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# **Development Through Dualism?**

## **Land Tenure, Policy, and Poverty in Malawi**

David E. Sahn  
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CORNELL FOOD AND NUTRITION POLICY PROGRAM



**DEVELOPMENT THROUGH DUALISM?  
LAND TENURE, POLICY, AND POVERTY IN MALAWI**

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## ABBREVIATIONS

<b>ADC</b>	Agricultural Development District
<b>ADMARC</b>	Agricultural Development and Marketing Corporation
<b>ASA</b>	Annual Survey of Agriculture
<b>DRC</b>	Domestic Resource Cost
<b>FAO</b>	Food and Agricultural Organization
<b>GDP</b>	Gross Domestic Product
<b>IFAD</b>	International Fund for Agricultural Development
<b>MK</b>	Malawi kwacha (1 MK = 100 tambala)
<b>MT</b>	Metric Tons
<b>NDF</b>	Northern District Fire-Cured (Tobacco)
<b>NPC</b>	Nominal Protection Coefficient
<b>NRDP</b>	National Rural Development Program
<b>NSO</b>	National Statistical Office
<b>NSSA</b>	National Sample Survey of Agriculture
<b>SDF</b>	Southern District Fire-Cured (Tobacco)
<b>SSA</b>	Sub-Saharan Africa
<b>TAMA</b>	Tobacco Association of Malawi
<b>UNICEF</b>	United Nations Children's Fund
<b>USAID</b>	United States Agency for Institute Development
<b>VMP</b>	Value of Marginal Product

## FOREWORD

Like many countries in sub-Saharan Africa, Malawi's agriculture is characterized by a dualistic structure, where the smallholder, largely subsistence sector exists along with the commercialized, export-oriented estate sector. The differences between these two sectors originate in the colonial period. However, the evolution of policy since independence has reinforced the duality.

Despite attempts to restore sustainable growth through structural adjustment during the past decade, policy has left the dualistic nature of agriculture largely untouched. Rather, adjustment has attempted to address weaknesses, particularly in smallholder agriculture, given the legal and institutional framework that differentiates it from estate farms.

This paper explores how failure to alter the laws and regulations contributes to widespread poverty and to poor agricultural performance. In particular, it serves to illustrate the difficulties in breaking down structural impediments to growth and equity, despite the purported commitment of donors and the Government to structural adjustment in Malawi.

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March 1991

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## 1. INTRODUCTION

Land policy, linked inextricably with marketing and pricing policy, is the cornerstone to Malawi's dualistic agricultural system and thus to the nation's entire economy. Inherited from a colonial past, this dualistic system was designed and justified as propelling growth through agriculture. Estate-based, export-oriented agriculture was to be the national growth pole.

Malawi's early record was viewed as testimony to the success of this strategy. With agriculture composing more than 40 percent of Gross Domestic Product and directly generating more than 70 percent of the country's export revenues, per capita growth performance in the 1970s reached 3.9 percent per year. In contrast, the Africa region's mean per capita growth rate was 1.1 percent during this period, with Malawi ranking seventh highest of 30 countries for which such data are available.

The 1980s, though, have cast a shadow on this record and raised some troubling questions. In particular, Malawi's average annual GDP growth rate in the 1980s was recorded at -1.5 percent, which made Malawi rank only twenty fifth out of 36 sub-Saharan African (SSA) countries with respect to growth performance over the past decade (Table 1). Its growth was slower than the mean regional rate of -0.5 percent per year. Consequently, Malawi remains one of the poorest countries in the region. With a per capita GDP of only \$176 per year, Malawi ranks thirty fourth out of the 38 countries in economically impoverished sub-Saharan Africa.<sup>1</sup> The general constraints of low aggregate incomes are compounded by the inequality of the income distribution (Pryor 1988). Poverty apparently remains not only present, but also pervasive.

The issue in Malawi is not whether the land and associated agricultural policies have meant an inherent trade-off between growth and poverty. The issue in the Malawian context, rather, is whether this policy set has compromised both poverty and growth. This paper argues that the poverty

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<sup>1</sup> There has also been an increasing awareness of the low levels of Malawi's living standards. The illiteracy rate of 59 is higher than the SSA average of 54, with Malawi ranking seventeenth out of 29 countries for which data are available. With an infant mortality rate of 163 in 1985, Malawi's performance is among the worst; the region's average is 120. Furthermore, by 1986 results of the 1980 to 1981 National Sample Survey of Agriculture began to reveal the extremely weak nutritional status of Malawi's rural population. More than 55 percent of smallholder sector preschool-aged children suffer from long-term, chronic malnutrition (i.e., stunting), a figure that is considerably higher than every other country in Africa for which data are available.

Table 1 - Selected Economic and Social Indicators

Indicators	Malawi's Rank	Out of Total	Values	
			Malawi	Mean
1987 GDP (million US\$)	25	43	1,307	3,151
Average annual percentage change, GDP 1971-79	7	40	7.50	3.90
Average annual percentage change, GDP 1980-87	23	36	1.54	2.47
1987 GDP per capita	34	38	175.72	513.80
Average annual percentage change, GDP per capita				
1971-79	7	39	3.89	1.08
Average annual percentage change, GDP per capita				
1980-87	25	36	-1.50	-0.52
1987 population	18	40	7,438	11,375.90
Average annual percentage change, population 1971-79	11	40	3.06	2.68
Average annual percentage change, population 1980-87	18	40	3.08	3.00
1987 population density (people per square kilometer)	8	40	63.03	11.24
Infant mortality rate 1985	29	32	163	119.80
Percentage change, infant mortality rate 1975-85	14	32	-14.44	-14.50
1985 calories consumed	9	43	2,415	2,158
Percentage change, calories consumed 1970-80	15	43	5.83	2.92
Percentage change, calories consumed 1980-85	24	43	-1.51	-1.11
Average annual percentage change, calories consumed				
1971-79	11	43	0.78	0.27
Average annual percentage change, calories consumed				
1980-85	29	43	-0.42	-0.05
Illiteracy rate 1985	17	29	59	54
1985 gross enrollment ratio	17	28	64	75
Percentage change, gross enrollment ratio 1980-85	12	28	4.29	7.28

Source: World Bank (1989c); World Bank (1989d).

Notes: 1987 GDP figures are from UNDP/World Bank, African economic and financial data, p. 20. Infant Mortality Rate ranked in increasing order; IMR rate of change ranked by greatest decrease. Illiteracy rate figures are from 1989 World Bank Atlas, ranked in increasing order of illiteracy.

problem in Malawi has, in fact, been critically defined by the dualistic tenorial structure inherited from the colonial era and reinforced by government policies. Land and related agricultural policies have played a crucial role in determining both the aggregate economic performance and the livelihood of the pervasively poor rural population in Malawi. Moreover, the structural duality of agriculture, imposed by the rules and regulations applicable to land use, continues to be a current constraint to poverty alleviation, to productivity, and to growth itself.

In developing this argument in the next section, we will discuss the history and dualistic nature of Malawi's agriculture. This argument is followed by an examination of the characteristics and causes of poverty among smallholders, estate workers, and tenants, and of how policy has contributed to stagnating productivity and limited equity. Our concluding comments describe the role of policy in improving Malawi's economic performance and in raising living standards.

## 2. HISTORY AND NATURE OF DUALISM IN MALAWI

The evolution of policy in Malawi since before independence has fostered a sectoral duality in agriculture: agricultural land falls into two major categories.<sup>2</sup> The first is the traditional customary land that existed before independence. It is viewed as belonging to the entire community: "...to the living, the dead, and the unborn."<sup>3</sup> Community residents get access to land through the village headperson who, as custodian of communal land, has the right to allocate holdings.<sup>4</sup> Through this channel, village residents attain occupation rights and usufructuary rights only.<sup>5</sup> They are not vested with ownership rights. Customary land, therefore, cannot be alienated, - namely assigned, charged, or mortgaged. Nevertheless, rights of use and occupation can be transferred between generations.<sup>6</sup> Residence and use are generally sufficient to maintain usership rights on land from generation to generation.

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<sup>2</sup> A third category, public land, is addressed later in the paper.

<sup>3</sup> Mkandawire and Phiri (1987), p. 10.

<sup>4</sup> Given the headperson's role as custodian of village lands, use of such land has traditionally been contingent on the following: residence in the village, a verbal agreement with the headperson regarding terms of use, the payment of an annual tax by the smallholder to the headperson, and the presentation of an annual gift by the smallholder to the headman. The presence of witnesses at these events ensures that the implicit contract is binding. Such rights, once allocated, are lost only if the landholding is abandoned or if the farmer in question is expelled from the village. Expulsion occurs only if the smallholder is accused of a serious offense, such as witchery, or of treachery toward the village chief.

<sup>5</sup> Use rights, furthermore, allow cutting those trees for firewood that were not planted privately as well as allowing livestock to graze on the village commons and on agricultural land in the off-season.

<sup>6</sup> This transfer is done in accordance to the inheritance rules of the ethnic group in question. In Malawi the majority of the population, residing in the more densely populated south and central areas of the country, follow matrilineal rules of inheritance. Land is passed on to a group of consanguine sisters (a sorority), their husbands moving to live on the wives' land (uxorilocal residence). Some northern ethnic groups follow a patrilineal pattern. For more details, see Riddell (1985).

## THE INTRODUCTION OF DUALISM: THE COLONIAL ERA

The colonial era introduced a system of individualized tenure parallel to this pre-existing system of traditional, customary tenure. In Malawi, the British settlers' appropriation of agricultural land in the Shire Highlands for the cultivation of tea, tobacco, cotton, and coffee occurred quickly, between 1890 and 1920. Between 1891 and 1894 alone, 15 percent of this land had accrued to European companies, individuals, and Christian missions (Pachai 1978).<sup>7</sup>

The initial appropriation of customary land was undertaken through treaties with local chiefs who continued to believe that they were allocating usufructuary rights alone as per customary law. The formalized institution of a parallel set of land law in Malawi occurred in 1889 to settle the increasing disputes among settlers and villagers. Under the provisions of the Africa Order-in-Council and the Foreign Jurisdiction Acts, the first governor was given the authority to issue certificates of claim as freehold land, in addition to claiming land for the crown (Mbalanje 1982). Subsequently, leasehold land was also conferred on individuals and private organizations. By 1920 an estimated 193,472 acres of terrain had been designated as freehold and an additional 118,504 acres as leasehold, almost all of which were claimed by Europeans (Mkandawire and Phiri 1987).

The legacy of the colonial era is not restricted to the legalities of land rights alone. Rather, it also extends to the introduction and institutionalization of new tenurial systems in Malawi and explains important regional distinctions to agricultural production that continue to persist today. First, faced with the expansion of estate lands in the densely populated Shire Highlands of the south, the rapidly expanding African population of that region (whose numbers increased with the influx of Lomwe people in the early 1900s) was willing to enter into tenancy relationships with European landlords to gain continued access to land. The settlers, in turn, gained their access to this cheap labor through *thangata* ("to assist" in Chichewa), an arrangement that required villagers to pay for the use of land with their labor. The labor charge, moreover, was levied by the hut. Obligated to work for the landlord for up to six or seven months, polygamous tenants especially had very little time to cultivate for their subsistence needs.

A second type of tenancy arrangement developed with the expansion of estate cultivation into the central region in the 1930s. The expansion was due largely to that region's lower population density and to the commencement of tobacco cultivation. Without the plentiful supply of cheap labor prevalent in the south, estate labor was drawn by the offering of money wages first. Subsequently, an arrangement was developed whereby tenants, commonly

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<sup>7</sup> The British Government also actively encouraged settlement in Malawi. After World War I, for example, it made estate lands available to returning British soldiers as a means of relieving domestic unemployment (Riddell 1985).

migrant labor, sold to the landlord the dark-fired tobacco that they produced as sharecroppers. This "visiting tenancy system" in the central region prospered during the colonial era, in step with the price increase of tobacco relative to other export commodities. The system drew upon the labor of farmers from nearby villages and from the south. Those farmers found it attractive to come and work for up to six months per year before returning to their villages to cultivate their own plots. Consequently, it is reported that the number of tenants in the central region increased from 900 in 1923 to 41,660 in 1932 (Mkandawire and Phiri 1987). By 1937 the central region's estate tobacco production had increased to more than 7 million pounds; by 1941 more than 60,000 acres were appropriated as leasehold estate lands by approximately 20 European farms in three central districts (Mkandawire and Phiri 1987). The newly founded estate sector thus fulfilled the British objective of rapid and controlled export of primary commodities from its colony. These commodities were needed to fuel the industrial expansion at home and the demands born of it.

#### THE INSTITUTIONALIZATION OF DUALISM: THE POST-INDEPENDENCE ERA

Policy in post-colonial Malawi reasserted the strategy of estate-sector-led growth. Export-producing estates were reaffirmed as the engine to growth, while the customary sector effectively remained an attendant to growth. The latter provisioned the former with a supply of labor and food. Malawi thus undertook policies that at once ossified the existing dualistic structure in agriculture, while at the same time promoting the growth of the individually tenured estate sector. Land policy perpetuated Malawi's dualistic agricultural sector; and the production, marketing, and pricing policy have reinforced it.

Land policy in the decade after independence thus largely institutionalized the segmented tenurial system inherited from Malawi's colonial era. First, there was no large-scale land reform or land redistribution upon independence. The Land Act of 1967 recognized and maintained the land tenure structure that existed during colonial times. *Customary land*, cultivated by smallholders, was defined as all land under customary law (not including public land) and corresponded to the African Trust Land classification of the pre-independence era. *Public land* was defined as all land occupied, used, or acquired by the government and any other land that is not customary or private land. It corresponds to what was British Crown land before independence. *Private land* is defined as all land that is owned, held, or occupied under a freehold title, a leasehold title, or a certificate of claim. In other words, it incorporates the estate sector.

Second, post-colonial land policy maintained, if not increased, the state's ultimate control of land and access to land. In this regard, Malawi has conformed to a pattern that has been common throughout sub-Saharan Africa (Noronha 1985). Thus, all customary land, while declared to be "the lawful and undoubted property of the people of Malawi," is yet also declared to be

"vested in perpetuity in the President for the purpose of the Act." Effectively, this statement gives the state, through the arm that is the Department of Lands, ultimate right to control communal lands. This right extends from the state's right to alienate customary land for its ultimate conversion to private land (either into leasehold land for estate use or freehold registration for smallholder use) to its right to appropriate customary land for public purposes. Furthermore, through control orders issued by the Department of Lands, the government can also regulate, control, and manage the use of customary land, including regulation of the method of land cultivated, crops grown, and livestock kept.<sup>8</sup> Finally, legislation also ensures the access of land for public purposes. Upon termination of a lease, for example, private land is converted into public land, not back to customary land. Moreover, the Land Act also permits the direct conversion of customary land into public land.

Third, land legislation has clearly been structured to promote stated policy and growth objectives by expanding the area of land under the individually tenured estate sector and by restricting the area of land under the customary tenured sector. Indeed, land law promotes the conversion of land away from customary tenure and toward both the private and public domains through a number of stipulations. The Land Act gave the Ministry of Lands the authority to grant a lease on customary land to an estate for a period of up to 99 years.<sup>9</sup> Land policy introduced after independence has thus maintained policies that facilitated conversion of customary into private leasehold land, enabling the growth in estate lands that has characterized the past two decades.

While smallholders cultivating customary land may apply to convert their land to leasehold estates, this practice appears not to have been pervasive through the 1970s. Recent evidence, however, points to the existence of a large set of "graduated smallholders," progressive smallholders who have attained leases during the 1980s either for their individual smallholdings or for a consolidation of family holdings (Mkandawire, Jaffee, and Bertoli 1990). As such, these smallholders continue to cultivate the land that they and their families have cultivated in the past.

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<sup>8</sup> In effect, such orders have frequently been made and are in force in the context of various schemes and projects (Mbalanje 1982).

<sup>9</sup> Issuing a lease requires several steps. First, the village headman is consulted about availability of suitable land. His signature is required on the application forms before endorsement by the District Commissioner. Next, the forms are forwarded to the Agricultural Development Division's (ADD) Program Manager, who then forwards his comments to the Commissioner for Lands, who in turn forwards it to the Regional Town and Country Planner. The forms are then returned to the Commissioner of Lands, who, barring any queries, issues a memorandum approving the lease.

Yet the vast majority of farmers in the smallholder sector have not converted the land into leaseholds. A number of reasons, in fact, appear to limit the acquisition of leases by smallholders. Stipulations on land use inherent in granting leases would compromise a risk-averse farmer's ability to cultivate an adequate quantity of maize for subsistence purposes. These same stipulations may require more capital or credit than the farmer has access to. Furthermore, the farmer may simply be unaware of his rights to leasehold land or of the process required to procure a lease. In addition, the nature of tribal relationships would make it difficult for a farmer to get the chief's approval (needed for the conversion of customary land to leasehold land), and the farmer may not be able to afford the gifts needed to facilitate such a transaction.

In addition to the window for converting customary land into leasehold estate land, the newly independent government also instituted legislation that would permit smallholders to acquire individualized (freehold) land rights to their customary holdings in accordance with the stated belief that individualized tenure was more conducive to development than customary tenure.<sup>10</sup> Specifically, the Registered Land Act of 1965 provided a limited number of small farmers an opportunity to convert their holdings to freehold land through the institution and registration of title. The Customary Land Development Act of 1967 extended the Registered Land Act by permitting the government to take land for development purposes, to bypass the customary land allocation procedures, and to register the land in the name of a smallholder (or of an entire family) through the issuance of private titles. While these acts were designed in theory to permit the large-scale conversion of smallholder plots from customary to individual tenure, in practice these conversions have been implemented only on a limited and experimental basis.<sup>11</sup>

In addition to the two legal channels for smallholders to gain more than usufructuary rights to land (i.e., conversion of land into leaseholds or registration to freehold land), there is also evidence that informal markets in land have developed, reflecting the binding land constraint on smallholders. That is, in following a pattern observed elsewhere, the

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<sup>10</sup> President Banda himself viewed customary tenure as an impediment to growth, asserting: "Our customs of holding land in this country, our methods of tilling the land in this country, are entirely out of date and totally unsuitable for the economic development of this country" (Hansard 1967, cited in Mbalanje 1982, p. 53).

<sup>11</sup> In practice, the Registered Land Act and Customary Land Act became operational when the first land registry was opened in 1972 to delineate land titles within the area of more than one million acres of customary land covered by the Lilongwe Land Development Programme. Registration has since proceeded slowly and appears to have stalled. By 1981 only a little over a quarter of the designated area had been registered. Furthermore, although application of these acts was extended to the capital city area, registration has not proceeded beyond the Lilongwe district.

increased scarcity value of land appears to generate informal markets even where formal markets are deemed illegal (Feder and Noronha 1987). Several avenues are resorted to in order to gain access to land and cash. Land loaning has been increasingly used as a means of accessing land for some and as a source of income for others. Now, however, what was initiated as a loan often ends up as a permanent allocation (World Bank 1987). Furthermore, land is even increasingly exchanged on the market, with the "sale" being disguised as the sale of trees on the land (World Bank 1987).<sup>12</sup>

While land policy, as discussed above, has assisted in perpetuating Malawi's dualistic agricultural sector production, the marketing and pricing policy have reinforced it. First, on the production side, the Special Crop Act has prohibited cultivation on customary land of burley and flue-cured tobacco as well as tea and sugar. Effectively, that prohibition has given a monopoly on these crops to the estate sector.<sup>13</sup> As a result, the main crops grown by smallholders are maize, sorghum, cassava, pulses, rice, cotton, and a restricted variety of tobaccos (sun/air-cured, fire-cured, and oriental).<sup>14</sup> Recently, an important move was made to add burley tobacco to the above list. This change is being implemented in 1990 to 1991 on a pilot basis within eight Rural Development Projects (RDPs) in six ADDs. With the prohibition of smallholder production of burley over the past two decades having denied

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<sup>12</sup> Other coping strategies are also apparent in the face of the land shortage. Common lands are often encroached upon without the consent of the village chief. Encroachment of smallholders onto leased land is also commonplace and constitutes a continuing source of dispute (World Bank 1987).

<sup>13</sup> To the extent that smallholders "cheat" by illegally producing restricted crops, this observation is weakened. There are some indications that illegal production does occur (Duncan 1990).

<sup>14</sup> There are also restrictions on the area of smallholder land cultivated with these restricted varieties of tobacco.

small farmers access to an important source of domestic value added,<sup>15</sup> the recent policy could represent an important break from the past.<sup>16</sup>

Second, while the segmentation of production over the past two decades has been legally mandated, so too has an enforceable separation of marketing channels. Smallholder produce is channeled through the state marketing agency, ADMARC, while estate produce is auctioned privately.<sup>17</sup> The separation of marketing channels, therefore, has both enabled the application of different pricing rules to the two different subsectors and facilitated the enforcement of crop production restrictions on customary land by smallholders. In combination, as will be discussed in greater detail below, these factors have had important implications for income inequality and poverty in Malawi.

Third, credit was directed to estate agriculture through the policies of the commercial banks. Any individual who could secure a lease on customary land was able to procure a loan upon meeting certain minimum conditions.<sup>18</sup> Meanwhile, little lending was available to smallholders, except through informal channels.<sup>19</sup>

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<sup>15</sup> Burley represents approximately 70 percent of all tobacco produced in Malawi.

<sup>16</sup> The permission to grant burley, however, applies only to smallholders with less than two hectares, and the permitted area of burley cultivation is restricted to 20 percent of the farmer's holding. The impact of this change on production, quality, and prices is yet unclear. However, smallholder interest in qualifying for burley production is evident in lines forming at ADD offices. The procedure for obtaining a permit to grow burley is similar to the procedure in place for estates with the need for an additional recommendation from the Local Screening Committee in the village (consisting of the village headman, Extension Field Officer, and representatives of the Malawi Congress Party). There is some speculation that people actively involved in politics may stand a better chance to obtain a permit than others.

<sup>17</sup> These marketing channels are slowly being changed with the gradual privatization of marketing within the smallholder sector.

<sup>18</sup> As a result, by 1980 more than 50 percent of commercial bank advances were to estates and were mainly for the cultivation of tobacco (Mkandawire and Phiri 1987). The estates were also disproportionately favored, furthermore, to the extent that this credit was subsidized (as revealed by negative real rates of interest that have existed in Malawi).

<sup>19</sup> A credit revolving fund through the National Rural Development Programme (NRDP), while covering much of the country by 1984, is reported to favor better-off farmers.

In conjunction, therefore, land tenure policy, agricultural production policy, and agricultural marketing and pricing policy have defined and strengthened the dualism inherent in Malawi's agriculture. In so doing, they combined to contribute to the structural rigidities inherent in the Malawian agricultural sector. Indeed, they raise questions, to be addressed in the following sections of this paper, as to whether dualism may be acting as a constraint to productivity and growth and as a detriment to the important objectives of poverty alleviation and equity.

### 3. POST-INDEPENDENCE AGRICULTURAL GROWTH AND DEVELOPMENT

The significance of the estate sector in driving Malawi's growth performance is readily apparent. Agricultural products dominated the export sector, and estate crops were dominant among these. Tobacco, tea, and sugar accounted for 60 percent of all exports in 1968. By 1988 their share had risen to 85 percent, with tobacco alone accounting for 64 percent of the export revenues (Table 2). That agricultural growth in aggregate has relied on the estate sector is also clear. The share of estate production in agricultural GDP has steadily increased. It was 13 percent in 1978 and 23 percent in 1988. Similarly, gross crop production data reveal a fourfold increase in estate sector production during the 1970s, while smallholder crop production grew by only 33 percent (Table 3).

The impressive increase in production by the estate sector through the 1970s and into the 1980s is a result not so much of its relative productivity or intensity of production, *ceteris paribus*, but rather of the expansion of land under the estate sector in general and burley tobacco in particular. There has been large-scale appropriation of customary land by the estate sector over the past 25 years. While figures regarding actual changes in the amount of land under leasehold vary from one source to the next, all available information points in the same direction. According to the most conservative estimates (Mkandawire and Phiri 1987), the number of estates had increased from 111 in 1967 to 1,150 in 1986, while land under leasehold also increased dramatically from 79,000 hectares in 1970 to 308,000 hectares in 1985. Other estimates, however, reveal a much larger expansion. By one account, estate acreage in 1985 was 691,000 hectares (World Bank 1987). The most recent estimates suggest that, whereas in 1979 there were approximately 1,200 estates covering about 300,000 hectares, the number of estates (freehold and leasehold) in 1990 was approximately 14,700 with the area covered by estates now estimated at approximately 843,000 hectares (Mkandawire, Jaffee, and Bertoli 1990). Reflecting an increasing trend is more localized evidence from Mzuzu Agricultural Development Division (ADD)<sup>20</sup> that shows the number of leaseholds doubling between 1986 and 1987.<sup>21</sup>

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<sup>20</sup> There are eight ADDs in Malawi. Each is composed of a number of districts, which total 24 nationally. These districts correspond closely to Rural Development Projects (RDPs), which are the planning unit for the Ministry of Agriculture.

<sup>21</sup> It should be noted that the magnitude of the recent expansion observed in the scarcely populated northern Mzuzu ADD, however, does not find a parallel in the densely populated south, nor yet in other northern ADDs.

Table 2 - Composition of Exports by Commodities (as a proportion of total exports)

Year	Tobacco	Tea	Sugar	Groundnuts	Cotton	Other
1964	0.367	0.290	-	0.097	0.084	0.162
1965	0.379	0.278	-	0.121	0.080	0.142
1966	0.327	0.322	-	0.093	0.078	0.180
1967	0.255	0.271	-	0.207	0.042	0.224
1968	0.315	0.289	0.000	0.138	0.038	0.220
1969	0.346	0.260	0.004	0.153	0.047	0.190
1970	0.409	0.269	0.004	0.105	0.068	0.145
1971	0.445	0.240	0.006	0.119	0.051	0.138
1972	0.453	0.218	0.007	0.129	0.047	0.147
1973	0.440	0.199	0.048	0.086	0.028	0.199
1974	0.439	0.192	0.103	0.058	0.030	0.178
1975	0.481	0.204	0.116	0.061	0.018	0.120
1976	0.460	0.187	0.165	0.080	0.017	0.091
1977	0.504	0.242	0.087	0.052	0.014	0.102
1978	0.579	0.196	0.082	0.031	0.005	0.107
1979	0.557	0.173	0.101	0.050	0.005	0.114
1980	0.453	0.134	0.170	0.072	0.020	0.152
1981	0.427	0.131	0.243	0.046	0.006	0.147
1982	0.585	0.182	0.097	0.019	0.001	0.115
1983	0.516	0.211	0.102	0.011	0.000	0.161
1984	0.529	0.260	0.067	0.002	0.005	0.137
1985	0.447	0.218	0.106	0.014	0.031	0.189
1986	0.547	0.153	0.090	0.036	0.005	0.170
1987	0.620	0.101	0.105	0.022	0.001	0.150
1988	0.644	0.106	0.098	0.033	0.000	0.121

Source: Reserve Bank of Malawi (1987 and 1988).

Table 3 - Estate and Smallholder Sector Shares of Agricultural GDP,  
1973 - 1990

Year	Agricultural GDP (Mk=1980)	Estate Share .....(percent).....	Smallholder Share
1973	223.6	0.13	0.87
1974	228.2	0.14	0.86
1975	230.3	0.17	0.83
1976	257.6	0.15	0.85
1977	286.5	0.17	0.83
1978	294.9	0.17	0.84
1979	304.1	0.17	0.83
1980	284.2	0.19	0.81
1981	261.0	0.19	0.81
1982	277.6	0.22	0.78
1983	289.9	0.23	0.77
1984	306.5	0.21	0.79
1985	307.4	0.21	0.79
1986	308.0	0.21	0.79
1987	312.5	0.22	0.78
1988	318.7	0.24	0.76
1989	329.7	0.25	0.75
1990	346.5	0.23	0.77

Source: Reserve Bank of Malawi (1987 and 1988); Malawi Government (1990)

Several observations can be made regarding the dramatic expansion of the estate sector since independence. First, the expansion has been driven by estate exposure to high world prices of tobacco. Periods characterized by large increases in tobacco prices sold on Malawi's auction floors, namely the 1970s during the global embargo on Rhodesian tobacco, as well as the periods of 1981 to 1983 and 1987 to 1989, were also the years with the largest bursts in estate expansion.<sup>22</sup>

Second, the nature of estate expansion changed between the 1970s and the 1980s. In the 1970s many new estates were larger and belonged to corporate entities, businessmen, and civil servants. The 1980s were characterized by the registration of much smaller estates, albeit in greater numbers. Approximately 70 percent of the estates registered in the past decade were less than 30 hectares, and many are reportedly smaller (Mkandawire, Jaffee, and Bertoli 1990).

Third, there are new indications that many small estates registered in the 1980s belong to progressive smallholders (Mkandawire, Jaffee, and Bertoli 1990). Indeed, there are a growing number of cases of farmers being granted leases for lands that have been customary holdings and under family cultivation for years. As such, these estates differ from those registered in the first decade after independence in that they generally lack salaried managers, a permanent work force, or even a concentration in hectareage to cash crops.

Fourth, there has been an important regional dimension to estate expansion. Whereas early estate development had taken place on the Shire Highlands of the southern districts, estate expansion since independence has been focused on the less densely populated central districts. Thus, whereas before independence estates were concentrated in the southern districts such as Thyolo and Mulanje, their high population precluded rapid expansion in the area and resulted in the districts of Kasungu, Dowa, Mchinji, and Mangochi registering the fastest growth since 1967. The central region now accounts for 77 percent of all estates and 67 percent of land area under estates. In the Kasungu, Mchinji, and Ntchisi districts, estates currently occupy more than 25 percent of total land area.

Meanwhile, in the northern districts, poor infrastructure, inappropriate climates, and sparse population density have limited estate expansion. Only 3.9 percent of total land area in the northern region is held by estates (Mkandawire, Jaffee, and Bertoli 1990). Districts such as Mzimba, Nkhata Bay, Rumphu, Karonga, and Chitipa still have large tracts of unalienated customary land, much of it not cultivated. Similarly, in the far south, because of bad soil, tse-tse infestation, and the Mozambican war, the

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<sup>22</sup> Between 1981 and 1983, 161,000 hectares were added to the estate subsector. Between 1987 and 1989, another 240,000 hectares were added to the subsector (Mkandawire, Jaffee, and Bertoli 1990).

Chikwawa and Nsanje districts have also not experienced the alienation of customary land seen in the central districts.<sup>23</sup>

Population flows have reflected employment prospects and availability of arable land. The 1977 census shows the northern region as being a net labor exporter and the central region as a net labor importer (Christiansen 1984). Furthermore, in a reversal since the 1966 census, the southern region has also become a net exporter of labor. These figures reflect on the one hand increased labor saturation in the south, and on the other hand the growing labor needs of the developing estate sector in the central part of the country. More recently, the development of estates in Mzuzu (specifically Mzimba and Rumphu districts) in the north has made this ADD a net importer of labor from both the south and central regions.

Several factors explain this dramatic growth in lands under estates. In aiding the increase of estate sector production, this growth was the driving force behind agricultural and national growth in the 1970s. Furthermore, the nature of this growth is of consequence to employment and income generation in rural Malawi. Specifically, how growth in estate hectareage has affected the use, access, and tenure of land among rural households is what tells much of the poverty story in Malawi. We now turn to these issues.

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<sup>23</sup> Chikwawa district does, however, have a large sugar estate (Sucoma) that is operated as a parastatal.

#### 4. PROMOTING PRODUCTIVITY AND EQUITY

Malawi's export agriculture-based development strategy is predicated on the notion that there is a need to develop a productive subsector that departs from the rules and practices of the low-input, low-productivity, customary land tenure. Such a strategy, if enhancing productivity and growth, would also be a vehicle for poverty alleviation. Indeed, employment and income generation within the estate sector has been the implicit strategy relied upon to provide the resources necessary to tackle poverty alleviation in rural Malawi.

Whether Malawian rural households would have been better off with no estates at all is a question that is not explicitly addressed in this paper.<sup>24</sup> We do argue, however, that productivity and equity have both been compromised by the rules that specifically dictate duality in the Malawian case. In other words, not only does agricultural productivity stand to gain by reforms that work to remove many policies that originated and perpetuated this dualistic system, but Malawi's poor also stand to gain, both in terms of employment and income opportunities.

#### THE SMALLHOLDER SECTOR

The prospects for economic growth and poverty reduction among the largely subsistence smallholder sector is limited by land. In particular, together with a population growth rate of 3.7 percent per year between 1977 and 1987 (Malawi Government 1987b), the alienation of customary land in the central and southern regions had forced pressure on land available to smallholders. This is not to say that the conversion of customary land to leasehold land has forced peasants off their land. It has not.<sup>25</sup> However, by appropriating previously uncultivated customary land, estate expansion reduces land area available for the future expansion of smallholder cultivation in the face of an expanding rural population.

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<sup>24</sup> Moreover, with respect to policy prescription, the question is moot. Given the reality of the current political economy and policy environment in Malawi, the prospect of wholesale land reform and the elimination of the estate sector improbable at best.

<sup>25</sup> In fact, the amount of land actually planted by smallholders has recently increased, even if only slightly. It reportedly rose from 1.29 hectares in 1964 to 1965 (Pryor 1988) to 1.58 in 1982 to 1983, and to 1.77 million hectares in 1986 to 1987 (Ministry of Agriculture). Much of this and other nonrecorded land newly brought into cultivation is likely on the slopes of Malawi's hilly terrain.

The resultant land pressure on smallholders is evident in the statistics. The number of households with less than 2.0 hectares of land increased between 1968 to 1969 and 1980 to 1981 from 29 to 81 percent. Even more troubling is that, as shown in Figure 1, more than half of all smallholders had less than 1.0 hectare in 1980 to 1981. Although no recent survey data are available, extrapolating these trends suggests Malawi is facing the prospect of a significant number of landless and near landless peasants who rely on agricultural work on estate and other smallholder plots, as well as on nonfarm income sources (Christiansen and Kydd 1987a).<sup>26</sup>

### **Employment and Incomes**

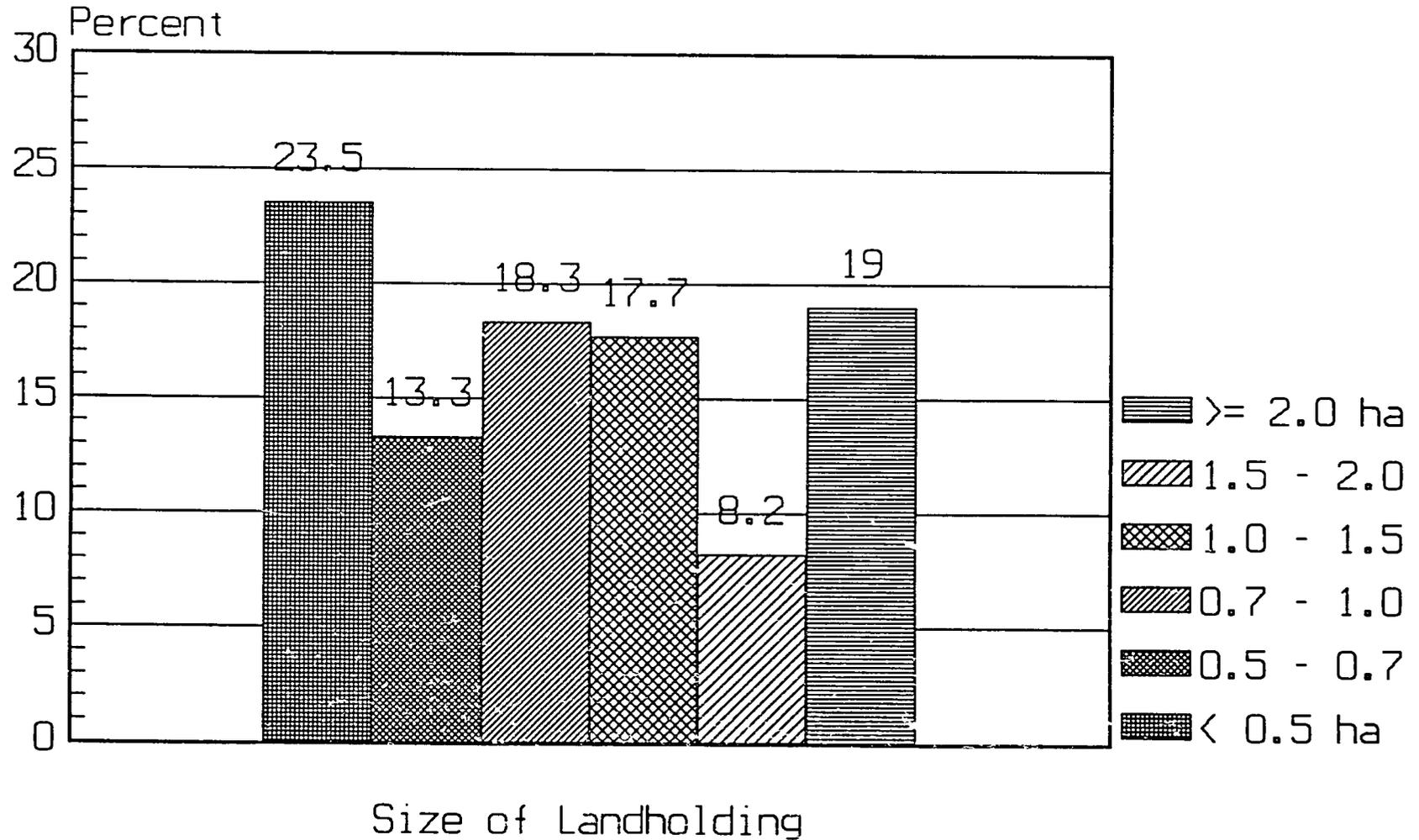
The above resource constraints to smallholders are reflected in data on employment and incomes. The smallholder sector, which employs 72.0 percent of the labor force and generates 34.2 percent of value added, is also the lowest paid sector. Income per worker is just over half of that in the estate sector and only 8.6 and 5.8 percent of that in the government and manufacturing sectors, respectively (Table 4). This pattern of a low value added per smallholder in absolute and relative terms has not changed during the past decade. In fact, the evidence suggests that the real value added per worker has increased only from Mk 131 to Mk 138 between 1978 and 1987.

Low value added, caused by low productivity, has important food security implications, especially when evaluated in conjunction with the important phenomenon of shrinking landholding sizes. Calculations indicate that, given present technology and yields, the average smallholder household with a holding of less than 1.0 hectare would produce an average daily caloric equivalent of 1,231 per capita (Sahn, Arulpragasam, and Merid 1989). This

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<sup>26</sup> The data on the declining size of landholdings have some important regional dimensions. Population densities vary widely, reflecting partly the fertility and arability of the land. The south, with 50 percent of the national population, has a population density of 125 per square kilometer. The comparable population density figure for the central region, which hosts 39 percent of the total population, is 83 people per square kilometer. The north, with the least fertile land and 11 percent of the population, has 11 people per square kilometer. Mzuzu, ADD, where most smallholders reside, registers only 26.5 percent of households holding less than 0.15 hectare per capita. The fact that the comparable figure for Karonga is 40 percent illustrates that smallholdings are not just a function of population density, however, but also the quantity of arable land, the quality of land, and the proximity of a market to sell the surplus.

Figure 1 - Percentage of Households by Landholding Size



Source: Centre for Social Research (1988).

Table 4 - Labor Force, Functional Distribution of Income, and Income per Worker, by Sector

Sector	Labor Force (15-64 Years Old)			Functional Distribution of Income (Percent Value Added) <sup>a</sup>		Income per Worker		Income per Worker	
	1968	1978	1987	1978	1987	1978	1987	1978	1987
	('000)			(percent)		(Current Mk)		(Mk=1978)	
Smallholder	1,497.3	1,768.7	2,138.6	31.1	34.2	131	398	131	138
Estate agriculture <sup>b</sup>	64.5	207.5	266.4	6.4	7.2	234	704	234	244
Government <sup>c</sup>	31.6	36.6	52.6	8.3	9.3	1,760	4,625	1,760	1,606
Manufacturing and other industries <sup>c</sup>	82.6	133.8	176.4	53.6	48.5	2,976	6,840	2,976	2,375
Informal sector	44.9	87.4	121.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Unemployed	n.a.	48.0	197.0			-	-	-	-

Sources: World Bank (1988, 1989a, 1989b).

<sup>a</sup> Figure does not ascribe a portion of the value added to the labor force in the informal sector. We do not know to what extent the labor force's contribution to GDP is captured in the figures of other sectors.

<sup>b</sup> Includes wage and nonwage employees, the latter group of which includes tenant households.

<sup>c</sup> Includes wage and nonwage employees.

figure is clearly inadequate to meet normal calorie requirements.<sup>27</sup> Moreover, data from the 1980 to 1981 NSSA reveal that 83 percent of households with holdings of less than 0.7 hectares depleted their food stocks by the preharvest month of February. Of households with 0.7-1.49 hectares and of those with more than 1.5 hectares of land, 72 and 51 percent, respectively, depleted their stocks before February (Quinn et al. 1988). Similarly, survey data from 1989 to 1990 indicate that 60 percent of farmers ran out of food in December in the Salima ADD, while 85 percent of farmers in the Kasungu and Ngabu ADDs depleted their food stocks by February (Babu, Ayoade, and Bisika 1990).

The obvious need to increase incomes within the smallholder sector is inextricably linked with the need to increase production. Currently, the evidence indicates an extremely low level of productivity on customary holdings in Malawi and a general failure to innovate. With respect to maize, yields have barely risen through the 1980s; the increase from 1.07 MT/hectare in 1982 to 1983 to 1.19 MT/hectare in 1988 to 1989 was a function of weather (Table 5). Similarly, yields on most smallholder export crops have stagnated or declined (Table 5). Yields on southern dark-fired (SDF) tobacco fell 59.1 percent between 1978 to 1979 and 1987 to 1988; yields on sun/air-cured tobacco fell 31.8 percent in those years, and yields on oriental tobacco fell by 14.4 percent. Cotton yields, meanwhile, dropped by 14 percent between 1978 to 1979 and 1986 to 1987.

### **Toward Greater Productivity and Equity**

Improving agricultural productivity as well as rural incomes requires addressing a number of distortions that characterize dualistic agriculture in Malawi. First is the need to improve incentives to smallholders. A reduction of the taxation of smallholder production is fundamental to poverty alleviation in Malawi. Indeed, smallholder subsistence capabilities have been squeezed not only by the decreasing size of holdings but also by the

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<sup>27</sup> The average holding size for households with less than 1.0 hectare is 0.55 hectares. The average household size is 4.2. We assume that 100 percent of the holding is cultivated with local maize. These data and average yield data are from the 1984 to 1985 Annual Survey of Agriculture and do not take into account variations in land quality. Similarly, the figures do not address that if the household planted their hectareage in hybrid or composite maize, they would likely be fulfilling their food energy needs, even on smaller holdings. Most smallholders, however, grow local maize to meet their subsistence needs because of considerations of taste, fertilizer requirements and storage. Furthermore, it is noteworthy that this stylized fact about the inadequacy of own production potential is supported by a study completed by the Liwonde ADD in 1982. The study reveals that up to 63 percent of households with less than 0.5 hectares could not provide for their own basic food requirements (Mtawali 1989).

Table 5 - Crop Yields (kg/ha)

Year	Estate Crops		Smallholder Crops									
	Flue-cured Tobacco	Burley Tobacco	NDDF Tobacco	EDF Tobacco	Sun/Air Tobacco	Oriental Tobacco	Cotton	Rice	Local Maize	Composite Maize	Hybrid Maize	Total Maize
1978	1,189	969	-	-	-	-	491	-	-	-	-	-
1979	1,325	1,080	286	548	286	561	720	-	-	-	-	-
1980	1,402	1,206	289	450	304	437	633	-	-	-	-	-
1981	1,324	1,176	388	468	295	235	594	-	-	-	-	-
1982	1,624	1,184	345	161	272	87	496	-	-	-	-	-
1983	1,576	1,055	202	243	157	61	410	-	-	-	-	-
1984	1,637	1,113	467	482	241	97	629	-	1,040	1,790	2,760	1,190
1985	1,376	964	301	361	100	233	515	1,610	1,030	1,750	3,110	1,180
1986	1,321	1,069	267	118	191	445	405	1,640	960	1,730	2,940	1,080
1987	1,457	1,066	250	183	188	129	619	1,490	950	1,640	2,710	1,020
1988	1,237	878	428	224	195	480	-	1,520	1,090	1,200	2,670	1,170
1989*	-	-	-	-	-	-	-	-	1,060	1,770	2,800	1,190

Source: Ministry of Agriculture; Malawi Statistical Yearbook, 1987; and Tobacco Control Commission and ADMARC as presented in: Government of Malawi (1988), "Crop Industry Economic Studies," Vol. 2. Dickerman and Bloch (1989).

\* Estimate.

nature of pricing policies. Smallholder producer prices on export crops, set by the government, have traditionally been associated with high levels of implicit taxation (Table 6). Nominal protection coefficients (NPCs) reveal that producer prices have lain well below border prices.<sup>28</sup> In 1977, for example, the NPC for smallholder rice at the official exchange rate was calculated at 0.57, that of groundnuts at 0.36, and that of smallholder tobacco at 0.17.<sup>29</sup> Smallholders have been further taxed by the misalignment of the exchange rate. At the shadow exchange rate, the respective 1977 NPCs for smallholder rice, groundnuts, and tobacco were as low as 0.36, 0.23, and 0.11.<sup>30</sup> With regard to the pricing policy for maize, smallholder producers do not appear to have faced analogous, high levels of taxation. Nevertheless real, official producer prices of maize declined between 1982 and 1987.

The suppression of smallholder earnings through the taxation on agricultural production has two distinct impacts. First, the high rate of implicit taxation on smallholder production is a disincentive for undertaking increased investment, adopting improved technology, and using agricultural inputs. Then increasing incentives may be expected to increase incomes by virtue of increasing productivity and production. Similarly, removing the quantity rationing on fertilizer and the credit constraints that have restricted fertilizer application by many smallholders is also necessary, even if the removal is at the expense of a lower rate of subsidy on this input.<sup>31</sup>

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<sup>28</sup> The subsidy on smallholder fertilizer mitigates the degree of taxation. However, given the low levels of uptake, the fertilizer subsidy would not contribute to a great divergence between effective and nominal rates of protection.

<sup>29</sup> The recent move liberalizing the production and sale of burley among smallholders, if sustained, should go a long way in raising the NPC of tobacco to smallholders.

<sup>30</sup> While some reduction in the level of implicit taxation has been noted since the initiation of the Malawian structural adjustment program, this reduction can be attributed largely to the falling world prices of Malawian exports and to increased transportation costs (Sahn, Arulpragasam, and Merid 1990).

<sup>31</sup> Unlike estates that purchase their fertilizer through Optichem (a commercial enterprise that sells fertilizer at market prices), smallholders rely on ADMARC, which sells fertilizer at a subsidized price. Specifically, the Smallholder Farmer's Fertilizer Revolving Fund has provided fertilizer at a subsidy rate that has ranged between 20 and 30 percent during the past few years. Demand is constrained by a combination of the farmer's inability to procure credit and the quantity rationing that occurs at the subsidized price.

Table 6 - Nominal Protection Coefficients (NPCs), Selected Smallholder Crops

Year	Rice		Groundnuts		Tobacco	
	NPC Official Rate	NPC Shadow Rate	NPC Official Rate	NPC Shadow Rate	NPC Official Rate	NPC Shadow Rate
1975	-	-	1.96	1.41	0.17	0.13
1976	0.32	0.21	0.48	0.33	0.17	0.12
1977	0.57	0.36	0.36	0.23	0.17	0.11
1978	0.41	0.30	0.33	0.25	0.52	0.38
1979	0.34	0.25	0.54	0.40	0.52	0.38
1980	0.36	0.25	0.56	0.39	0.46	0.32
1981	0.28	0.18	0.37	0.25	0.31	0.20
1982	0.20	0.13	0.88	0.58	0.17	0.12
1983	0.30	0.20	0.92	0.60	0.34	0.22
1984	0.29	0.18	0.92	0.57	0.39	0.24
1985	0.39	0.24	1.42	0.88	0.89	0.55
1986	0.23	0.15	0.84	0.53	0.49	0.31
1987	0.21	0.14	1.05	0.70	0.35	0.24
1988	0.20	-	1.02	-	0.26	-

Source: Sahn, Arulpragasam, and Merid (1990).

Second, raising producer prices among smallholders also assists agricultural workers by raising the average reservation wage in agriculture. Higher prices would put upward pressure on the wage rate offered by larger farmers for casual labor. Such employment, called *ganyu*, is relied upon by many households with relatively smaller holdings as well as by the growing number of households that are nearly landless.<sup>32</sup> Furthermore, increased producer prices, by raising the opportunity cost of labor, would also raise the wage rate that the parallel estate sector must offer to engage labor.

Increasing the price to labor is especially important in Malawi. The meager prospects of earning a livelihood solely from one's small holding reveals itself in the important share of smallholder income now derived from off-farm sources. Such income is quite significant for most smallholder households (Table 7). However, it is higher for households with smaller holdings. Households with less than 0.5 hectare of land derive approximately 51.4 percent of their total earnings from off-farm sources, while the contribution of off-farm sources declines to 25.8 percent of total income for households with more than 3.0 hectares of land. It is important to note that currently a large portion of off-farm income for smallholder households is derived from remittances, transfers, and other sources, rather than from agricultural wages. In addition to productivity considerations, therefore, raising the implicit wage paid to agricultural labor by removing taxes on such labor is essential for rural poverty reduction.

While recent efforts at market liberalization in the smallholder sector have focused on maize, there is also a need to ensure that smallholders receive higher incentive prices for cash crops as well. Smallholder incomes along with national agricultural productivity stand to gain as bans are removed from smallholder production of export crops such as burley tobacco. With regard to income, it is noteworthy that the auction price of a kilogram of burley tobacco exceeded the auction price of sun/air-cured tobacco by 32 percent in 1988. That figure exceeded the smallholder producer price of sun/air-cured tobacco by 207 percent, or 354 tambala/kg, the value of enough maize to meet an adult's subsistence requirement for more than three-fourths of a month in 1988.<sup>33</sup> Permitting smallholders to produce burley and flue-cured tobacco is imperative to raise the implicit wage in the smallholder

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<sup>32</sup> There are two major classes of *ganyu* labor. Laborers on farms are called *ganyu-olima* (farm *ganyu*) while those involved in other types of labor are called *ganyu-kumanga*. This work, mainly in construction and transportation, is relatively limited in rural areas.

<sup>33</sup> This calculation was based on the assumption of a per diem subsistence requirement of 2,200 calories and a conversion factor of 3,570 calories per kg of maize. The smallholder producer price for sun/air-cured tobacco is an average of the producer price of the five highest grades of this variety as reported in Malawi Government, *Economic Report 1989*.

Table 7 - Per Capita Income and Expenditure (Mk), by Landholding Size in Zomba District

	Landholding Groups (hectare cultivated)					
	< 0.5	0.5-1.0	1.0-1.5	1.5-2.0	2.0-3.0	> 3.0
	(Mk)					
Total per capita expenditure	79.11	62.30	75.30	68.10	84.80	155.10
Total per capita income of which:	76.62	61.29	77.65	74.50	78.65	156.85
Home consumption	18.20	15.19	22.10	22.00	28.24	57.46
Agricultural sales	16.18	18.06	27.37	23.66	22.05	44.80
Nonfarm earnings	17.03	4.67	11.46	12.41	8.69	4.30
Transfers, remittances, and others	15.17	12.22	12.24	13.99	17.81	48.84
Agricultural wages	10.04	11.15	4.48	2.44	1.86	1.45

Source: Peters and Herrera (1989).

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sector and, thereby, to drive up the competitive wage rate for labor in the estate sector.

In addition to this price effect, moreover, the removal of production restrictions would also have positive benefits on national growth and smallholder incomes by increasing productivity.<sup>34</sup> It has been shown that the domestic resource costs (DRCs) for producing burley and flue-cured tobacco are lower for smallholders than they are for estates (Lele and Agarwal 1989). This lower cost is true, moreover, of production valued, appropriately, at international prices.<sup>35</sup> Moreover, this is the case even for production on smaller farms. Carr (1988) indicates that smallholder production of burley tobacco is technically and economically feasible on holdings as small as 0.5 hectare. Releasing the production restriction on smallholdings will, in addition to increasing smallholder incomes, raise the Value of Marginal Product (VMP) on Malawian lands and potentially will also increase Malawi's foreign exchange earnings.

Third, the stagnation of smallholder productivity is attributable to the failure of government extension services and agricultural research to make significant inroads in improving smallholder productivity over the past two decades (Kydd 1990). The causes for this failure require greater study, including a determination of the extent to which the provision of these services has been biased toward the estate sector. Food security policies must also be developed to assist the farmer in averting the higher risk of crop failure of hybrid maize. Similarly, greater efforts must be made to address, through both agricultural and agroindustrial research, the poor taste, processing, and storage characteristics of hybrid maize. Consideration should also be given to exploring other low-risk and high-yield crops such as finger millet and hybrid sorghum, while recognizing the limitations on viability and speed of adoption as a result of social and cultural factors.

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<sup>34</sup> Arguments are frequently raised that restriction of smallholder production is required to control the reliability and quality of exported tobacco and to exercise Malawi's market power in dictating international price. There is no reason why tobacco grown by smallholders could not pass through a quality control as is done for other crops in other countries. Another option is that of smallholders organized around a nucleus estate that could control for quality. Examples include rubber and palm plantations in Guinea and tobacco plantation in Sri Lanka. Meanwhile, with regards to quantity control, the auctioning of licenses is possible. The rents currently received by estate producers will instead accrue to the treasury as revenue from the sale of licenses.

<sup>35</sup> The smallholder DRCs for burley and flue-cured tobacco in 1986 have been calculated at 0.55 and 0.49, respectively, while those for the estate sector are computed at 0.61 and 0.53, respectively (Lele and Agarwal 1989).

Fourth, lagging productivity and income are caused by the low level of both investment and improved technology in the smallholder sector. These problems lead to a consideration of the virtual absence of credit to smallholders in Malawi, which has also characterized agricultural duality in Malawi. On the one hand, it may be argued that the lack of credit is largely a function of commercial banks not viewing usufructuary rights as sufficient collateral for lending. The concurrent demand for funds from the parallel leasehold sector has certainly contributed to the diversion of credit from the smallholder sector. On the other hand, it may be argued that the lack of collateral need not be an argument for the increased individualization of tenure but for the development of appropriate credit institutions. Over the past two decades, there has been little investment in developing rural banking institutions geared to Malawi's smallholders. Even with the registration of smallholdings in Lilongwe under the Customary Land Development Act, little credit has been forthcoming, perhaps because registration of land is permitted to a family rather than to an individual, which is a factor that may need to be addressed. Another reason could be the lack of an appropriate and extensive rural credit system targeted at smallholders in Malawi.

Fifth, the improvement in productivity and incomes among smallholders by means of the above policies will be expected to have multiplier effects in reducing poverty. Low productivity of labor and of land in the smallholder sector in Malawi has been noted to be a function of poverty itself. In the first place, the combination of increased land scarcity and commercialization of agriculture has meant a greater reliance on the wage labor market and nonfarm incomes to feed poorer household during the preharvest season. In Malawi this increased reliance has had serious consequences. In relying on *ganyu* income caused by the depletion of stocks well before the next harvest, smallholders neglect preharvest preparation on their own small landholdings, seriously compromising their own harvest for the next year. In the second place, poverty decreases labor productivity in a more fundamental way. Data from other countries suggest that reducing food intake among poor farmers will likely mean lower energy expenditure and lower productivity among these farmers (Strauss 1985; Deolalikar 1988; Sahn and Alderman 1988). Increased incomes to smallholder agriculture will thus have secondary effects on productivity.

Sixth, poor productivity of the smallholder sector raises the important question as to what extent decreased productivity may be attributable to inefficiencies inherent in customary tenure. It has been argued that the insecurity of tenure associated with customary tenure is an impediment to development. The farmer's lack of security on customary farm lands is a disincentive to his making investments on the land. Meanwhile, farmers' difficulty in acquiring credit is also due to their lack of ownership rights. It has also been suggested that while private registration would ease the sale and transfer of land, customary tenure impedes the efficient economic mobility of an important factor of production and income.

While these factors may indeed restrain productivity among smallholders, there is reason to question their significance in the Malawian case especially. With regard to the arguments concerning security of tenure, first, most smallholders in Malawi are secure in the historically based notion that they will not lose their land. In this regard Malawi parallels other situations (Noronha 1985). Likewise, usufructuary rights are by and large inheritable, ensuring the transfer of land to offspring. Furthermore, while smallholders do not avail themselves of the right to sell and rent land (and consequently to recover any improvements into the land other than directly through its cultivation), one must also question the importance of this aspect of security. Given that land remains the sole means of economic security for most rural households, most households are not interested in selling. Given the slow pace of expansion of the nonfarm economy and related opportunities for employment, moreover, this is likely to be the case for many years to come in the medium term and the key to sustained economic growth and equity in the long term.

The second argument is that, it is unclear that actual conversion of customary land into private land would improve tenure security, equity, and productivity. Attempts at such conversion often raise the tenurial insecurity of households remaining on customary land (Noronha 1985). Namely, there is an inherent insecurity "... that flows from frequent amendment of formal laws and the absence of any ability to forecast what might happen next" (Noronha 1985, p. 207). The changes inherent in a move toward registration, moreover, may especially affect the tenurial security of women. The increasing pressure on land appears to be altering the rules of succession from that of a matrilineal system to that of a patrilineal one (Pervis 1984). In diminishing the security of land access for women, as is evident in cases such as Kenya, this particularly endangers single women, separated women, and widows (Davison 1988).

A related and third argument against land registration and privatization, on the grounds of either productivity or equity, is that improving the efficiency of land mobility fosters increased concentration of land ownership, and possibly of incomes. Evidence from the Kenyan experience, for example, shows this to have been the case (Collier and Lal 1980; Shipton 1987). The next step in the argument is that individualization of tenure contributes to landlessness: villagers could lose their rights to cultivate their ancestral land. In Chimanimani, Zimbabwe, for example, a story unfolds of families who progressively went from being farmers, to tenants, to landless refugees in Red Cross camps (*African Business* August 1989). As Swynnerton, the architect of Kenyan land policy, recognized: "Energetic or rich Africans will be able to acquire more land and bad or poor farmers less, creating a landed and a landless class" (Swynnerton 1954, p. 10). While he viewed this process as "a normal step in the evolution of a country," others have contested it on equity and poverty grounds. Still others have pointed to the fact that rich Africans are not necessarily better farmers. Many are urbanites who have no farming or managerial experience and who have just

invested in land as an asset. Correspondingly, efficiency of land mobility would not translate into efficiency of land use.<sup>36</sup>

The fourth argument, and perhaps most important, experience to date reveals that, in practice, land registration is no quick panacea for smallholders, either in Malawi or elsewhere in Africa. The realities of political economy, the strain on limited bureaucratic capabilities, and just plain bad implementation have left a sad record. In Kenya, the initial enthusiasm on the prospects of individualization of tenure has been replaced by creeping doubt after 40 years of slow implementation (Shipton 1987; Noronha 1985; and others). While registration of land was to have been a major prong of land policy in Malawi, it has made little progress for lack of political commitment, among other reasons. In the Lilongwe ADD where registration has been under way since the early 1970s, there is little evidence that credit has become more available, that the trend toward smaller landholdings has abated, that land improvements are more widespread, that yields are more rapidly increasing, or that a vibrant market in land has evolved.<sup>37</sup>

It has to be recognized that the bad track record may be partly due to problems of implementation in practice. But practice matters. Even if the individualization of tenure is beneficial for long-term development objectives, the administrative capabilities of a government to undertake such a task and of the political will to continue its implementation must be considered. The process of registering and titling is expensive, requiring trained professionals and sound institutions. Efficiency gains could well not outweigh the costs of introducing a new system (Feder and Noronha 1987).

Whereas registration may have potentials in addressing the productivity concerns within the smallholder sector, its prospects require further study. The Malawian case, at least, cannot be looked to for the urgent resolution of a lagging subsistence sector. Rather, the constraints represented by other aspects of Malawi's dualistic agriculture, discussed above, should probably be addressed first to promote growth in the smallholder sector. The welfare

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<sup>36</sup> Bates (1981, cited in Feder and Noronha p. 33) points to cases in a number of countries in which the urban elite and large farmers have used their knowledge of the law to acquire additional land. Similarly, studies in Kenya show that civil servants and other influential individuals tend to have gained land at the expense of poorer, less-influential, and less-knowledgeable individuals. Analogous observations are made of Nigeria, Botswana, and Senegal (refer to Feder and Noronha 1987, for an extensive review).

<sup>37</sup> Some failures may be due to imperfect policy implementation. For example, the low level of credit growth has been attributed to the fact that the process of titling allows the registration of land to households and families rather than just to individuals, thereby posing a collateral problem to creditors.

and productivity of smallholders depend critically on removing the discrimination against smallholders with regards to choice of crops, access to inputs, and opportunities to market a surplus. While the appropriate approach to land titling needs to be further explored in the smallholder sector, immediate concerns should thus revolve around removing associated impediments to development by improving rural infrastructure, credit institutions, input supply, product markets, and agricultural extension.

A strategy for poverty alleviation would call for a two-pronged approach. First, as addressed above, there must be an emphasis on increasing smallholder productivity and incomes. This emphasis will increase smallholder welfare in general while directly countering poverty among the class of subsistence farmers. Furthermore, increasing the implicit wage rate within the smallholder sector has an indirect effect by raising the price paid to labor in the estate sector. Second is the need to increase the wages and amount of labor employed by estates. We turn to this issue next.

## THE ESTATE SECTOR

The justification for the reliance on the estate sector as both an engine of national growth and a provider of resources for the alleviation of poverty relies crucially on the supposition that the sector is efficient, highly productive, and labor absorptive. In practice, there are indications that the estate sector has not lived up to the advantages it has been provided on any of these counts.

### Employment and Incomes

First, whereas the number of people employed by the estate sector has grown dramatically, that number still remains a small fraction of those employed in agriculture. An agricultural laborer has access to a livelihood within the estate sector either as a wage earner or as a tenant. With respect to the former, the number of agricultural wage laborers in the estate sector (excluding tenants) grew rapidly during the 1970s and first half of the 1980s, with estimates on the order of 157,200 hired workers in 1987 (Table 8).<sup>38</sup> In the more densely populated south, and especially Zomba district where surplus labor is plentiful, estates rely almost exclusively on wage labor, with sharecropping not being observed. Yet despite the quadrupling of estate laborers since 1969, the numbers are still small in comparison with the number of smallholders. The former represent just over 7 percent of the latter.

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<sup>38</sup> However, caution is needed in interpreting these figures because even among the so-called permanent wage earners on estates, employment is highly seasonal, peaking in January and February, precisely when demands for maize cultivation are at their greatest.

Table 8 - Wage and Salary Employment in Commercial Agriculture and Tenants on Burley Estates (1,000 persons)

Year	Tea Estates	Tobacco Estates	Other Private Commercial Agriculture	Total Wage and Salary Employment	Tenants
1969	30.1	8.1	4.5	42.6	-
1970	30.7	13.1	4.8	48.6	-
1971	32.6	15.9	5.2	53.7	-
1972	32.5	20.2	6.8	59.5	-
1973	35.2	24.6	11.5	71.4	-
1974	35.2	22.5	17.1	74.8	-
1975	36.8	20.5	28.8	86.1	-
1976	36.7	30.6	28.5	95.8	-
1977	39.6	71.7 <sup>a</sup>	21.5	132.8	-
1978	39.0	87.5	21.8	148.3	-
1979	-	-	-	-	-
1980	-	-	-	-	21.0
1981	-	-	-	-	24.0
1982	-	-	-	-	35.0
1983	63.7	85.3	23.3	172.3	59.0
1984	49.6	80.6	25.0	155.2	40.0
1985	47.3	89.7	28.7	165.7	47.0
1986	-	-	-	162.3	42.0
1987	-	-	-	157.2	52.0
1988	-	-	-	-	78.0
1989	-	-	-	-	105.0

Source: Malawi Government, Reported Employment and Earnings Annual Report, various years, and official sources; Duncan 1990.

<sup>a</sup> Before 1977, only firms employing more than 20 employees were included in wage or salary employment numbers. After 1977, all firms are included. Figures for 1977 and 1978 include about 18,300 workers not previously counted.

The same is true of estate tenants. Much of estate production, especially on burley tobacco estates in central Malawi, is carried out by tenants. One estimate puts the number of tenants nationally at 105,000 in 1989, up dramatically from 21,000 in 1980 (Duncan 1990). This growth rate reflects the recent expansion of estates, with most new lands being cultivated by tenants rather than wage laborers, whose numbers by contrast have remained stable during the past decade. The number of tenants, however, still remains below that of estate wage laborers.

Second, in addition to the above data on employment, an understanding of earnings helps to assess the estate sector's contribution to aggregate agricultural incomes. With respect to wage labor, indications are that earnings are low.<sup>39</sup> This evidence comes in a number of forms.

**Value-Added Income.** An examination of the value added per estate worker indicates that it is approximately 75 percent higher than in the smallholder sector (see Table 4). However, this figure does not take into account the fact that income per worker is highly skewed, with this category including wealthy estate owners and managers, as well as tenants and wage laborers. If, for example, one assumes that estate owners and managers represent 5 percent of those engaged in the estate sector and receive 50 percent of the income (likely a conservative estimate), the average value added for the remainder of the population would have been Mk 370 per year in 1987. This income is less than that of smallholders.

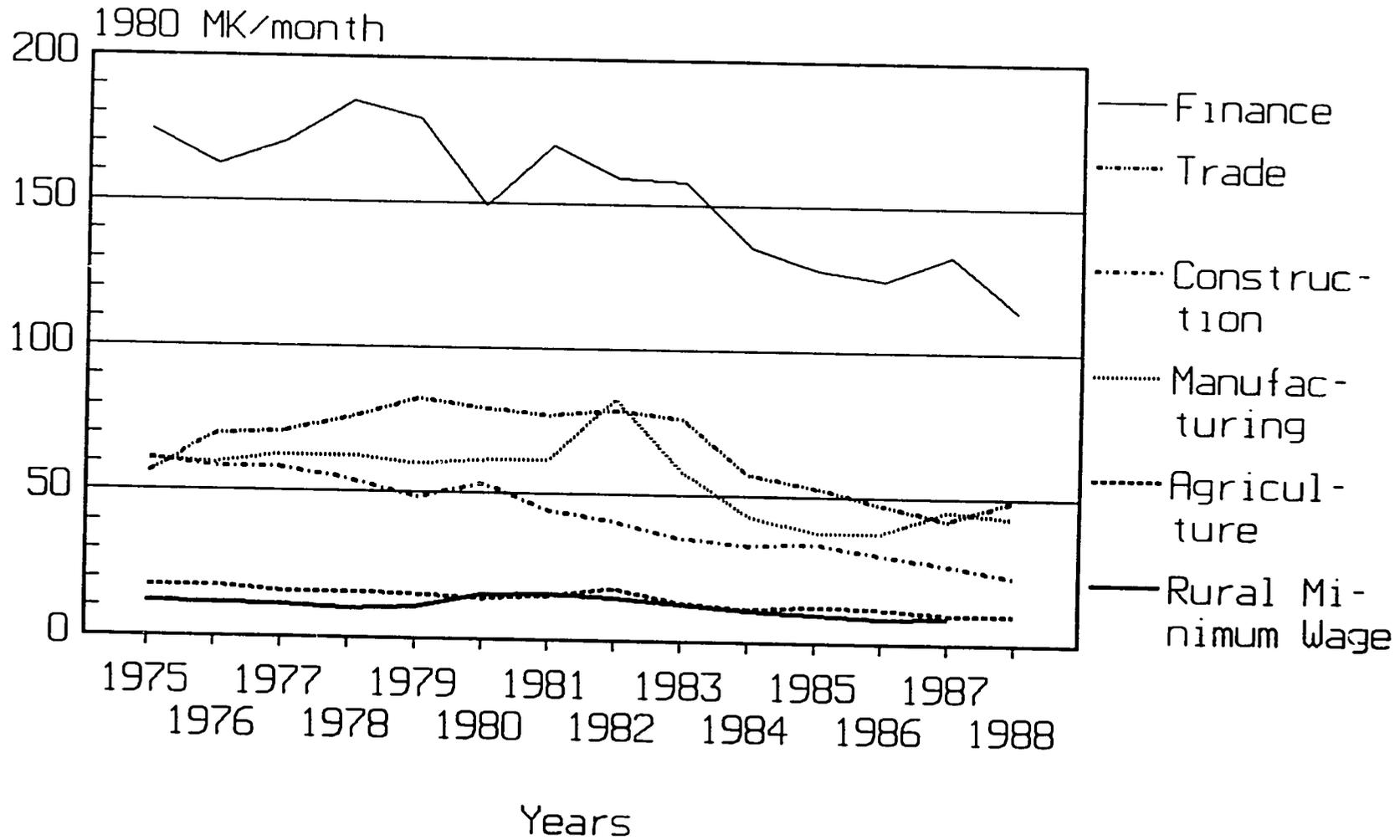
**Estate Workers' Average Earnings.** Data on average earnings by sector indicate that estate workers' wages correspond almost exactly to the minimum wage since 1980, while before that date it was higher than the legislated floor (Figure 2).<sup>40</sup> Overall, however, the real agricultural wage of Mk 9.54 in 1987 is lower than the figure of Mk 16.95 in 1975 and than the peak level of Mk 17.92 achieved in 1982. More importantly, estate workers are paid markedly lower than any other classification of workers (although other workers have also witnessed a declining real wage during the 1980s). For example, in 1987 the payment to agricultural estate workers was just over one-third of construction workers, the next lowest paid category, while estate workers earned less than one-fifth of the earnings of workers in manufacturing. But more interesting is that even if one assumes that estate

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<sup>39</sup> Low wage rates are achieved through two means. The first is through low (i.e., barely subsistence) minimum wage policies. The second is through the taxation of smallholder crops, which lowered the returns to farming customary lands and, consequently, the opportunity costs of being a wage laborer or tenant. This cheap labor, of course, has fueled the expansion of leaseholds and contributed to the growth in employment on estates.

<sup>40</sup> It should be noted that the minimum wage increased markedly in 1989. It is unclear whether this jump was paralleled by average agricultural earnings.

Figure 2 - Monthly Average Earnings  
by (Private) Sector



Sources: Malawi Government (1990); World Bank (1985a and 1982).

workers are employed 12 months a year, their individual annual earnings would have been Mk 252, less than the optimistic estimate above, which we expected to overstate the welfare of those engaged as estate workers.

**Estate Workers' Wages.** Survey data (Mkandawire and Phiri 1987) indicate that estate wages ranged from 70 to 90 tambala per day. Assuming the workers were employed 26 days per month, this level gives an income of between Mk 18.20 and Mk 23.40. In constant 1980 Kwacha, the upper bound is extremely close to the estimates found in Figure 2. More recent 1990 data also reveal that approximately 50 percent of adult male permanent workers were paid less than the statutory minimum wage, and 32 percent were paid less than nominal Mk 30 per month (Mkandawire, Jaffee, and Bertoli 1990).<sup>41</sup>

These indications, in sum, reveal that agricultural wages did not keep pace with administered maize consumer prices over 1982 to 1988. As a result, while it would have taken the head of a rural household with no other source of income 15 days of work per month at the average agricultural wage to feed a family of five that month in 1982, that worker was required to find 22 days of work at the average agricultural wage to sustain the family in 1987 (Figure 3).<sup>42</sup>

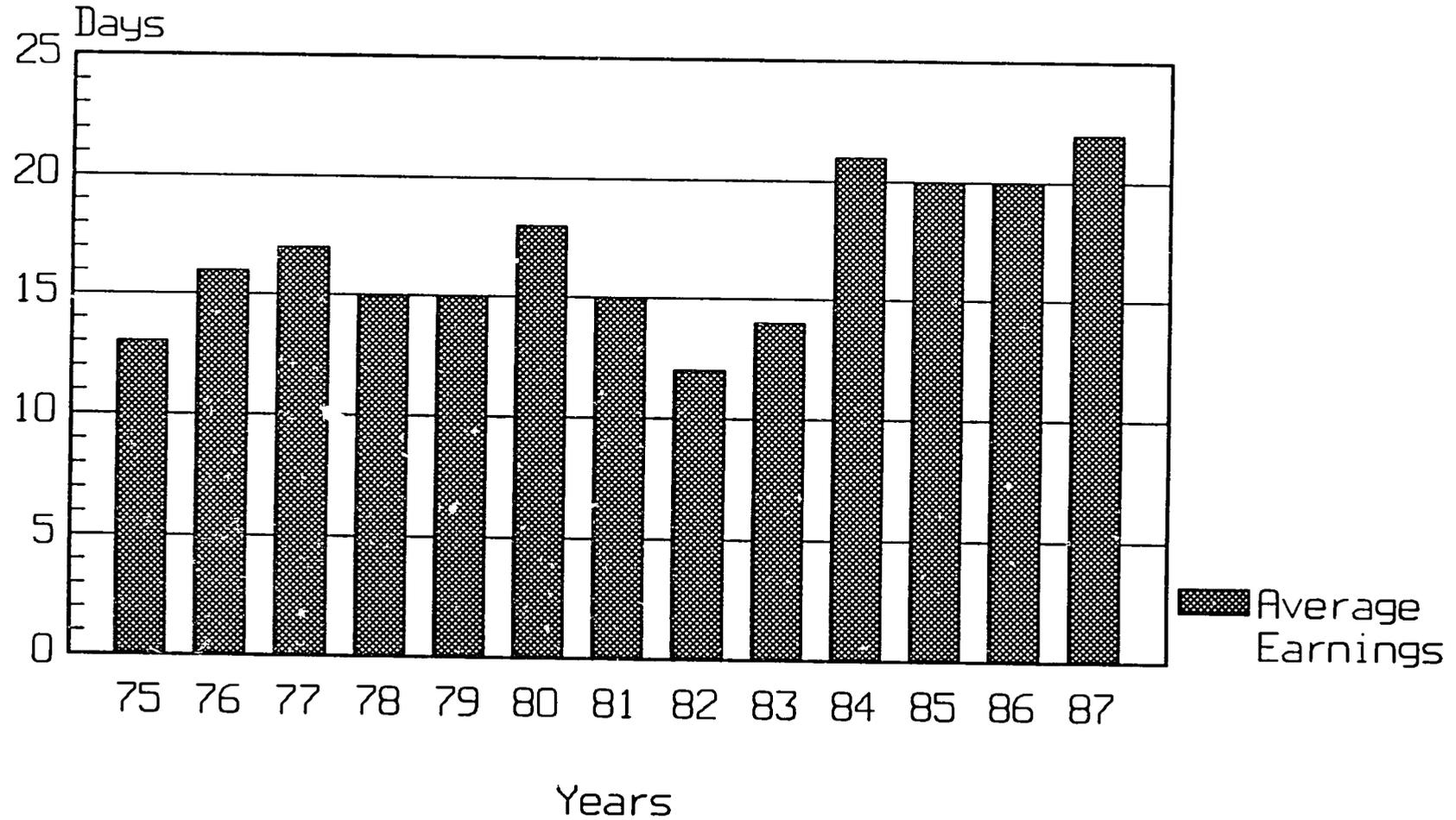
With respect to tenants, the story regarding mean earnings is somewhat better. The figures on tenants' incomes from various studies reveal that mean earnings compare favorably with the minimum wage, although they vary considerably. Vaughan and Chipande (1986) found that most of the tenant's annual profits were between Mk 200 and Mk 300 in 1985, while Nankumba (1985)

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<sup>41</sup> As many as 75 percent of adult male permanent workers were paid below the minimum wage in estates that were less than 15 hectares in size, according to the same study. Children were almost universally paid below the minimum wage. The large number of refugees from Mozambique is hypothesized to be exerting a downward influence on rural wages.

<sup>42</sup> These calculations assume that all household calories are from maize, and 70 percent of the budget share is allocated to food; a minimum caloric requirement of 2,200 calories per day per person; and a standard content factor of 3,570 calories per kilogram of maize. In other words, it assumes a requirement of 92 kilograms of maize to satisfy the subsistence requirements for a family of five. It should also be noted that these calculations use the official consumer price for maize. Actual retail prices for maize are generally higher even in rural areas and, as such, would require more days of work to meet minimum subsistence requirements.

Figure 3 - Number of Days Work at Average Agricultural Wage to Buy Subsistence Quantity of Maize, 1975-1987



Sources: World Bank (1988); Malawi Government (1988 and 1987).

cites an average annual net return to tenants in 1989 of Mk 476.<sup>43</sup> In another study, the mean profits of tobacco tenants for 1989 was Mk 396 (Nyanda and Shively 1989), although when non-estate income was added, total household income rose to more than Mk 600. A more recent survey revealed mean reported tenant cash income at Mk 621, with smaller estates paying lower wages (Mkandawire, Jaffee, and Bertoli 1990). All these figures compare favorably with an annual minimum wage rate of Mk 281 from 1987 into 1989,<sup>44</sup> which corresponds closely to the average agricultural wage as discussed previously. This observation is tempered, however, by the revelation of a high degree of skewness in tenant incomes. A large number of tenants receive no income at all while a few account for a large share of receipts (Mkandawire, Jaffee, and Bertoli 1990).

### **Toward Greater Productivity and Equity**

While estates have been growing in terms of land area, the fact that the laborers and tenants are still extremely poor and have benefited little from the expansion of estate lands appears to lie with the existence of a number of "market failures," which restrain the productivity of both land and labor. Furthermore, these market failures restrain the amount of labor demanded by the estate sector and the remuneration paid, both of which are of crucial and increasing importance to rural households.

Of particular concern is the observed underutilization of leased land. The concern is especially acute in light of the rapid conversion of customary land into leasehold land and of the conjunct land pressure on smallholders, discussed above. Indeed, in the absence of any national land use survey, studies such as that by Mkandawire and Phiri (1987) support the contention that large tracks of leasehold land lie idle while many smallholders are, in effect, nearly landless. Underuse is especially true for large-scale estates (greater than 100 hectares) where cropping intensities average 23 percent, with more than one-third of these estates cultivating less than 15 percent of

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<sup>43</sup> Caution should be taken in interpreting these returns, however, since a number of costs should be subtracted in these calculations and often are not. For example, the Nankumba study subtracts only production expenses for which tenants received advances from landlords. The study does not take into account rental value, if any, on housing. Furthermore, it is unlikely, for example, that tenants' migration costs are subtracted in calculating their net returns here. It is also likely that the value of the food ration provided and of the implicit interest rate for such food are not taken into account.

<sup>44</sup> The sharp increase in the minimum wage in 1989, however, permits an annual income of Mk 635 if one were to work every day of the year.

their total land (Mkandawire, Jaffee, and Bertoli 1990).<sup>45</sup> Increasing the use of this idle land should increase the potential labor absorption capability of estate expansion.

Most explanations for the observed phenomenon of unused estate lands point to rectifiable market failures.<sup>46</sup> First, assigning a rental value to land is, in theory, a most direct means of raising the opportunity cost of holding land and inducing its productive use. In practice, though, land rental values in Malawi are not related to land productivity. Land rents not only lie well below the economic value of land, but also do not vary with the productivity of land. These rents, which are fixed at Mk 10 per hectare regardless of land quality and potential returns, moreover, are often not even collected (World Bank 1987). Designing and then enforcing an appropriate land rent or land tax structure for the estate sector is imperative to preventing land from being viewed as a costless asset. Charging land rents would encourage land use and raise labor requirements that will contribute to reducing rural poverty concerns.

Second, underutilization of estates results from problems of slow start-up, partially because of the slow pace at which lease applications are reviewed and capital for estate development is procured. While one justification for converting customary to leasehold land was to direct land rights toward those with the financial capacity to maximize productivity, in Malawi we are apparently presented with ironical circumstances. Many leases, especially in the 1970s, were issued to civil servants and others who had enough money to obtain a lease, but not enough financial or managerial capacity to do anything with the land. Contrary to the theory that underutilization of estates may simply be due to a lack of labor, land underutilization may be problems associated with absentee landlords and the

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<sup>45</sup> Whereas the extent to which estate land lay idle was, in the past, estimated at between 92 to 86 percent, the recent estate survey found that close to 70 percent of estate lands were uncultivated. This percentage was found to vary by estate size. While, as discussed above, much land on larger estates remain uncultivated, cropping intensities on estates of less than 30 hectares approached 50 percent. Cropping intensities also differ by region, varying, for example, from 20.6 percent in Rumphi to 42 percent in Lilongwe.

<sup>46</sup> A few other explanations also exist that could partially explain such a phenomenon. On the one hand, there may be technical reasons. The optimal fallow period for tobacco ranges from two to three years, for example, potentially explaining some of the non-use of land. Moreover, wood lots may occupy a significant portion of land, especially where critical for the drying of tobacco.

lack of managerial capacity.<sup>47</sup> In the recent estate survey very few managers reported having had any managerial experience before their present job (Mkandawire, Jaffee, and Bertoli 1990).

Third, the observation on differential regional population densities discussed earlier also sheds light on why there might be underutilization of estate lands in the central region. Currently, there appear to be labor shortages on estates in the central region while surplus labor in the form of nearly landless farmers characterizes the south.<sup>48</sup> To the extent that a labor shortage does exist on estates, the solution lies in working to make labor markets clear. To begin with, there is a need for information and infrastructure to lower job search and related transaction costs. At present these costs are quite high because workers rarely relocate permanently and because travel is expensive. This pattern of seasonal migration reflects factors such as the limited growing season for tobacco, the inaccessibility of estate land for subsistence maize cultivation, the risk of losing one's own customary holding upon prolonged absence, and the generally poor working conditions and lack of long-term contacts. Labor mobility would be promoted and job search costs reduced by solutions such as the diversification of estate cultivation so as to allow for the production of maize on unused land, the registration of smallholdings, or the construction of housing on estates, which would facilitate resettling smallholders in central Malawi. Here, too, tenancy contracts that are better defined and less exploitative, as well as wages that are more attractive to labor, would enhance the pull of estates as a destination for potential migrants. The latter, as discussed above, will be supported by the increase in implicit wages to a more competitive smallholder sector.

In addition to the high rates of underutilization, a related concern revolves around the productivity of estate crops during the past decade (Table 5). While the data in Table 5 appear to reveal a substantial yield advantage held by estates, a simple comparison of burley and flue-cured yields with those of smallholder tobacco is of limited meaning. First, the differences in yields are a function of the type of tobacco grown and, more specifically, of the prohibition against smallholders growing burley and flue-cured. Second, in contrast to estate managers, smallholders growing

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<sup>47</sup> The most recent estate survey found absentee ownership of estates less pervasive a phenomenon than claimed in the past. This is probably also due to the increase in the number of leases extended to "graduated smallholders" during the past decade. Approximately 60 percent of sampled estates are now managed by a resident owner (Mkandawire, Jaffee, and Bertoli 1990).

<sup>48</sup> A recent report suggests that there is little evidence of "land hunger" in the Kusunga, Mchinj, and Salina tobacco growing areas (Twomey 1989). These areas contrast with densely populated areas of the south, such as Blantyre and Chirdzulu, districts where population densities are 292 and 275 persons per square kilometer, respectively. Low utilization of land on some estates may thus simply reflect the lower labor-to-land ratios in those districts.

sun- and air-cured tobaccos do not generally apply fertilizer for reasons alluded to earlier.

Nevertheless, several reasons continue to be cited as to why the estate sector may be expected to have a theoretical yield advantage relative to the smallholder sector. The first reason is that the estate sector has better access to higher output prices, to credit, to cheap labor, and to larger landholdings. The second, albeit less well-substantiated, reason for lower yields on smallholder tobacco is that labor inputs are lower for smallholder than estate tobacco production, including the few smallholder farms producing burley (Lele and Agarwal 1989).<sup>49</sup> The third reason, which is a productivity advantage held by estates in theory, is that the ratio of product to input prices is higher for estates than for smallholders, compelling estates to be relatively more input-intensive. The fourth reason, and perhaps most difficult to substantiate, is the hypothesis that even if crops were comparable and input usage were the same, estates would appear more productive because they are cultivating better land.

While estates may hold these advantages in theory, in practice, the empirical evidence presented in the previous section on DRCs reveals that the smallholder sector holds the productivity edge, thereby arguing against the suggestion that production on estates is to be commended over smallholder production on efficiency grounds. In fact, the evidence of stagnating productivity of Malawi estates (Table 5), as frequently observed elsewhere in Africa, suggests quite the contrary.

The following are reasons for this failure to achieve productivity gains. First, low productivity on estate land may hark back to a criticism of customary tenure—namely, insecurity of long-term tenure may be limiting investment on some estates. For the many estates with only 21-year leases, the time horizon appears too short to encourage extension investment in the land. Twomey (1989) suggests that if there is a problem with poor land utilization, it seems to be concentrated on mid-sized estates with short, 21-year-term leases. The optimal economic solution here would be the conversion of leasehold to freehold land in conjunction with the introduction of a market in land. However, this solution is politically unlikely. In this case, the lengthening of lease terms is recommended.

A second reason for low investment and low productivity on estate land may be associated with the insecurity of tenants' tenure rather than that of the leaseholder. Under tenancy relationships in Malawi, the burden of risk

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<sup>49</sup> To the extent that this assertion is correct, it is in conflict with the observations from land-scarce Asia that labor inputs are inversely proportional to holding size. One possible reason for this divergence is that there are seasonal labor shortages likely during transplanting and harvesting. Such shortages may induce smallholders to neglect their own holdings in search of high seasonal wages that are offered during the period when stocks of maize have been depleted.

invariably falls on the tenant's shoulder – namely, if crops fail or crop prices fall, the tenant must bear the uncompensated costs incurred during production, including the value of food and inputs provided on credit.<sup>50</sup> This distribution of risk, while evidently one of the primary attractions of tenant labor over wage labor in the eyes of estate managers, is not conducive to technological change. A more equitable sharecropping arrangement in this regard can be expected to result in productivity gains.

Third, the limits set by the allocated tobacco quota, as well as shortages of capital and transportation constraints, are cited by estate owners as reasons for low productivity and for low levels of land use. The detrimental impact of tobacco quotas on land use is evident in the fact that several estate owners admitted registering land as estates simply to gain access to an additional quota. These owners had no intention to actually develop the estate (Mkandawire, Jaffee, and Bertoli 1990).

A fourth reason for stagnating productivity that has important implications for the welfare of workers is that the poor pay, the high implicit cost of credit, and the frequently exploitative contractual relationships contribute to the high turnover rate of tenants. This problem has been identified as serious both by owners and managers<sup>51</sup> (Nankumba 1990). (Recently, the turnover rate among tenants was estimated at above 30 percent per year [Mkandawire, Jaffee, and Bertoli 1990]).

With respect to pay, the price to tenants is set by the government, not the market, on the basis of recommendations received by the producer's organization, the Tobacco Association of Malawi (TAMA) (Mtawali 1989). As a result, the price paid to the tenant is low relative to the auction price. In fact, the price has ranged over the past decade from a low of 19 percent in 1988 to a high of 41 percent in 1983. Furthermore, the set price is a maximum rather than a minimum price, thereby in theory tending to hold down, rather than support, a reasonable price to be paid to tenants. Consequently, estates frequently pay less than the maximum price, although this is often done through undergrading tobacco purchased from tenants, delaying payment until after the auction, and paying in installments (Nankumba 1990).

With respect to credit, the cost at which credit is made available to tenants by landlords appears to be extremely high. Data show interest paid on credit for high-analysis fertilizer is as high as 140 percent, and interest on hoes is 45 percent (Mtawali 1989). The interest on the maize ration, similarly, is as high as 40 percent, increasing the price of a

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<sup>50</sup> This burden sometimes leads tenants to remain on the estate after the crop season to perform casual labor as a method of repayment.

<sup>51</sup> Out of 90 tenants interviewed on tobacco estates in 1989, only 46 had been there for two or more years. Such turnover is a reflection of tenant discontentment and welfare.

subsistence diet significantly. It is apparent that debt repayment significantly diminishes actual tenant incomes.<sup>52</sup> On the Chilanga estate, for example, presumably as much as 90 percent of the value crop is designated as repayment of debt accrued that year, and contracts specify that tenants will receive in cash only 10 percent of the value of the crop (Nankumba 1990).

Other elements in the contractual arrangement between landlord and tenant are unfavorable to tenants and may partly explain tenants' high turnover rate. Generally, these holdings are contracted by estates to married men, who work the land with their families. Assigning a tenancy agreement to a married man is viewed by estate managers as a means of reducing the turnover rate. It is also viewed as a cost-effective way of increasing the size of the labor force, because a married man presumably brings his wife and grown children to work his plot with him. For example, holdings among tenants are small, allocated plot sizes averaging 0.4 hectares<sup>53</sup> (Mtawali 1989). Moreover, the contract binds the tenant to cultivate a specific crop, predominantly burley tobacco, which the tenant must then sell solely to the estate. While tenants are occasionally provided with an extra plot of land for cultivating crops for their subsistence needs, in many reported cases this does not occur<sup>54</sup> (Nyanda 1989; Vaughan and Chipande 1986). Rather, a preferred arrangement among estate managers is the provision of a food ration on credit. However, there are indications that this system leaves some tenants at nutritional risk. While the food ration varies by estate, the typical allotment consists of one tin of maize and three kilograms of beans per household per week, regardless of household size (Mtawali 1989). As a result, larger households are often short of food. Added to this is the fact that landlords do not always adhere to the food distribution arrangement. Landlords frequently run short of maize and extend the ration distribution period from once every week to up to once every two weeks (Mtawali 1989). Also, once the tobacco crop is planted after January, landlords are observed

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<sup>52</sup> These charges are subtracted from the value of the final tobacco sale, which obfuscates determining the extent to which low sales revenue is actually due to low prices on output rather than to high credit costs of inputs.

<sup>53</sup> Holding sizes of tenants on nontobacco estates are apparently larger. In fact, another source (World Bank 1988) states that the average amount of land under cultivation by tenants was 0.32 hectares on tobacco estates, 0.68 hectares on tea estates, and 1.54 hectares on sugar estates.

<sup>54</sup> In addition to detracting from land that could alternatively be used to produce highly remunerative export crops, estate managers are aware that allowing the cultivation of subsistence crops diverts tenant labor and other inputs, such as fertilizer, from producing tobacco.

to pay less attention to agreed food rations since they know that tenants are now bound by debt and investment to wait until harvest.<sup>55</sup>

In sum, the landlord-tenant relationship is characterized by ambiguity, reflecting that tenancy contracts are essentially unenforceable. Often negotiated in oral rather than written terms, such contracts have generally been biased in favor of landlords. Lacking specificity, most contracts lack clauses that would protect tenant interests. The lack of a written contract also encourages breaches in contract. As a result, disputes frequently arise regarding many of the factors discussed above, such as the cost of credit as well as the provision of food and social services. Moreover, disputes are more often than not resolved in favor of the more powerful estate managers (Nankumba 1990).

The above factors, relating to low pay, high credit costs, and other unfavorable aspects of the contractual relationship, may thus contribute to lower productivity by driving the high turnover rate among tenants. The transaction costs of the associated job search, moreover, are not only a threat to the household's welfare, but also a further cost indirectly borne by the estate manager who often does not have a reliable, experienced work force. The above factors would also have a negative impact by serving as disincentives for tenants to cultivate intensively or to invest in their tenancy holdings. In this regard, the clearer definition of tenancy contracts and the removal of certain exploitative provisions can be expected not only to assist estate productivity, but also to improve the plight of tenants.

In sum, then, strategies need to focus on increasing the use of both land and labor in the estate sector, usage that is essential for generating higher levels of rural employments and incomes. In improving productivity, these strategies will enhance the estate sector's capacity to absorb labor and to pay higher wages. In so doing, they would provide the rural poor with much needed access to a source of cash income as well as access to land. Indeed, within the context of a two-sector agricultural economy, only by so doing can an estate sector be justified – either in terms of promoting a strategy for national growth or in terms of promoting a strategy for the alleviation of poverty.

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<sup>55</sup> These factors certainly play an important role in explaining the relatively high rate of malnutrition on estates. A recent study on nutritional status in the estate sector found the degree of malnutrition to be higher on estates than among smallholders or wage laborers (Mtawali 1989).

## 5. CONCLUSIONS

This paper has examined the effect in Malawi of land and related agricultural policies on economic development in general and poverty in particular. The focus has been on Malawi's decision to channel resources to the estate sector, a policy that is predicated on the notion that smallholder agriculture, which is based on customary land, was not an appropriate engine of growth. Rather, the estate sector was viewed as a means of generating needed revenues and foreign exchange, with the smallholder subsector providing cheap labor and wage goods in support of this strategy.

It remains debatable whether, and to what extent, the favoritism accorded estate leaseholders has been to the detriment of the aggregate growth objective. On the one hand, pro-estate policies in terms of marketing arrangements and support services have encouraged dramatic expansion since independence, especially in tobacco. On the other hand, the low levels of land utilization and the stagnating productivity of estates, coupled with the increasing number of estates unable to repay commercial bank loans, are strong evidence of the failures that have beset Malawi's growth strategy.

Less contentious is the point that the land policies could have been formulated to be more conducive to poverty alleviation. As the first factor, policy has contributed to the smallholder sector's failure to raise household incomes and welfare. The combination of shrinking holding sizes (a result of population growth and alienation of land to estates) and lack of technological innovation has contributed to widespread household food insecurity. This combination is especially so in the more densely populated regions of the country where productivity growth in maize has lagged far behind population growth. In addition, export crop production by smallholders cultivating customary lands has not proven very profitable because of a combination of restrictions placed on crops produced; of high levels of taxation; and of shortages of credit, extension, and other public inputs into agriculture.

A second factor for land policies not contributing to poverty alleviation revolves around the estate sector's failure to generate remunerative employment opportunities. While the number of agricultural wage laborers has risen substantially during the past two decades, wages have not. This dichotomy is due to a combination of reasons, including the failure to raise estate productivity, the explicit wage policies that have tended to maintain minimum wages at barely subsistence levels, and the taxation of smallholder production that reduces the smallholder reservation wage. In addition, government policies toward tenants working on estates can at best be characterized as benign neglect. Virtually nothing has been done to protect tenants' rights and to avoid exploitation of workers. Indirect efforts to

improve tenant welfare, such as removing barriers to migration, have not been implemented.

The third related factor contributing to the continuation of widespread poverty and food insecurity is that the mechanism for applying for and receiving leases encourages rent-seeking behavior and factor price distortions, both of which contribute to inefficiencies. As the fourth factor, there is also little evidence that surpluses generated from agriculture have been reinvested in agriculture in such a way as to address the large income differentials between agriculture and other sectors such as manufacturing and government. In fact, the profits that accrued to ADMARC from taxing the smallholders were used for an array of activities, many of which involved the surpluses being transferred out of rural areas altogether. As the fifth factor, given the resource constraints to agriculture, it is important to recognize that greater attention must be given to promoting off-farm income sources as a strategy for tackling rural poverty and contributing to national development.

Throughout this paper, we have discussed the types of changes in land policies that will facilitate more rapid and equitable growth: raising leasehold land rents; enforcing land covenants; imposing a moratorium on land alienation; reducing the taxation of smallholder export crops; eliminating restrictions barring production of profitable export crops on customary land; promoting written and equitable contracts for tenants working on estates; investing in rural credit and related infrastructure to serve smallholders; and imposing greater penalties to estate holders who default on loans.

A common thread runs through these recommendations. Specifically, policy must address the inequities and inefficiencies that emanate from keeping down the costs of local factor inputs (i.e., land, labor, and capital) to estates. Doing so not only will provide an opportunity for factor use to reflect the inputs' scarcity value, but also will improve equity in the distribution of agricultural value added. It will remove the rents that accrue to the privileged estate owners who get access to low-priced land alienated from the customary sector, to low-priced labor because of the high level of taxation of smallholders, and to cheap credit resulting from the negative real interest rates that have prevailed. Increased factor prices, coupled with increased public investment in agriculture, will foster more efficient production methods and greater equity as well. Ultimately, whereas factor ratios may have justified a policy direction promoting expansion of large-scale estates at one time, current circumstances warrant a different tack. Capital scarcity and land abundance at independence may have contributed to Malawi's adopting the estate strategy. In contrast, the land scarcity extant in densely populated regions of Malawi today contributes to rural poverty and draws into question the appropriateness of current policies.

While the policy implications of much material in this paper have been clear, lessening the cleavages between these subsectors presents a new set of challenges. Concurrent with removing distortions and institutional discrimination that has reinforced agriculture's duality, it is, therefore,

important to carefully consider appropriate changes in the structure of smallholder and estate sectors. In particular, there is a need to release constraints to smallholder production and marketing while increasing smallholder producer prices, thereby placing competitive pressure on the estate sector in order to raise rural incomes. This approach is the most politically feasible and realistic way of tackling the distortions and poverty induced by the current nature of dualism in Malawi.

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