribution of planting stock used by independent Liberian farmers. What emerges is a close relationship between price levels and the number of planting stock used by farmers. Specifically, during the periods when rubber prices are increasing, there are corresponding increases in the number of planting stock used by farmers. The reverse is also true. While not dismissing the importance of the "demonstration effect" of Firestone in the acceptance and expansion of rubber cultivation by Liberians, it would seem that price incentives--both market and direct financial subsidies such as those provided during World War II and the Korean War--have been more significant in inducing production. This is reflected by the peak periods of the graph depicting the distribution of planting stock.

Liberian participation in rubber production is not to be interpreted uncritically as a manifestation of a positive transformation of subsistence agricultural production. Beyond their participation in rubber production as wage laborers, "native" Liberians are minimally involved in rubber cultivation as independent producers. Most Liberian rubber farms and the relatively efficient operations are owned by a small number of absentee owners, mostly urban Americo-Liberians and a few "native" elites.

Table 5.13 Distribution of Liberian Farms by Size and Sales, 1960

Size in Acres	Number of Farms	Acre-age	Estimated Employ-ment	Total Sales (Dollars)	Aver. Sale Per Farm	Acreage Per Worker	Sales Per Worker (Dollars)	Sales Per Acre (Dollars)
1-10	1,426	6,737	1,600	420,000	295	4.0	266	65
11-20	346	5,959	1,245	378,000	1,092	4.6	304	67
21-50	325	10,370	2,281	790,000	2,431	4.6	346	76
51-100	125	8,960	1,971	672,000	5,376	4.5	341	70
101-200	43	5,970	1,313	510,000	11,860	4.5	388	85
201-450	29	8,025	1,865	800,000	27,586	4.3	429	100
450 +	6	4,700	1,166	630,000	105,000	4.0	540	134
TOTAL	2,300	50,121	11,441	4,200,000				

Source: Clower _et al_., 1966: 286.

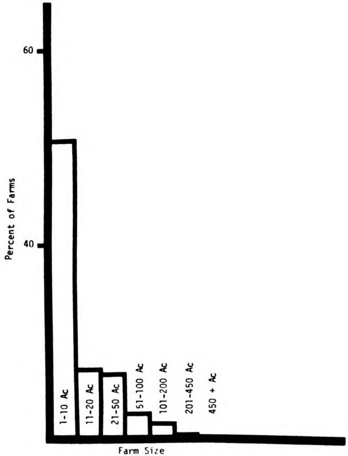

Figure 5.6 Distribution of Liberian Farms by Size, 1960

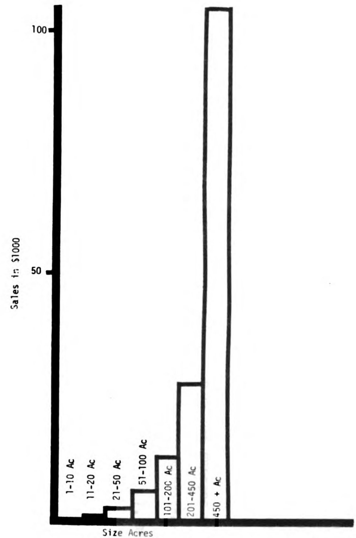

Figure 5.7 Distribution of Average Sale per Farm Size, 1960

As depicted in Table 5.13 and Figures 5.6 and 5.7, about 3% of Liberian rubber farms accounted for 46% of rubber sales in Liberia for 1960. The largest number of farmers (1,426), more than half of all those engaged in rubber production, had holdings averaging less than 5 acres with gross average sales of less than $300, as compared to sales of $105,000 by each of the six largest farms. In effect, rubber cultivation by independent Liberian producers has emerged not to benefit the large numbers of "native" Liberians within subsistence agriculture but, instead as an extension of the economic, social, and political hegemony of a select number of urban Liberians. In this regard, Liberian rubber farm owners and operators emulate the essential attributes of plantation production and their interests are mirror images of those of the rubber concessions.

The large acreages devoted to rubber production by foreign concessions as well as Liberian producers have geen acquired at the expense of food-crop production by subsistence farmers. The following map, Figure 5.8, shows the location of major rubber plantations and farms. The tendency is for all lands made accessible by new roads to be converted into rubber cultivation, irrespective of legitimate claims of "native" Liberians and their subsistence needs.

Subsistence (Peasant) Economy

The following may be distilled from the various definitions of subsistence or peasant economies. A peasant (or subsistence) socio-economic organization is one in which agriculture is at the same time an occupation, a livelihood, and a way of life rather than a business

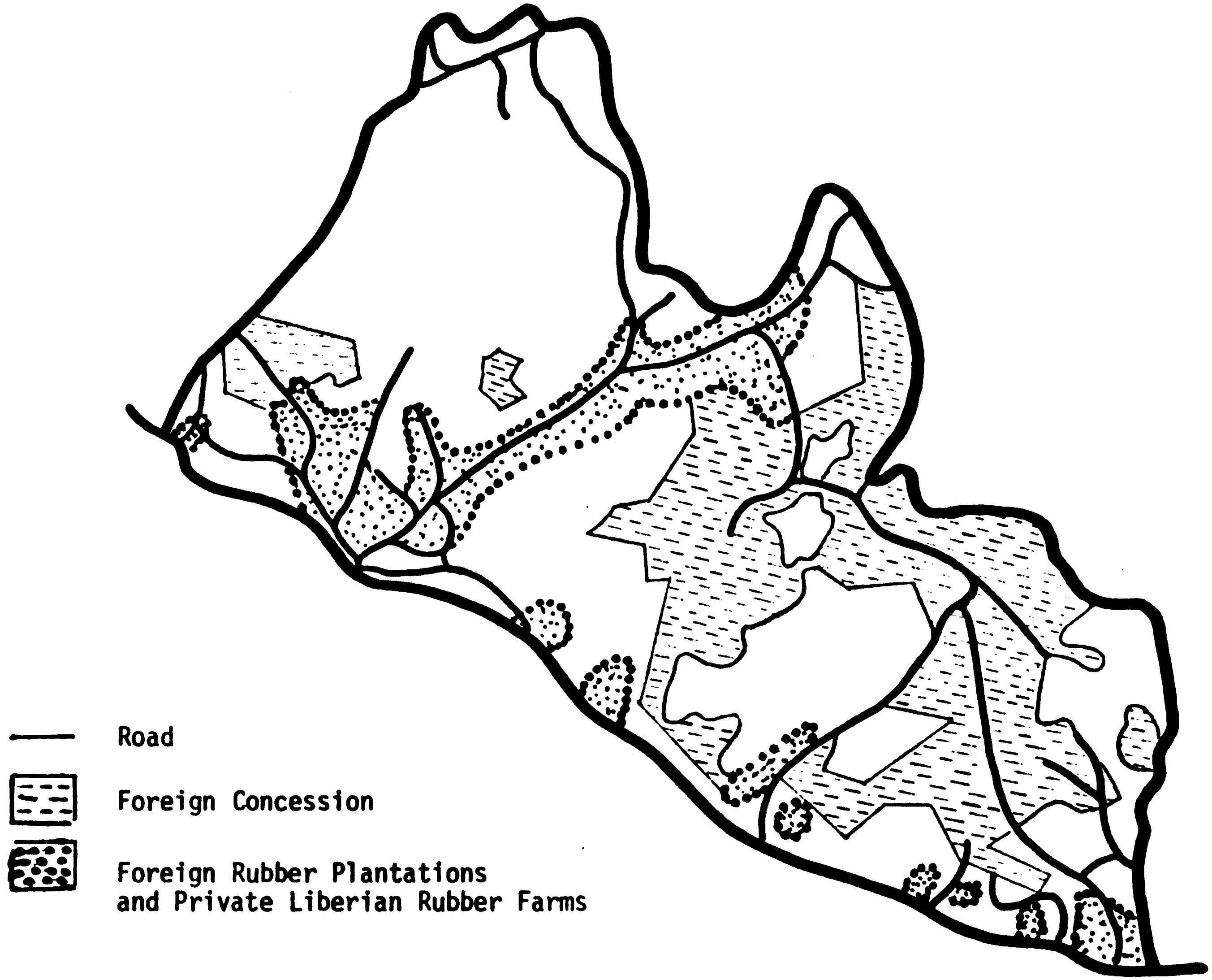

Figure 5.8 Map: Location of Rubber Plantations, Rubber Farms, and Foreign Concessions in Relation to Roads in Liberia

(Redfield, 1954). The peasant economy links purchasers and consumers as well as resource and product allocations in a network of ties which are more personal and more directly perceptible than in a more developed economy (Chayanov, 1966). Subsistence or peasant economies exist not in isolation but form a segment of larger economies with urban and metropolitan ties (Firth, 1961). Some of the key elements of a subsistence socio-economic organization are: family and kin ties, patronage, clientship and ascribed relations based on seniority, ritual office, gender, etc. as the basis for leadership and work organizations.

Land and labor are the two critical items of subsistence production. Ownership of land and labor power are defined by rights which are ultimately invested in a kin group of which an individual is a member. The overriding rights of kin groups over land is such that in many parts of Africa there are no "free markets" in land (Schneider and Gough, 1961). Liberia differs in this respect. Communal (or kin) ownership of land co-exists with a dominant fee simple system of ownership. Also in Liberia, the institution of wage labor is well entrenched despite the persistence of the norms regulating the mobilization of family labor for subsistence purposes.

The dictates of the concept of a wider communal or kin good, embodied in the rights in the use of land and labor for subsistence purposes, are often at odds with the requirements for plantation production in Liberia. A brief account of subsistence production in Liberia is provided and evaluated with respect to its inherent conflicts with plantation production.

The dominant farming system in Liberia is similar to that found in many tropical areas--shifting agriculture. A wide range of crops are cultivated. Rice is the most important crop. The sequence of the agricultural cycle is as follows: land preparation, planting, crop maintenance, harvesting, and storage. After the harvest the land is allowed to return to "bush" or a fallow period which ideally should last between 10 and 20 years.

Performance of the various farming activities is by different groups within a family or kin organization whose specific responsibilities are ascribed by tradition. The initial selection of the primary or secondary forest to be cleared for farms is the perogative of the village chiefs, elders, and "medicine men" (Porter, 1961). Land preparation which entails clearing and burning is the responsibility of male adults who work either as a domestic kin group or as members of male labor cooperatives. Land preparation is done between February and March. Around late April or May, after the first rains, the women cultivate the field. Relieved of their responsibilities in subsistence production, many males direct their attention to cash crops such as cocoa, coffee, sugar cane, and rubber. Activities in subsistence production continue with the burden shouldered by women, the old, and children. These activities involve weeding and the protection of the crop from animal predators. The effectiveness of these maintenance activities is critical since they are vital for a successful harvest and thus a family's subsistence needs until the next agricultural cycle. Between August and October, the crops, principally rice and other cereals, are harvested; food crops such as cassava are left in the ground for another year and harvested as

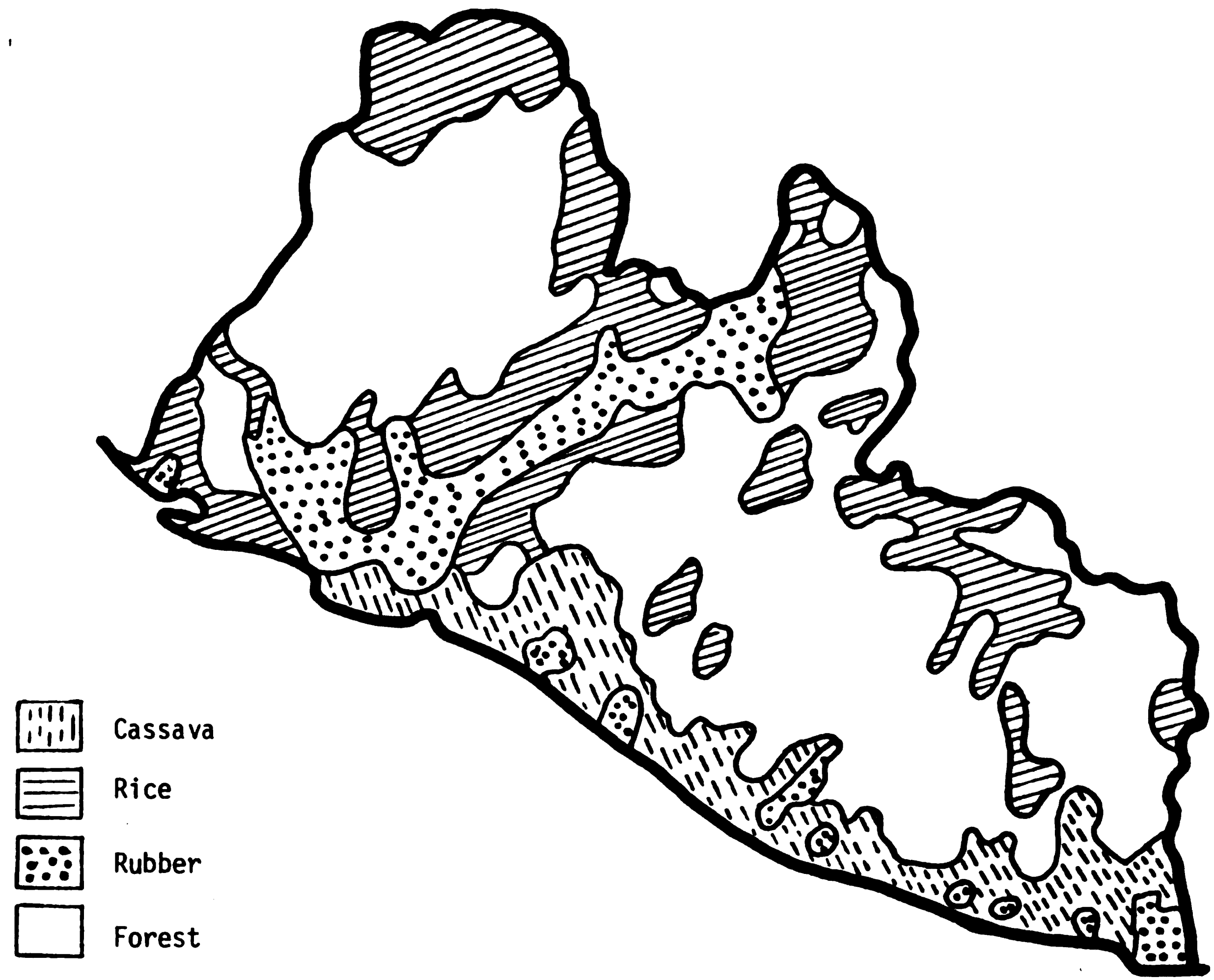

Figure 5.9 Spatial Distribution of Rubber, Cassava and Rice Production in Liberia

needed for consumption. During the rice harvest the men assist by collecting and storing the crop.

Capital inputs in subsistence production as outlined is minimal. Besides seeds which are carried from one harvest to another, the agricultural implements used are simple and often rudimentary. The axe and cutlass are the two principal tools; the former is the most important and it is often shared. The axe has a very important place in native life:

> It is used to fell or uproot trees or to split wood. For this reason, whenever a person owns in a Jabo community an axe, it is likely to travel the entire length of the village. Almost every household will come to the owner for the use of it. When it is lent to one household, that household will take the liberty of lending it to the next, and so on until it finally returns to the proper owner. (Interpretation of a Jabo proverb cited by McEnvoy, 1971: 328-9).

In addition to low capital investment, subsistence production permits very little or no capital accumulation over time except where cash-cropping has been grafted to the system (McCourtie, 1973).

In 1967 the total number of Liberians within the "subsistence sector" was estimated at 700,000. Out of this number, 310,000 were classified as actively involved in subsistence production. The value of production for the same year was placed between $31-45 million (Shoup, 1971). This represents 10%-15% of gross domestic product (GDP) for that year. This figure seems to be an underestimate; it also excludes the value of cash-cropping, which in many instances is grafted on to subsistence production.

While rice dominates subsistence farming, the typical Liberian farm may be regarded as a multi-product farm. A pure stand farm devoted to the production of a single crop is rare or non-existent.

Production through a system of inter-cropping, where selections from about 30 different crops are involved, is the rule, In a survey of 1,281 Liberian farms in 1971, McCourtie found the following distribution of crop combinations shown in Table 5.14. Despite the wide range of subsistence crops cultivated under a system of multicropping, rice remains the dominant food crop. Historical records indicate that in those areas in Liberia where greater emphasis is given to the cultivation of crops other than rice, the reasons for such preference are other than those related to climate, as suggested by Porter (1961) for instance. Relative land scarcity, declining soil fertility, and labor shortages may better explain the increasing incidence of cassava cultivation. McEvoy comments with respect to the "Sabo" area:

> ... cassava has been increasingly emphasized because of labor migration from the area and because of the increase in cash-cropping of tree crops, particularly rubber....The planting and consumption of cassava in southeastern Liberia has increased since the coming of rubber because of declining rice yields in under-fallowed, exhausted soils. Moreover, in view of the importance of wage-labor migration in the economic organization of the people of the region, it is important to note that the planting (if not the preparation) of cassava is relatively much less labor-intensive than rice and is easily carried out by households which lack adult male labor (1971: 334-335).

The changing pattern of subsistence production, its underlying reasons, and implications are elaborated. For reasons already alluded to, the focus of the discussion is on rice culture.

Table 5.14 Distribution of Number of Major Crop Combinations by 1,281 Farmers

Farmers, 1971		
Number of Crops	Number of Farmers	Percentage
1	0	0 %
2	49	3.8
3	144	11.2
4	275	21.5
5	289	22.6
6	241	18.8
Over 6	283	22.1
Total	1,281	100.0 %

Source: McCourtie, 1973: 5.

Agri-Ecological Aspects of Rice Culture

Brown sums up an account of the day of a "Rice Harvest Dance" at a Liberian village in these words:

> The spirit "devil" was pleased. A brown hawk sailed over the crowd. Soon he would find a chicken, for if the spirit "devil" is ill at ease with an empty belly, while the village is so full with happiness and joy, let him take a chicken for feast. The crowd left to dine on rice, goat soup, Palaver source and bamboo wine (1941: 102).

There was a bumper rice crop and with such a good harvest, the villagers' subsistence until the next planting cycle had been assured. The villagers' joy also reflected the experience of bad harvests in the past and, perhaps, they were not unmindful of potentially bad years in the future.

Liberia was at one time an exporter of grains including rice. Johnson (1906) traces the trade in rice to about 1611. By the beginning of the twentieth century, however, the same author singles out rice and salt as the two major imports of Liberia, the former item amounting to about 150,000 bags or roughly 700 tons annually. There has been a steady increase in rice imports since. In 1952, rice imports were recorded at 170,000 tons and, for the period 1958-70, annual imports were estimated at 112,000 tons. Between 1962 and 1970 nearly one-third to one-half of all rice consumed in Liberia came by way of imports from the United States (Ghoshal, 1974). Available figures for rice imports for the period 1962-70 are presented in Table 5.15. Between 1962 and 1970 the quantity of rice imported increased by 80% with a corresponding price increase of more than 40%. During the same period per capita income increased by only 13%. During the first half of the 1970s the number of farmers who were self-sufficient in rice declined, with a corresponding rise in the number of farmers purchasing rice.

Amacheree (1970: 70) argues that the increasing quantity of rice imports "rests more on taste and on the prestige attached to eating imported rice than on the availability of local resources to meet demand." While this may be true for urban Liberians, the same argument may not hold for rural farming communities. As indicated in Table 5.16 and the accompanying Figure 5.10, the percentage of farmers who buy rice (either locally produced or imported) increased from 30% in 1971 to

Table 5.15 Volume and Value of Rice Imports, 1962-1970

Year	Quantity		Value	
	Thousand Pounds	Percent Change	Thousand Dollars	Percent Change
1962	60,163	0 %	3,846	0 %
1963	79,245	32	6,034	19
1964	92,368	54	6,102	2
1965	71,644	19	6,326	38
1966	102,075	70	7,536	16
1967	75,794	26	6,564	36
1968	100,329	65	8,664	34
1969	61,302	2	5,202	33
1970	108,049	80 %	9,771	41 %

Based on figures from McCourtie, 1973: 72.

Figure 5.16 Percentage of Farm Holdings Buying, Selling and Self-Sufficient in Rice Production 1971-1976

Year	Buying	Selling	Self-Sufficient
1971	30 %	16 %	70 %
1975	51 %	24 %	54 %
1976	57 %	29 %	46 %

Source: Monke, "Rice Policy in Liberia": 5a.

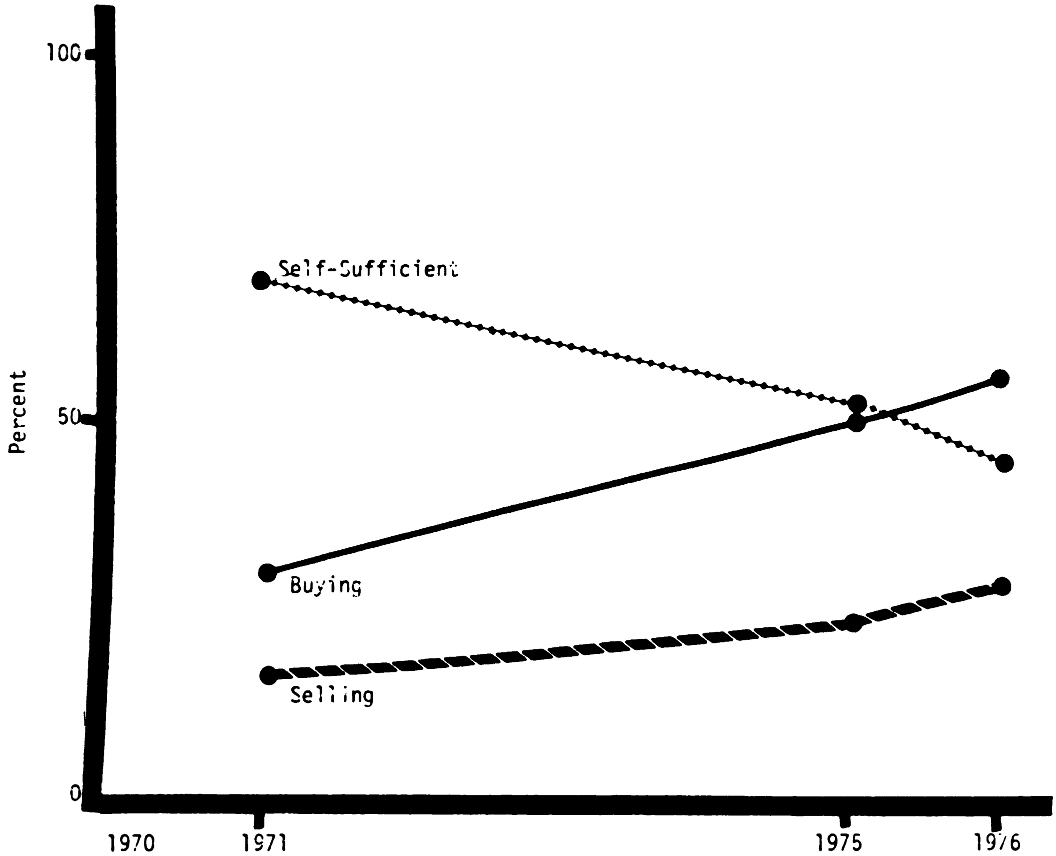

Figure 5.10 Trends in Farm Holding, Buying, Selling, and Self-Sufficient in Rice in Liberia, 1970-76

nearly 60% in 1976. On the other hand, there was only a modest increase of 13% in the number of farmers who sold part of their rice harvest. A most alarming statistic, however, relates to the proportion of subsistence farmers who were self-reliant in rice production. There was a decline from 70% in 1971 to 46% in 1976. The increasing levels of rice imports and a corresponding decline in local production may be attributed to labor shortages, relative land scarcity, and declining quality of land.

Near Cape Palmas the removal of lands from subsistence production and its impact are most obvious. Besides Firestone plantations in the area, it appears

> ... that increasing amounts of land are being given over to the growing of rubber each year in spite of the generally falling values of rubber in the world market. One apparent consequence of the land conversion process seems to be the adoption of a decreased fallowing cycle for land which remains available for rice production. This reduction in the length of fallowing appears, moreover, to result in visibly poorer rice and smaller yields. In Gobi, rice grows to a height of about four feet while near Plibo, mature rice in 1967 appeared to be often less than two feet in height (McEvoy, 1971: 334).

In a similar vein, another author comments on the competing claims of subsistence production and cash-cropping thus:

> The combined effect of these factors serve to reduce the fallow period in some localities. Farmers in these areas farm what they refer to as "young bush," representing in some cases a fallow period of no more than three years. Where the fertility rating of a farming unit has been adversely affected by a reduction in the fallow period a farmer may resort to planting of a crop of second choice viz. cassava in place of rice. When asked what they intend growing in an area being cleared, farmers would sometimes state that the bush was too young for rice, but could grow cassava instead (McCourtie, 1973: 15).

Adjustments to male wage labor migration tend to have the same ecological impact: a decline in rice production and change from rice to cassava cultivation. Theoretically, migration could be expected to reduce the man-land ratio and thus the length of the fallow needed to restore soil fertility. Observations, however, point to the contrary. Specifically, there is the tendency for households deprived of male labor to opt for shorter fallows and the cultivation of cassava instead of crops such as rice which are more labor demanding. The preference of women for shorter fallows is due to the relative ease of clearing "young bush." Even under conditions where more fertile lands (longer fallows) are available, the preference of female heads of households for shorter fallows represents a rational response to their increased responsibilities resulting from male labor migration (Hunter and Ntiri, 1978). But irrespective of the logic of such a choice, shorter fallows under the system of shifting cultivation is damaging to soil fertility, and the preference for cassava is a poor choice in its relative nutrient value to rice.

The Liberian government has come to the realization that the substitution of cash-crop production and wage labor for food imports does not constitute a genuine alternative to local food-crop production. Food import bills continue to increase at the same time that receipts for primary agricultural products such as rubber, cocoa, and coffee either remain unchanged or decline. A primary objective of the government's agricultural policy presently is, therefore, aimed at first curbing food imports and then attaining ultimate self-sufficiency in staple foods such as rice (Clower _et al._, 1966; McCourtie, 1973; Monke, 1979). But there are several factors that stand in the way of this objective. First, Liberian farmers have come to accept export cash-crop production as an integral part of the agricultural system. Thus, if migrant wage laborers, for instance, are induced to go back into independent agricultural production, the tendency will be for the large number whose skills and experiences are related to plantation production to opt for export cash crops. In that event, the tendency will be further reductions in the length of the fallow due to the enclosure of subsistence farming by tree cash crops (McEvoy, 1971). The unwillingness to go into rice production in particular has a historical basis. There is the practice of food requisitions--demands of rice and other food stuffs without compensation--by Liberian officials, which many farmers cite as their reasons for producing agricultural products other than food crops (Amacheree, 1970). In one area with an estimated 5,000 households, 560,000 pounds of rice, averaging about 112 pounds of rice per household was expropriated in one year (Clower *et al*., 1966). In one farmer's words:

> If I grow cocoa or coffee, they [government functionaries] will not take it because they will have to sell it to get the money and they do not want to do that. They cannot eat cocoa or coffee. Rice yes, they will take it because all they have to do is eat or give it to their girl friends. You see why I don't like to grow too much rice. It is hard work and it is small and then someone comes and takes part of it. So I grow more coffee (Amacheree, 1970: 26-27).

The kinsmen are even reluctant to send rice to their counterparts on plantations and in urban areas for fear that soldiers at the numerous checkpoints on roads may insist on their share of the rice.

The dismal failure of the government's program to make Liberia self-sufficient in rice was reflected in the so-called Rice Riots of April 14, 1979, which one author characterizes as raising "the level of dissent to a transcendental level" and serving as the harbinger of the April 12, 1980 coup (Liebenow, 1980).

CHAPTER VI

INFERENCES FROM CASE STUDY

Two general inferences may be culled from the materials presented in the preceding chapter. First, plantation rubber production has impacted both positively and negatively on Liberia. Second, natural rubber production has emerged as a dominant economic activity, on the one hand, as a result of pressure from the United States to ensure its strategic needs and, on the other hand, the acquiescence of Liberian authorities for reasons of material rewards, continuing Americo-Liberian hegemony, and a lack of organized resistance to Firestone and United States. These two inferences are elaborated on and used as the basis of evaluating the data presented in Chapter V in the context of the theoretical model outlined earlier.

From the latter part of 1930s to 1960, rubber was the most important export of Liberia and, by extension, the leading foreign exchange earner. In 1945, rubber accounted for more than 90% of all exports. By 1960 rubber's share of total exports had declined to 45%. In value terms, however, rubber exports increased from $10 million in 1945 to $49 million in 1951, then dropped to $38 million in 1960. Despite the declining share of rubber in exports, production levels have been increasing. Moreover, compared with iron ore, the leading export item, natural rubber production continues to be the most important source of wage employment. Firestone alone employed nearly 70%

of all labor within Liberia's "money sector" in 1950. By 1960 Firestone accounted for less than 30% of total wage employment; this figure, however, excludes wage labor on plantations other than Firestone's. Private Liberian farms have been expanding and are becoming significant sources of wage employment. Employment on these farms was estimated at more than 11,000 in 1960. In general, natural rubber production remains the leading avenue for the involvement of a large number of Liberians in a money economy and as a means of acquiring skills other than those needed for subsistence production. Plantation infrastructure such as roads, ports, hospitals, schools, communication networks, and marketing facilities are largely at the disposal of Liberia and also serve as impetus for the Liberian government to create similar ones, possibly from revenues provided to the government by the plantations in the form of royalties and taxes. Technological transfers implied by the adoption of rubber cultivation by Liberians have also served to buttress the "agrarian sector" of the economy.

Positive contributions of plantation rubber to Liberia are more than counterbalanced by its negative aspects. Internally, these include the entrenchment of Americo-Liberian hegemony through economic resources made available to the state and by direct Americo-Liberian participation in rubber production as absentee landlords. Beside wage labor employment, there is limited integration of plantation production into the Liberian economy. Indeed the plantation sector has impacted negatively on both the industrial and agricultural sectors of the Liberian economy; in the case of the latter, with respect to food production for domestic consumption. By the reliance of the plantation on external markets for a bulk of its non-labor inputs, Liberia is deprived of the opportunity to create the supportive industries that the presence of the plantations could generate. And, by creating a situation in which resource allocation favors the plantation (export cash-crops), subsistence food-crop production continues to suffer. The resulting food deficit, especially in the case of rice, has meant the diversion of scarce foreign exchange resources toward food imports. This development continues to be a source of official concern and citizen discontent. In general, the traditional agricultural system and its related social organization have been destroyed without effective substitutes that can ensure good husbandry of land resources and the welfare of local groups.

Externally, plantation rubber production has meant perpetration of a division of labor that serves external capitalists' interests without reference to the needs of a large number of Liberians. In the process, social and economic infrastructure, investments (government, local, and foreign capital), and the skills of Liberians have become "trapped" into the production of a crop that must be sold on external markets which Liberia is not in a position to influence. The transfer payments entailed by foreign investments in plantations also drain the Liberian economy of possible investments from a large share of production surplus.

Modified versions of Tables 4.1-4.5 in Chapter IV are presented in the light of the data from Chapter V. These tables have been reconstructed to include the results of the integration of plantation and subsistence production as reflected in the uses of labor, land, and capital as well as in the agri-ecological and organizational aspects of the two systems of agricultural production. Submodels of the plantation system are presented in Figures 6.1-6.5. These are also based on the case data and serve as elaborations on the provisional model of ecological and socio-economic change (Figure 4.3) adapted from Ellen (1979). The summaries outlined in the form of tables and submodels are used as the basis of answering the five key questions posed in Chapter IV. While the quantitative data presented in Chapter V are inadequate for the solution of the equations outlined in Chapter IV, an attempt is made to use the available statistics in conjunction with the neo-classical economic models as illustrations of their potential in clarifying the qualitative outcomes of the integration of plantation and subsistence systems. The inferences thus drawn serve to strengthen those derived from the more qualitative data.

As a result of the integration of plantation and subsistence production labor assumes the guise of a commodity. Communal and kin relationships as the mechanisms defining access to labor are replaced by wage as a "unifying" force between labor and capital. But wage incentives alone are inadequate to entice labor from subsistence production. Adequate supplies of plantation labor, however, can be ensured through compulsion and other developments within subsistence production which "push" individuals and groups off their lands. Thus, both wage incentives and compulsion as means of labor acquisition characterize plantation production. However, wage labor migration and forced labor (peonage as well as inter- and intra-tribal slavery) predate plantation rubber production in Liberia. Americo-Liberians, European traders, and colonial powers throughout West Africa adopted and exploited the system of compulsion in traditional labor use to their advantage. Firestone's use of compulsory labor may be explained as a "hold-over" from Liberia's past, fitting into the structure and requirements of plantation production and the interests of Liberia's governing elite. Specifically, "native" Liberian participation in plantation work was induced by government sanctions in the form of taxes, physical punishment, and financial rewards to government-appointed chiefs. Official sanctions as outlined also undermined traditional authority and ensured the flow of labor to the plantations. Had the government chosen to do so, there would have been a fair chance that it could have resisted the overtures of Firestone for compulsory labor. During the labor investigation which was sanctioned by the United States around the time Firestone was contemplating rubber cultivation in Liberia, world opinion was on the side of Liberia. Numerous groups and individuals throughout the world, especially Blacks, mounted a massive "propaganda" which if Liberian authorities had so desired, could have been capitalized on to forestall Firestone investments and the use of forced labor that it entailed. Indeed, Firestone's attempts to establish rubber plantations in the Philippines, Sarawak, and Mexico had been successfully rebuffed by local authorities (Taylor, 1956). Liberial officials, however, have always been beneficiaries of the system of forced labor and the presence of Firestone had the potential of buttressing those benefits.

Table 6.1 Labor: Parameters Within Integrated System of Subsistence and Plantation Production

Parameters	Subsistence System	Plantation System	Integration of Plantation and Subsistence
I. Sources	1. Communal 2. Kin 3. Peonage, inter and intra tribal slavery	1. Forceful recruitment without wage compensation 2. Forceful recruitment with wage compensation 3. "Slavery" 4. Wage labor migration resulting from "push factors" at source areas	1. Labor assumes the guise of a commodity. Its availability remains dependent on compulsion and an historical interplay of ecological forces and migration
II. Uses and Scope of Demand	1. Subsistence 2. Communal goods and services 3. Wealth 4. Debt and tax payment	1. Production of single crop for export 2. Demand levels based on external market conditions and profit 3. Labor exports to generate revenues for private local individuals	1. Source of government revenue 2. Surplus on production to owners of foreign capital 3. Private local rubber farms
III. Control	Community, kin or family	1. Contrived control due to limited alternatives of earning cash incomes for taxes 2. Military and police 3. Government appointed local administrators 4. Plantation hierarchy and sanctions	1. Development of a community of wage laborers dependent on plantation 2. Integration of traditional authority structures into the organization of labor for plantation production 3. Absence of (agricultural) trade unions
IV. Division of Labor	Age, sex and ritual office within secret societies	1. Local adult male unskilled labor 2. Expatriate supervisory staff	1. Adult males in plantation wage labor and cash cropping 2. Preponderance of females, children and old people within subsistence and food crop production
V. Power Relations	1. Normative 2. Coercion	1. Normative 2. Coercion 3. Remunerative	1. Normative 2. Coercion 3. Remunerative

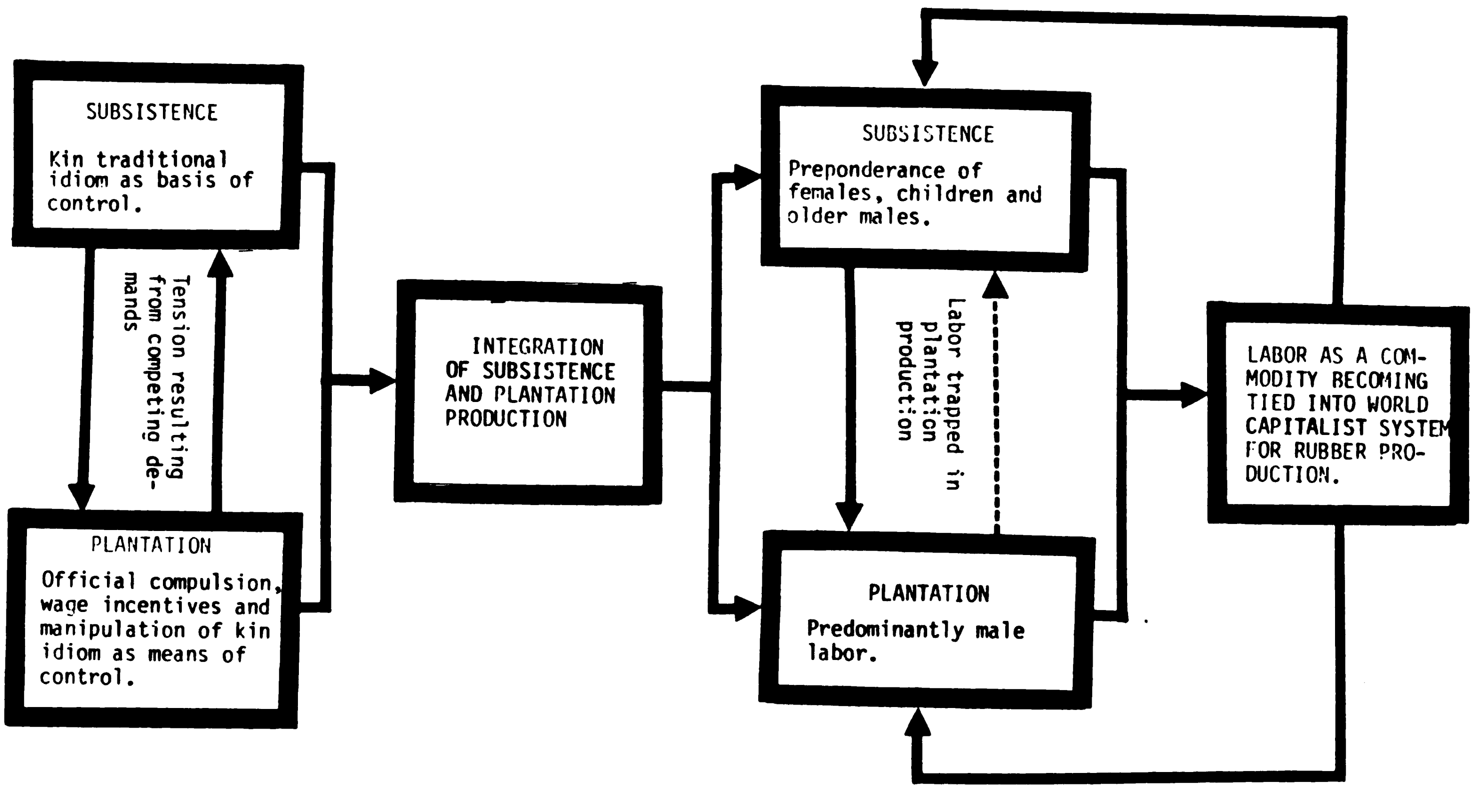

Figure 6.1 Submodel of Labor Within Integrated System of Subsistence and Plantation Production

With the system of compulsory and wage labor migration in place, traditional division of labor on the basis of age, gender, and ritual office gave way to a concentration of adult males on plantations and a preponderance of females, children, and old people within subsistence (food-crop) production. To the extent that traditional sanctions in labor use and control proved beneficial, they were incorporated into plantation production. At the same time organizations such as trade unions were banned by official decree to diffuse the collective power of plantation labor.

The foregoing suggests that the allocation of labor between plantation and subsistence production is dependent on the relative power enjoyed by each of the two systems of agricultural production. To the extent that power relations are manifest in economic terms, equation 6 may serve as the basis of aggregate labor allocation. That is, $L = Ls(Ws) + Lp(Wp)$ with wages, Ws and Wp as measures of the economic power exerted respectively by subsistence and plantation systems. This relationship, however, does not account for the coercive and normative power characteristic of the labor process in Liberia. These two sources of power were incorporated into equation 6 thus:

$$L = Ls\ (Ws,\ Fs) + Lp\ (Wp,\ Fp)$$

where F designates coercive and normative power. From the case data, the relationship Fs Fp may be inferred. That is, coercive and normative power to either retain labor within the plantation or force labor out of subsistence into the plantation is greater than the corresponding power within the subsistence system. What is not clear is the relative contribution of wages (W) and the combination of normative and coercive power (F) within and between the two systems of production.

While wage and employment levels within the plantation are available, the corresponding figures for subsistence may be deduced only under a set of questionable assumptions (Ghoshal, 1966). The plantation side of the equation is, therefore, used to shed light on the relative contribution of wage incentives and compulsion in labor allocation. In 1954 about 80% of Firestone's labor force was secured through recruitment (Clower _et al._, 1966). The corresponding figure for 1962 was roughly 83%, as indicated in Table 5.1. This information may be incorporated into the plantation component of the labor allocation equation thus:

$$Lp = L - Ls = Lp\ (Wp,\ Fp)$$

$$\text{Let } Lp = Lp\ (Wp,\ Fp) = 1$$

$$\text{From data } Fp = 80\%\ \text{(roughly)} = 0.8$$

$$Wp = Lp - Fp = 1 - 0.8 = 0.2$$

$$Lp = Lp\ (Wp,\ Fp) = 0.2 + 0.8 = 1;\ Wp \quad Fp.$$ [1]

That is, the relative power of wage incentives to attract labor in 1954 and 1962 into plantation production may be measured roughly by a factor of 0.2, as against 0.8 under compulsion.

From the perspective of Firestone, it is cheaper to resort to compulsory labor recruitments than wage incentives. In 1962, average monthly wage per worker was $15 with an additional expense of about 14 cents paid to Liberian chiefs towards labor recruitments (See Tables 5.1 and 5.3). While the additional expenditure of 14 cents per worker may be inadequate as additional wage incentive to attract labor, the same amount paid to chiefs per each recruited laborer

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[1] The effect of the interaction between W and F is not taken into consideration.

Table 6.2 Land: Parameters Within Integrated System of Subsistence and Plantation Production

Parameters	Subsistence System	Plantation System	Integration of Subsistence and Plantation
I. Ownership	1. Communal ownership 2. Usufruct rights	1. Occupation by force 2. Purchases from chiefs 3. Land lease	1. Capitalization of land as a commodity for economic ends rather than traditional relations to land as the basis of all productive and social organization 2. Ambiguities in land ownership: coexistence of individual and communal rights with the former codified in statutes as the dominant system 3. Class of landless and absentee landlords
II. Scope of Demand	Based on population size and subsistence needs	1. Extensive demand to ensure efficient use of capital labor 2. Dependent on size of concession rather than need for immediate development	1. Subordination of subsistence needs to commercial production with excessive claims by plantations limiting available lands for food crop production 2. Economic life cycle of rubber (about 25 years) extends and modifies usufruct rights thus limiting the area of communal lands for subsistence under the system of shifting cultivation
III. Spatial Distribution	Settlements are spread over a large area to ensure each village adequate access to farm lands	Concentrated in particular areas; often those made accessible by roads	1. Most accessible and productive lands are devoted to plantation and cash crop production leading to an imbalance in the spatial distribution of commercial agriculture 2. Disruptions in village-farm-forest land units constituting dwelling, farming, and source of raw materials and as the basis for viable subsistence and communal existence
IV. Ends in Use	Subsistence, production and communal life	Production for external market and profit motive	1. Shift of emphasis from subsistence to market rationale 2. Exchange of cash crop for food crop 3. Production levels tied to exigencies of external markets and cash rather than immediate subsistence needs
V. Power Relations	Normative	1. Coercion 2. Remunerative	1. Coercion 2. Remunerative

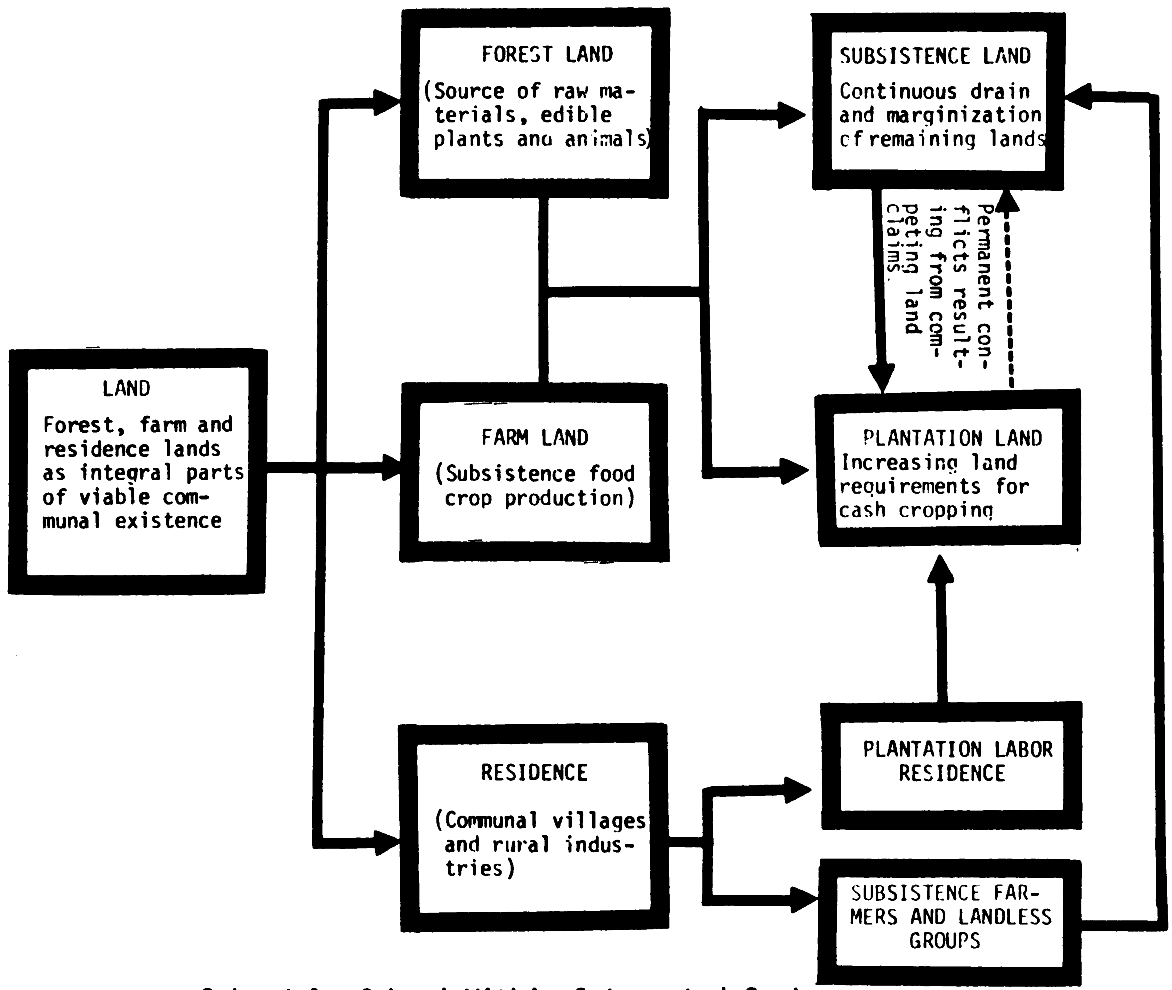

Figure 6.2 Submodel of Land Within Integrated System of Subsistence and Plantation Production

represents a substantial amount (monthly payments to chiefs in 1962 ranged between $65 to $530) to induce the cooperation of chiefs and Liberian officials. The greater emphasis placed on compulsion as a means of labor acquisition is, therefore, to be viewed in terms of the financial benefits derived by both Firestone and Liberian authorities. The economic power of the former is used to entice the latter to use both their coercive and normative power to fill the former's desire for cheap labor.

When Firestone attempted to establish rubber plantations in the Philippines during the 1920s, it found legal obstacles that would limit land ownership. The Liberian constitution had its own provisions that could have been used as a means of either keeping Firestone out of Liberia or to reach an agreement more beneficial to the country. But unlike the Philippines where "a bill to change legal obstacles severely limiting land ownership by foreign companies never emerged from a succession of hearings in the Legislature" (Taylor, 1956: 47), Liberia authorities cleared all obstacles that could have forestalled the granting of land concessions to Firestone. Specifically, the precedent had been set by the grant of a land concession to a British firm for rubber cultivation in 1910. In fact, the Liberian government fought the British investors for the release of their concession and abandoned rubber farms. These lands subsequently became the nucleus of Firestone operations in Liberia.

Earlier land acquisitions by the settler population were aimed at ensuring the viability and safety of Liberia as a new colony. Later encroachment on "native" Liberian territories by Americo-Liberians were politically motivated. It was a means of undermining traditional authority structures and ensuring Americo-Liberian hegemony. Trends leading to the capitalization of land as a commodity for economic ends--rather than traditional relations to land as the basis of all productive and social organizations--and the resulting creation of landless and absentee landlord "classes" are, however, developments that came in the wake of plantation rubber production. Typically, plantation interests acquire lands either through occupation, by force or "purchase" from traditional leaders. But Firestone did not have to use any of these approaches directly. The company simply leased vast tracts of "native" Liberian lands that Liberian authorities had acquired through deeds, force, and national statutes that subordinated "native" Liberian interests in lands to those of Americo-Liberians.

With the capitalization of land as a by-product of the system of plantation rubber production, rational use of land came to be determined by the financial logic of plantation agriculture. Subsistence needs were subordinated to cash-cropping and as the most accessible and productive lands were devoted to export cash crops, deflected fallows, and more "intensive" use of marginal lands for subsistence food crop production combined with labor shortages to undermine the viability of both subsistence and communal life.

The integration of plantation and subsistence production leads to the capitalization of agricultural lands. The allocation of land between subsistence and plantation systems is, however, not based on the relative returns to land as a capitalized asset within the two production systems but rather as the following: (1) a system of compulsion favored by officials for land acquisitions; (2) while mounting food prices make it economically rational to divert more land resources into food crop production, the entrenchment of the plantation infrastructure makes such a change difficult; (3) local farmers live in constant fear of their food crops being taken away by officials; (4) subsistence (food crop) farmers face serious labor shortages; and (5) most agricultural innovations are not geared towards food production. In general, the allocation of land between competing uses does not occur within the framework of a market; official decree and compulsion function in place of both market and traditional mechanisms for land allocation. It is in this context that the capitalization of Liberian lands for plantation production and its impact on food crop production are to be understood.

From its inception as a colony to its status as an independent republic for more than 160 years, Liberia has always relied on external sources for its capital needs. These investments were at first provided largely by American philanthropic organizations. Later foreign government and private loans were obtained, and beginning in the 1920s with Firestone investments and subsequent enunciation of President Tubman's Open Door Policy, foreign corporate capital became the major source of investments.

Liberia's inability to generate internal capital is in part due to its unique long history as an independent African nation. Unlike other African countries where colonial governments developed social and economic infrastructure as a means of exploiting agricultural and mineral resources, developments such as occurred in Liberia were

Table 6.3 Capital: Parameters Within Integrated System of Subsistence and Plantation Production

Parameter	Subsistence System	Plantation System	Integration of Plantation and Subsistence
I. Ownership	Local--Communal and Family	Foreign	1. Foreign corporate 2. Local private
II. Uses and	Limited requirements for subsistence pursuits	Relatively large demand, scope is dependent on rate of return--profits	1. Requirements for foreign plantations 2. Local plantations 3. Local government and "modern" infrastructure
III. Production and Control	Creation, protection and inheritance are defined by tradition	1. Controlled by foreign corporate body through contractual arrangements such as tax holidays and ceilings on taxation 2. Repatriation of bulk of production surplus	1. Banking laws and loan agreements 2. Moribund domestic capital market with a corresponding well-developed and regulated international money market
IV. Power Relations	Normative	1. Normative 2. Remunerative	1. Normative 2. Coercion 3. Remunerative

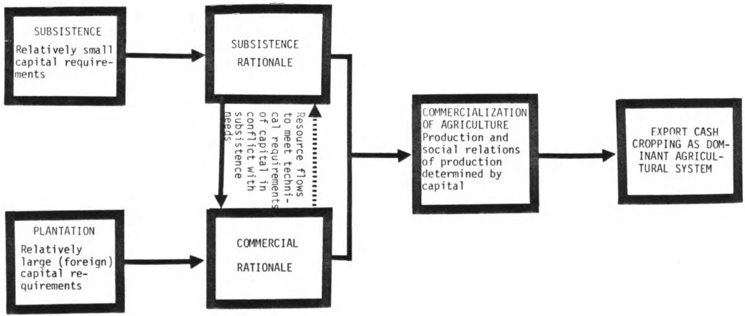

Figure 6.3 Submodel of Capital Within Integrated System of Subsistence and Plantation Production

neither planned nor well financed. Also, Liberia lacked the protection accorded infant industries by metropolitan nations in the form of preferential treatments, quotas, subsidies, and technical assistance. At the same time that Liberia was denied these "benefits" it had to compete with European colonies on international markets for its products. Without the protection extended to other nations, Liberia's coffee and sugar industries which could have provided investment revenues remained stagnant. The existence of rich deposits of iron ore in Liberia was reported more than a century before exploitation began. Western capitalists were reluctant to venture into Liberia as an independent black republic during the heyday of colonial adventure in Africa.

Beyond the unique problems of Liberia as an independent nation, however, the country's leadership was in part responsible for its inability to generate any internal investment capital. The authorities did not only condone but actively participated in the export of Liberian labor, in the process depriving the country of the necessary manpower for internal development. The leadership was also at fault in respect to the nature and circumstance surrounding loans obtained from foreign sources, the servicing of which continues to sap the nation of badly needed investment funds. From late 1940 to the first half of the 1970s, Liberia enjoyed unprecedented economic growth, principally as a result of iron ore production and expansion in rubber outputs which were accompanied by a buoyant international rubber market. But as has been indicated elsewhere, the resulting increase in public revenues was not channeled into development projects.

In general, Liberia is poor and like similarly placed countries has to seek investment capital from other than internal sources. The nation's resort to foreign government, private, and corporate capital has been at the expense of its sovereignty. This has entailed the imposition of outside financial administrators, a banking system tailored to the needs of foreign capital, and a correspondingly moribund domestic capital market. It has also meant repatriation of a large share of production surplus that could have been plowed back into the economy. Foreign control of investment capital implies that areas of investments and their scope are determined independently of Liberia's needs.

The necessity to distinguish between foreign and domestic investments has been stressed in Chapter IV. Specifically, a modified version of the investment function within the Harrod-Domar growth model was suggested in equation 15 as:

$$I = Id + If = Id\ (r,\ Y) + I\ (r) = Id\ (rd,\ Y) + If\ (rd/rf).$$

Available data on subsistence and plantation production are inadequate to fully explore the relationship outlined. However, information from Table 5.6 may be used to clarify the implications of foreign ownership of capital for domestic income and thus, internal savings and investments. These three equations are introduced for this purpose:

$$Y = Yd + Yf \text{ - - - - - - - - - - - - - - } 16.$$

That is, aggregate concession income, Y, is the sum of domestic concession income, Yd, and foreign concession income, Yf. Total domestic concession income is denied thus:

$$Y = WLd + G + Md \text{ - - - - - - - - - - - } 17.$$

where WLd is total domestic concession wages, G, payments from concession to the government (taxes, royalties and rent) and, Md, purchased domestic concession inputs. The corresponding relationship for the foreign concession is:

$$Yf = WLf + Kf + Mf + D \text{ - - - - - - - - - } 18.$$

WLf is total foreign concession wages, Kf, payments to foreign capital, Mf, purchased concession inputs from abroad and D, depreciation on capital investment. The three equations may be combined thus:

$$Y = Yd + Yf = (WLd + G + Md) + (WLf + Kf + Mf + D).$$

From Table 5.6 we obtain

$$Y = Yd + Yf = \$[(12.1 + 13.7 + 2.0) + 8.7 + 34.6 + 22.5$$
$$+ 5.0)] = \$98.6 \text{ million}$$
$$= \$[(27.8) + (78.8)] = \$98.6 \text{ million}$$

All the above figures are drawn directly from Table 5.6 except the two for domestic and foreign purchased inputs. The sum of the two figures, \$24.5 is designated as purchases of materials in Table 5.6.

The distribution of aggregate concession income between domestic and foreign factors of production is critical to an understanding of inability of Liberia to generate internal savings and thus, investments. It also brings into question the growth-without-development hypothesis advanced by Clower and others, emphasizing internal factors of the Liberian economy independently as the major reasons for the underdevelopment of the nation's economy despite significant growth during the 1960s. It is argued here that foreign interests in concessions which account for a large share of investments in Liberia are at odds with the country's need to create internal capital for investments to meet domestic development needs. As outlined in equation 15, domestic investment is a function of both the rate of return on capital and domestic income. Returns to capital investments as indicated in Table 5.6 are very attractive. Production surplus from $31 million investments by the concession amounted to $48.3 million in 1960. The major factor limiting internally generated capital investments is the small share of income going to internal factors of production. In 1960, $27.8 million went to internal factors as against $78.8 million credited to foreign factors, primarily capital.

Shoup (1970) estimated internal Liberian savings and investments at $19.2 and $1.2 million for 1967 and 1968 respectively. Without deductions towards payments for foreign factors--capital and labor--internal savings and investments would have amounted to $109.2 and $96.8 million for the two years.

The organization of "native" Liberian groups has been characterized as stateless formations. Within these social formations the family, kin groups, and community constitute production units with roles defined by ritual office, age, and gender. Tradition and secret societies serve as the instruments of control; the nature of power relations is largely normative. To the extent that communities had a class of slaves and peons, coercion underlined their relationship to the rest of the community. By and large, the communities were small and the absence of centralized state organizations that could bind communities together to enhance their strength made individual communities vulnerable to outside intrusions. In contrast to the communal (subsistence) organizations, the structure of the plantation is rigid. There are clear distinctions between owners, managers, and

Table 6.4 Organizational Aspects of Integrated System of Subsistence and Plantation Production

Parameters	Subsistence System	Plantation System	Integration of Plantation and Subsistence
I. Groups	Family, kin and community: functions defined by status, age and sex	Owners, Management, Labor	1. Hierarchal organization with a small cadre of expatriate managers at top and a large number of unskilled local laborers at the bottom 2. Local absentee farmers employing similar labor as the plantations 3. Political functionaries
II. Relations	Defined and controlled by tradition	Gaps between owners, management, technicians and labor	Social and occupational distinctions maintained through a combination of industrial and traditional sanctions: 1. Expatriate staff whose solidarity is based on race and location in hierarchy of plantation organization 2. Local supervisory staff tied to plantation labor on the basis of kin and ethnic relations 3. Americo-Liberian political functionaries and absentee landlords
III. Mobility	1. Roles are differentiated and ascribed by tradition. Status defined by age, ritual office 2. Size of labor available or "controlled" by an individual or a given group	1. Rigid distinctions between owner, management, and labor 2. Limited mobility within scope of a given group	"Class differentiation with the subservient position of labor ensured by the absence of labor unions in the agricultural sector."
IV. Power Relations	1. Normative 2. Coercion	1. Normative 2. Coercion 3. Remunerative	1. Normative 2. Coercion 3. Remunerative

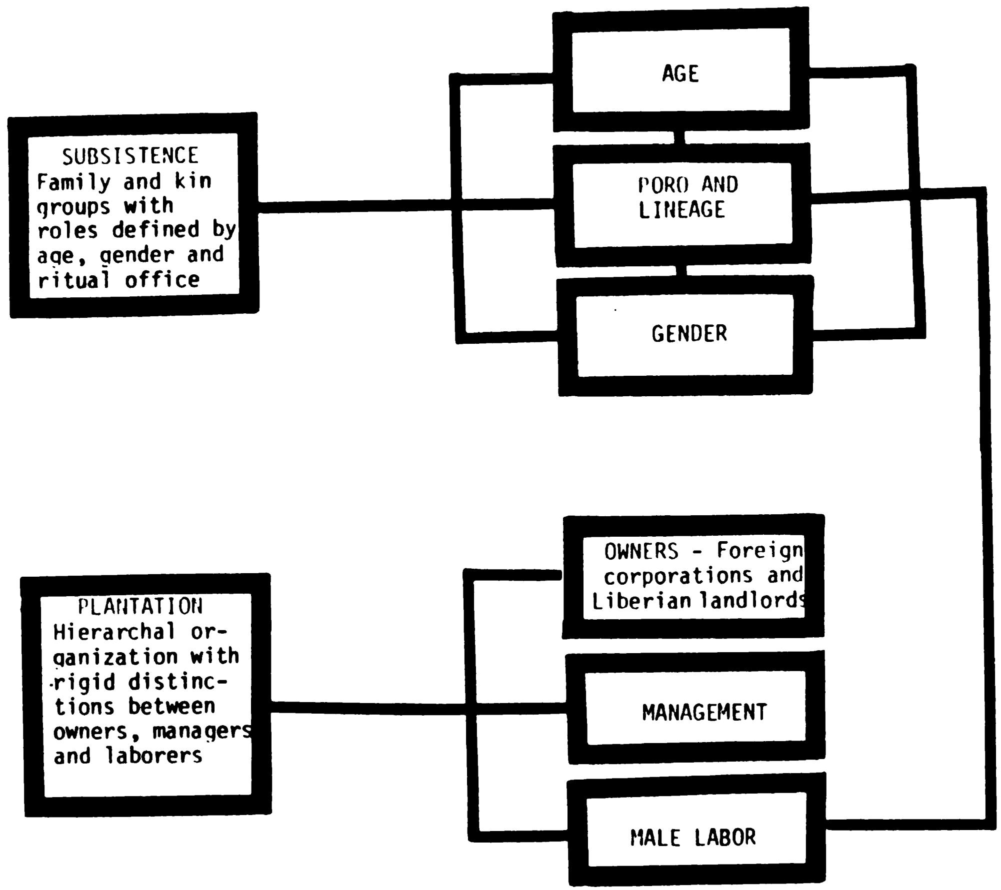

Figure 6.4 Organizational Submodel of Integrated System of Subsistence and Plantation Production

laborers. Social and occupational distinctions are maintained through a combination of industrial and traditional (native Liberian) sanctions.

To the extent that the plantation organization has emerged as the dominant system in Liberia, the reason may be attributed to the power (remunerative) of capital, a system of compulsion (coercion) instituted by Americo-Liberians, and the nature of relations (normative) within "native" Liberian society itself.

Distinctions between Americo-Liberians (an urban Christian elite) and "native" Liberians as rural agriculturists has been maintained throughout Liberia's history. This has been effected, on the one hand, through force and the exclusion of "native" Liberians from the rights and privileges accorded by the nation's constitution. On the other hand lay the inability of the "native" Liberia authority structure to muster enough collective resistance to withstand manipulation by the Americo-Liberian government. The pressure of the government's need for capital investments and direct Americo-Liberian interests in rubber cultivation (as absentee landlords) served as powerful incentives for the ruling elites not only to submit to the dictates of the plantation organization, but also to extend to it their own coercive and exploitative national organizational structure.

Integration of subsistence and plantation systems leads to permanent conflicts between agronomic and economic ends. The dominant rationale for technological choices shifts from subsistence--relatively labor-intensive, food-crop production under shifting cultivation--to the financial logic of plantation production--relatively capital-intensive, cash-cropping under a system of monoculture. The shift

Table 6.5 Agri-Ecological Characteristics of Integrated System of Subsistence and Plantation Production

Parameters	Subsistence System	Plantation System	Integration of Plantation and Subsistence
I. System of Production	1. Shifting cultivation 2. Labor intensive 3. Crop combinations and multiple cropping	1. Sedentary agriculture 2. Relatively capital intensive 3. Monoculture	1. Increasing emphasis on monoculture 2. Dictates of ecological and socio-economic changes leading to alterations in the types and number of crops raised under the system of shifting cultivation
II. Technology	1. Relatively simple and patterned after the natural environment	1. Large investments in machinery and transportation system 2. Hybrid planting stock 3. Chemical support systems	Plantation technology and infrastructure extended to local private farms; mainly those devoted to plantation crop production
III. Crops	Rice, cassava and kitchen crops	Rubber, cocoa, coffee, sugar cane	Shift to single crop farms within the commercial "agriculture" sector
IV. Risks	Spread over range of crops and wide distribution of villages and farms. Relatively low levels of risks of crop failure resulting from insects and other environmental factors	Single hybrid crop entails higher levels of risk from insects, weeds and environmental factors	1. Risks associated with hybrid plantation and other cash crops. 2. Shorter fallows and declining soil fertility compound crop damage by insects and weeds
V. Technical Choices	Subsistence rationale	Financial rationale	Persistent conflicts between agronomic and economic ends

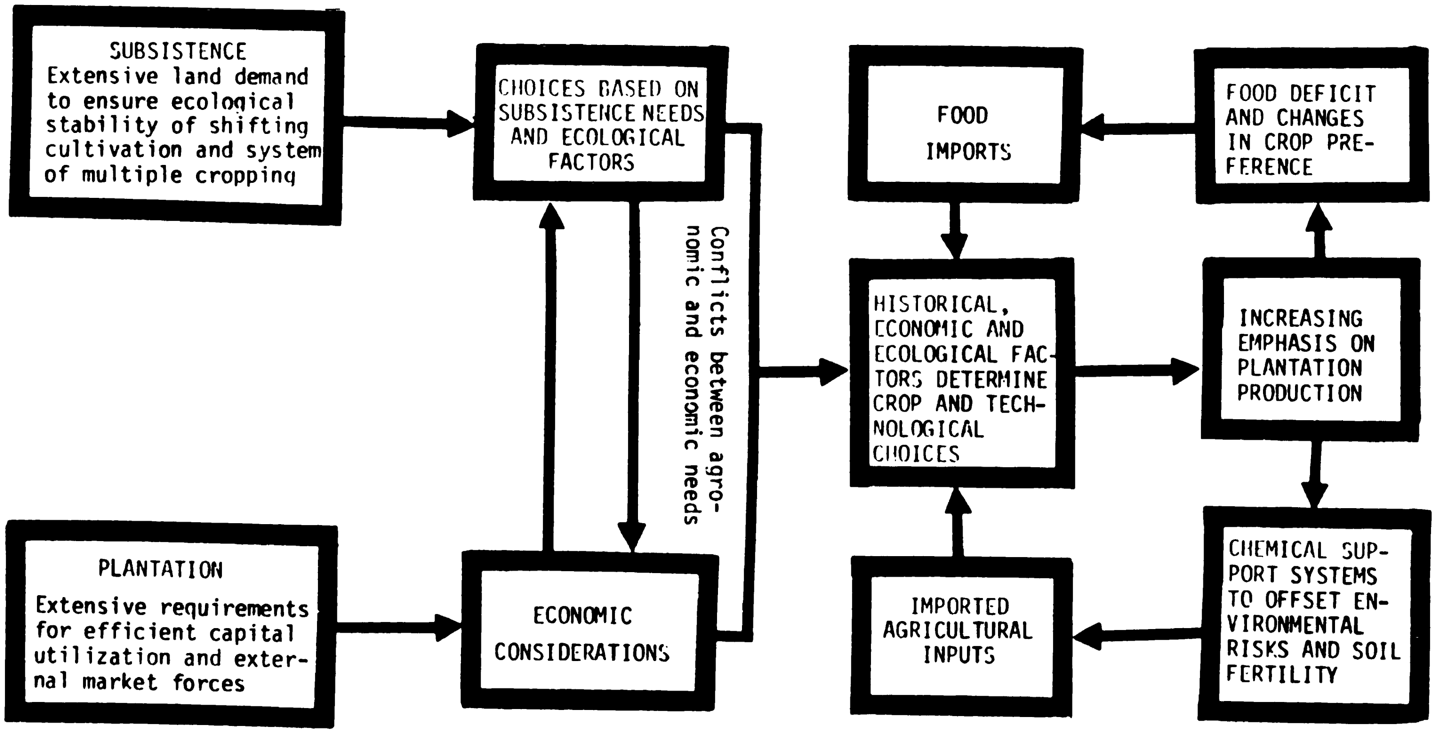

Figure 6.5 Agri-ecological Submodel of Integrated System of Subsistence and Plantation Production

throws into relief complex articulation of social, political, economic, and ecological relations which are at the same time products and causes of differential expansion in food (subsistence) and cash (plantation) crop production. That is, resource allocation tends to favor plantation production and the system of monoculture that it entails. And as a result, food-crop production and its related system of multiple cropping (crop mixtures) and stable fallows suffer and lead to declining food output. Making up for the ensuing food deficits calls for further expansions in plantation production (by diverting more resources from subsistence) as a way of generating foreign exchange to meet food import bills.

In the social realm, this process implies undermining the autonomy of traditional subsistence agriculture and making self-sustaining production units dependent on a market economy for their food needs. The diversion of resources--land and labor--to accomplish the expansion of plantation production is effected through the political (coercive) power of the ruling elite and economic (remunerative) resources of plantation interests. Responses of the subsistence system as outlined elsewhere include adjustments in the traditional division of labor, changes in crop preferences, shorter fallows, and increasing incidence of monoculture. Adjustments within the subsistence system lead to ecological changes (declining soil fertility, deflected fallows, etc.) which in turn impact negatively on levels of food crop production. This serves to "push" more labor out of subsistence into plantations as migrant wage laborers.

In general, the agri-ecological changes resulting from the integration of the two systems of agricultural production may be envisaged as self-amplifying loops favoring plantation production. Within successive loops, the incidence of Liberia's dependence on external sources for food increases at the same time that the entire agri-ecological system becomes progressively unstable and prone to both natural and "man-made" disasters. Despite these signs of decay, however, Liberia is caught in a "production trap" with no easy way out--a dilemma shared by all countries with heavy past investments in export agricultural products.

The concept of agri-ecological system is a man-nature-technology relationship. Man may be viewed as being at the center as both the system's curse and its potential. In that sense, the decay outlined may be the very source of constructive and lasting change. The battle cry of "RICE!" has already been sounded by many Liberians.

The foregoing discussion has focused on components of the plantation and subsistence systems, as well as on the dynamics of the integration of the two systems of production. I now turn to the collective implications of the inferences drawn with regard to labor, land, capital, organization, and agri-ecological aspects within and between subsistence and plantation production. The five questions outlined in Chapter IV are used as the context of explicating the dynamics of the insertion of Liberia into the world capitalist system as a dependent plantation economy.

a. What is the nature of power relations respectively within plantation and subsistence systems of agricultural organization?

Power is diffused within the subsistence system, while it is concentrated among groups within the plantation system of agricultural organization. The observed difference emerges from the control and uses of capital. The use of capital is minimal in subsistence production, and whatever capital is available is either collectively owned or shared by individuals and groups. Where and when capital accumulation by either individuals or groups occurs, the social (kinship) organization of such system has built-in mechanisms for its redistribution. In general, the ends in production are geared towards a given group's collective subsistence and welfare.

The plantation organization, on the other hand, is a capitalist venture with vestiges of its inception as a colonial activity. It distinguishes between owners of capital, managers, and unskilled laborers within a hierarchical structure that is maintained partly through the remunerative power of capital and the coercion characteristic of colonial ventures. To the extent that the power structure of the plantation organization predominates, this may be explained in part by the fact that power within the subsistence organization is diffused and can be undermined relatively easily.

b. How do the respective power structures within the plantation and subsistence system define independently and collectively the uses of land and labor?

Power relations in the uses of labor within subsistence are based on normative and coercive mechanisms for compliance. Labor used to meet subsistence needs of kin groups and communities are ensured through normative sanctions. Division of labor is on the basis of gender, age, and ritual office. Conflicts are relatively minimal; besides gender roles which are rigidly defined, aging and initiation into various ritual offices ensure that all members of a community at one time or another share in all responsibilities and privileges associated with the labor process. Conflicts arise primarily where coercion is used to acquire labor through peonage and inter- and intra-tribal slavery. But even under such admittedly coercive means of labor acquisition within the traditional system, the abuse of peons and slaves is relatively minimal when compared to the system of forced plantation labor which the traditional system of labor coercion was later turned into.

The plantation employs all three types of power--normative, coercion,and remunerative--to meet its labor demands. In its remunerative context, the plantation views labor as a commodity for the production of an export cash crop. Wage incentives are, however, inadequate to attract labor to meet the plantation's labor needs, hence, compulsion is the primary means of labor acquisition. The plantation relies on the internal (Liberia) structures of coercion to bolster its own power structure.

The same power relations characteristic of the uses of labor within the two systems are extended to land. Within subsistence, land is viewed as a communal good, while it is a "capitalized" asset in the plantation. On the whole, the uses of labor and land are influenced more by the needs of the plantation. The emergence of landlords, landless groups, and an increasingly shrinking availability of land and labor for subsistence are related to, on the one hand, the plantation's large appetite for land and labor and the system's power to back up such demands, and on the other hand, the support provided to the plantation by Americo-Liberians and other local elites.

c. <u>What are the forces which led to the emergence and crystallization of internal groups whose power and influence are derived primarily from external plantation interests?</u>

Americo-Liberian hegemony may be explained by the settler population's effective manipulation of traditional African institutions and leadership, Christianity, and arms support provided by both sympathizers and detractors of Liberia as an experiment in black self-government. The emphasis placed on the plantation system as the framework of Liberia's economic ties to the world's capitalist system also enhanced the status of the leadership of the settlers (as an aristocracy of wealth and means) since they stood to gain further economic and political power.

All the initial treaties by which lands were acceded to the settlers by African chiefs were given different interpretations by each of the parties involved. Representatives of the American Colonization Societies viewed these treaties as instruments ensuring their absolute right to land, while the local chiefs saw them as temporary usufructual rights. The ensuing conflicts and their related violent confrontations pitched Christian ideals against African values. The colonization societies and the settlers prevailed by playing African communities against one another through material rewards; and when that failed, by the force of arms.

It has been asserted that many of the original settlers were disdainful of agricultural work but this does not mean that they did not engage in agriculture--along the familiar lines of the southern United States plantations. A perusal of the demographic records of the settlers indicates that a significant proportion came from plantations and perhaps carried this cultural medium with them.

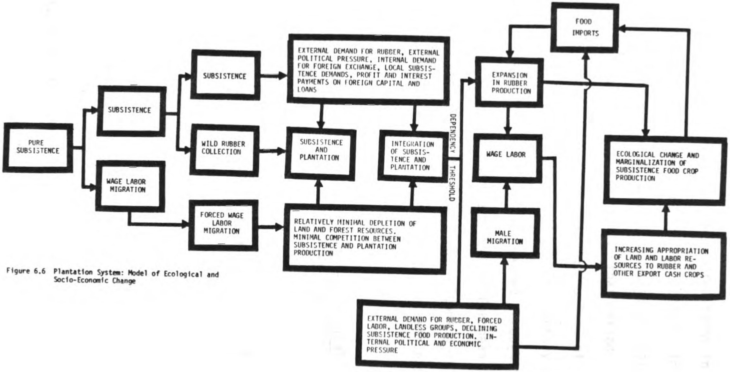

Figure 6.6 Plantation System: Model of Ecological and Socio-Economic Change

Settlers from Barbadoes, many of whom opted for the interior rather than the coastal settlements, were especially important in this regard. Numerous references to large sugar and coffee farms in Liberia during the nineteenth century, as well as settler attempts to secure adequate labor for these farms, will suggest at least an incipient plantation system of agricultural production in that period. The neglect (due to labor shortages) and accompanying decline of these coffee and sugar farms at the turn of the nineteenth century coincided with Liberia's economic woes which have lasted through the present century. The same period saw the threat of European powers to Liberia's existence and settler hegemony. By welcoming or acceding to pressures to accept Firestone investments, the settlers stood to regain their dwindling power.

d. <u>What are the historical, societal, and agri-ecological factors whose change account for compliance trends within the plantation organization?</u>

Figure 6.6 depicts the results of the integration of subsistence and rubber production emerging in Liberia as a case study of a plantation economy. The model is a modified version of Figure 4.3 in Chapter IV which has been adapted from Ellen (1979). It is self-explanatory in its attempt to view the social, economic, political, and ecological relationships that serve to trap Liberia into plantation production and define the nation's status as a dependent economy. The model is linear in its historical evolution up to the point where plantation and subsistence systems are integrated. Beyond this threshold the flow is circular with increasing amounts of inputs channeled from subsistence into plantation production. The linear phase of the

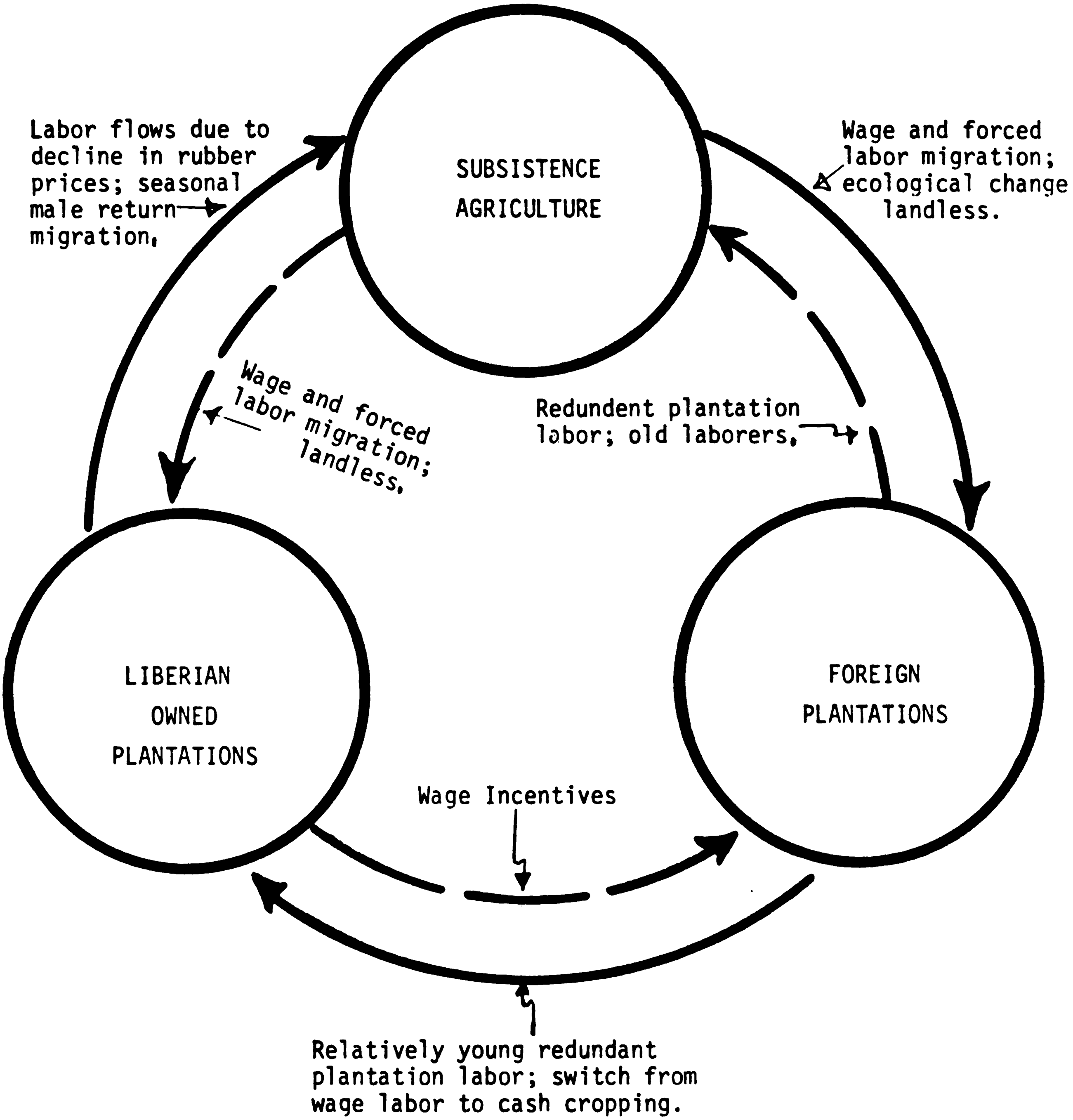

Figure 6.7 Labor Flows Within Agriculture in Liberia

model is ensured by the power relations as outlined with respect to Liberia's political economy. The system of compliance developed during this phase is fed into the latter circular phase to become "self-generating." All dimensions of the agricultural system defined in the study feed on one another to contribute to the persistence of the system depicted by the model. The relative significance of each sub-model--labor, land, capital, organization, and agri-ecological--is, however, a difficult empirical question.

The dual effect of ecology and state economy is critical to understanding compliance trends within the plantation system. For instance, the flows of labor as charted in Figure 6.7 cannot be understood independently of the historical, economic, social, and ecological complexes that underpin labor flows within agriculture. Specifically, the exclusionary processes leading to "classes" of landless and land-owning Americo-Liberian gentry and the devotion of more productive and accessible lands to cash cropping impact directly on labor flows from subsistence into rubber production. Also, foreign ownership of a bulk of capital investments in agriculture limit local savings and investments within subsistence, leaving plantation wage labor as the major alternative to subsistence pursuits. Again, the reproduction of the plantation organization in internal socio-economic relations, fragmentation and subordination of traditional authority to the dictates of the plantation system, and the use of traditional idioms as cover for wealth accumulation by government-appointed chiefs--plus labor control on plantations--ensure the flow of labor from subsistence and its retention on plantations. The state's participation in recruitment ensures that labor flows from subsistence into Liberian and foreign plantations. The creation and maintenance of social boundaries and encouragement of two distinct groups of Liberians also ensure Americo-Liberian power and hegemony.

The historical, societal, and agri-ecological factors that account for compliance trends within the plantation system are complex. They may be viewed as first, second, third, etc. order consequences and, as depicted in Figure 6.6 and the changes illustrated in Figure 6.7 with respect to labor, are better conceived as a power and systems paradigm. The application of power within the plantation system and the responses of groups and individuals are in part related to the different goals of subsistence and plantation production. The type of power--remunerative, coercive, normative--employed by each of the two systems of production vary, with compliance resulting from the integration of subsistence and plantation production favoring the latter. With respect to land, a normative system of control within subsistence that emphasizes collective over individual interests is at odds with the needs of the plantation. In the Weberian sense of the role of ideas in social action, the traditional African idiom of land ownership and use was contrary to the individualistic orientation of the Americo-Liberians and the profit motive of foreign plantations. The use of remunerative and coercive power by Americo-Liberians and foreign plantation interest in land acquisitions was, therefore, double-edged. On the one hand, it de-emphasized the traditional idiom and its potential conflict and, on the other, substituted in its place the idea of private ownership using coercion and economic rewards as instruments of compliance. In the case of labor, the traditional normative and coercive means of labor control could be effectively combined with the economic power (capital) of the plantation to serve its needs. While the hierarchical organization, power distribution, and associated rewards of the plantation become dominant as a result of the integration of plantation and subsistence production, the integrated system also borrows from the subsistence organization. Financial rewards to chiefs for their assistance in forced labor recruitments help to bolster their power within the communities to make further labor recruitments easy. The organization of plantation labor along ethnic and communal lines also ensures the effective use of traditional norms in labor control.

e. Finally, what are the general propositions that may be derived from the foregoing with respect to plantation activities?

1. Emphasis on labor exports and plantation crop production, as outlined, submerge all internal economic interests, other than secondary ones enjoyed by Americo-Liberians and a few "native" elites, in the dictates of capitalist (plantation) agriculture.

2. The predicament of Liberia in the utilization of its agri-ecological system to meet the food needs of its population (especially rice) may be better understood in terms of historical antecedents and general social mechanisms that govern the uses of land resources and labor.

3. Components of Liberia's agricultural economy--labor, land, capital, organization, and agri-ecological--may be interpreted as relational social experiences that give reality to inequality as between groups and individuals as well as an urban-rural dichotomy.

4. The tripartite relationship between the United States government, Firestone, and the Liberian government emerging around the

period of Liberia's labor investigation by the League of Nations in the 1920s was forged independently of the interests of "native" Liberians. Rather, it was based on United States strategic needs and the benefits to be derived from Firestone investments by the Americo-Liberian dominated government.

5. To the extent that rubber cultivation has been accepted as an innovation by Liberians, it serves to buttress Americo-Liberian hegemony rather than as a means of bringing subsistence producers into a cash economy as independent proprietors.

Communalities and Contrasts Between Liberia and Other Plantation Societies

Liberia shares many of the attributes of plantation societies in that the nation's economic system is characterized by institutional arrangements favoring the production and export of one principal agricultural commodity--rubber, and a single raw material--iron ore, and that the bulk of capital investments is in foreign hands. But upon closer examination of the Liberian economy, characteristics are found that contrast to generalizations about other plantation societies. Nevertheless, these contrasts serve to reinforce Liberia's situation as a dependent plantation economy.

There are social and economic distinctions between foreign plantation owners, Americo-Liberians, and "native" Liberians, with the last group constituting the source of plantation labor. But "native" Liberians, to the extent that they are involved in plantation labor, may not be adequately described as a rural proletariat. That is, as a group, their plantation experience has not imbued them with a "rural proletarian consciousness" as a result of association with plantation labor, dependence on imported goods, and a lack of productive assets, especially, land (Mintz, 1974). The reasons are to be found in the system of organization and control of plantation labor, as well as in the ties which Liberian plantation labor maintains with its rural origins. The use of kin idiom as the context of work organization and labor control on plantations, traditional communal rights that ensure such labor access to "native" Liberian lands--however limited such lands are--serve as veneer to cloud and dampen the capacity of plantation labor to perceive its collective exploitation. An official ban of unions within the agricultural sector also aids in limiting grievances to parochial concerns of kin groups, thus diffusing any collective awareness of labor's subservient position within the plantation organization. Race and color perform similar functions within New World plantations.

In Liberia, as is the case in other plantation societies, a system of compulsion is central to both labor and land acquisition. As regards labor, slavery in its classic form has been absent and there are no clear indications whether "inter- and intra-tribal slavery" has ever been used directly for the purposes of internal plantation production. What is clear is that coercion--wage labor recruitments and forced labor without wages--has been the major means of supplying labor to the plantations. Without a system of compulsion it would be difficult for the plantations to meet their labor needs.

> In most of the countries in which plantations are important they coexist with peasant producers who normally are engaged in farming cash crops (sometimes the same crop as the plantation) in addition to providing for their own subsistence. These peasant

> farmers are affected by the plantations in at least two important ways: competition for land and other resources and the provision of wage work on the plantation to supplement their incomes from the main preoccupation of farming on their own account. What evidence there is suggests that normally peasant farmers are reluctant to undertake wage work on plantations. This clearly is the case in the West Indies (and other ex-slave plantation areas) where the legacy of slavery has resulted in high premium being placed on an existence independent of plantation (Beckford, 1972: 18-19).

In the Liberian case also, land expropriations limit the scope for alternatives to plantation wage labor as means of supplementing subsistence production. Without land expropriation and forced labor, it is likely that "native" Liberians could use their labor to exploit land and forest resources or engage in activities within what has been described as the "informal sector" to generate revenues to meet their cash needs for taxes and the cost of the limited range of imported manufactured goods that they consume. In many instances, wage labor has become a substitute rather than supplement to subsistence production. In this sense, rubber cultivation in Liberia has not been incorporated into subsistence production. The integration of plantation rubber production and subsistence activities is to be envisaged as occurring along the periphery of the subsistence system, with urban Americo-Liberian farm owners drawing from the rural areas for their cheap labor.

This study has stressed the negative impact of plantations on food crop production. This is a departure from Beckford's assertion that

> ... in almost all instances, plantation production did not displace previous production and that peasant production of plantation crops was more often than not grafted on its subsistence production without any significant diminution, if any, of subsistence production. Java is perhaps the only notable exception

> to this general observation. Apart from this case, plantation agriculture everywhere became established initially in open resource situations (Beckford, 1972: 186).

This is a rather curious assertion. First, the traditional agricultural system associated with subsistence-shifting cultivation is an extensive system, par excellence. Both its stability and viable subsistence are predicated on existence of large land areas and associated forest resources. Unless the traditional agricultural technology is changed, any other demands imposed on available land resources will profoundly affect levels of food-crop production. Guyana represents an instance where technological changes (rice culture introduced by indentured immigrants from India) have helped to negate the impact of plantations on food-crop production (Rodney, 1981). In general, most plantation areas rely on imports to meet a very significant share of their food needs, basic carbohydrates and proteins as well as "luxury" food items. The West Indies in particular are deficit food areas; Haiti being one extreme example. Whether decline in subsistence production is attributed to relative land or labor shortages, the plantation is an underlying cause.

Liberia as a dependent plantation society shares the problems of similarly placed societies and is plagued by the same questions regarding ways of evolving solutions to the problems attendant upon the plantation system of production. Principally, it is a matter of how to dismantle the plantation infrastructure and re-allocate resources in ways that will ensure expanded economic activity for more Liberians and lessen the nation's external dependence. As the experiences of the two polar examples of Cuba and Guyana indicate, there are no clear-cut choices.

CHAPTER VII

SUMMARY AND CONCLUSIONS

Internal "contradictions" within Liberia's plantation economy have been stressed first, as counterpoint to studies emphasizing external relations and, second, as a way of gaining insights into those internal problems and issues that need to be addressed as a precondition to evolving measures to ensure the disengagement of Liberia from its dependent status. Within the models outlining the integration of plantation and subsistence production, the plantation has emerged as the dominant agricultural system in Liberia. The dominant status of the plantation is related, at one level, to the system's access to, and the power associated with capital and technology. At another level, it has been suggested that internal relations that characterize subsistence production, a history of exploitative use of labor and land by Americo-Liberians, and agri-ecological changes that undermine subsistence food crop production all reinforce the dominance of the plantation system. There are internal exclusionary processes that ensure the maintenance of distinctions between capitalists and laborers, landed and landless, rural and urban areas, and Americo-Liberians and "native" Liberians, as well as between ethnic groups. These exclusionary processes are viewed in this study in terms of the power structures underlying and defining the respective production organization of subsistence and plantation systems in the uses of labor, land, capital, and their augmentation by agri-ecological factors.

The integration of subsistence and plantation production has entailed the incorporation of the Liberian economy into the world capitalist system. But in general this has not led to a crystallization of the social structures associated with capitalist production. Despite increasing ties with external capitalist markets and the participation of a large number of Liberians in plantation wage labor, there are powerful forces which inhere in both plantation (external) and subsistence (internal) production systems to prevent the emergence of an agricultural proletariat as described for other plantation societies. This may be attributed to the fact that, in principle, the character of labor remains the same in the plantation as in subsistence production. That is, plantation labor remains an unskilled, undifferentiated, and an interchangeable agricultural input, without any of the benefits associated with the division of labor in the process of socio-economic change. Also, plantation rubber production has not served as an impetus for rubber production by subsistence farmers. Local participation in rubber production has been restricted largely to Americo-Liberians who emulate the foreign plantations in their preference for large-scale production and the use of cheap unskilled labor. Competition between plantation (rubber) and subsistence (rice) production in Liberia furnishes an example of the antagonism between capital and labor. But in this instance, the foreign ownership of capital and undifferentiated labor and non-market factors that define labor use are the critical features characterizing production relations. Over time, increasing foreign investments in plantation wage labor, dependence on rubber exports for foreign exchange, and a corresponding diminution in food-crop production have served to buttress Liberia's external dependence and to ensure hegemony by Americo-Liberians who control the state apparatus. These developments account for the underdevelopment of Liberia's agriculture in particular and the nation's economy as a whole.

The Dependency School asserts that in a single and an unevenly developed world there can be no dichotomies but rather dialectical unities. In this regard, the underdevelopment of peripheral formations is seen in terms of the relationship between these formations and metropolitan (center) nations. The present study supports this view, but with the additional clarification that persistent underdevelopment is occasioned collectively by "contradictions," both internal and external to a given social formation. In the case of Liberia, the dominance of agricultural production by foreign plantations and the restrictions imposed by Americo-Liberian interests on the ability and chances of the agrarian population to accumulate material and social resources are seen as fundamental to underdevelopment.

The world's struggle for rubber as an industrial and strategic raw material, the circumstances surrounding the inception of plantation rubber production in Liberia, and the resulting socio-economic impact portend very little which is not familiar. Similar developments and their consequence are subsumed under such themes as imperialism, colonialism, and neo-colonialism. However, by emphasizing the internal factors that have contributed to the external dominance of Liberia, the struggle for the nation's development is carried byyond anti-imperialist denouncіations, and the anti-capitalist sentiment inherent in the Dependency School is placed in its proper context. That is, the underdevelopment of Liberia is seen as resulting both from restrictions imposed by the foreign ownership of the nation's capital investments and the effect of internal socioeconomic relations on the process of internal accumulation by the agrarian population. Liberia's underdeveloped and dependent status emerges not from the institution of capitalism *per se*. It is rather the exploitative nature of foreign capital and the constraints imposed by internal factors on the chances for Liberians to evolve as capitalists themselves that restrain development.

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