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MADIA DISCUSSION PAPER 3

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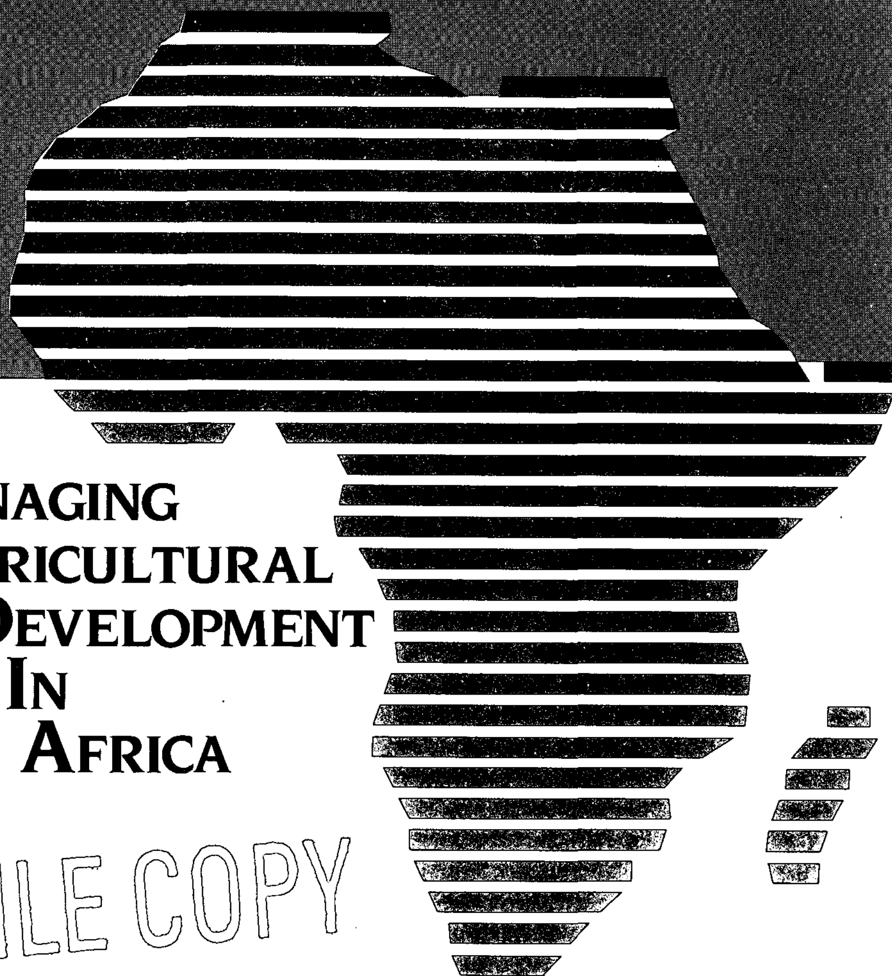
GROWTH AND STRUCTURAL CHANGE IN EAST AFRICA

DOMESTIC POLICIES, AGRICULTURAL PERFORMANCE, AND WORLD BANK ASSISTANCE, 1963–86

PARTS I AND II

UMA LELE · L. RICHARD MEYERS



MANAGING AGRICULTURAL DEVELOPMENT IN AFRICA

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FOREWORD

The MADIA study and the papers comprising this MADIA Discussion Paper Series are important both for their content and the process of diagnosis and analysis that was used in the conduct of the study. The MADIA research project has been consultative, nonideological, and based on the collection and analysis of a substantial amount of concrete information on specific topics to draw policy lessons; it represents a unique blend of country-oriented analysis with a cross-country perspective. The conclusions of the studies emphasize the fundamental importance of a sound macroeconomic environment for ensuring the broad-based development of agriculture, and at the same time stress the need for achieving several difficult balances: among macroeconomic, sectoral, and location-specific factors that determine the growth of agricultural output; between the development of food and export crops; and between the immediate impact and long-run development of human and institutional capital. The papers also highlight the complementarity of and the need to maintain a balance between the private and public sectors; and further the need to recognize that both price and nonprice incentives are critical to achieving sustainable growth in output.

The findings of the MADIA study presented in the papers were discussed at a symposium of senior African and donor policymakers and analysts funded by USAID in June 1989 at Annapolis, Maryland. The participants recommended that donors and African governments should move expeditiously to implement many of the study's valuable lessons. The symposium also concluded that the process used in carrying out the MADIA study must continue if a stronger, more effective consensus among donors and governments is to be achieved on the ways to proceed in resuming broad-based growth in African agriculture. The World Bank is committed to assisting African countries in developing long-term strategies of agricultural development and in translating the MADIA findings into the Bank's operational programs.

Stanley Fischer
Vice President Development Economics
and Chief Economist

Edward V. K. Jaycox
Vice President
Africa Regional Office

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Uma Lele is the manager of Agricultural Policy in the Africa Technical Department at the World Bank.
L. Richard Meyers is a rural sociologist in the Agriculture and Rural Development Department at the World Bank.

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Note

This volume was originally completed in 1987 and was issued at that time as a DRD Discussion Paper by the Development Research Department of the World Bank. Other MADIA publications completed since then provide more current detail of the recent developments in each of these countries including information on the adjustment experience. See, for example, the following MADIA papers and journal articles:

Uma Lele, "Structural Adjustment, Agricultural Development, and the Poor: Some Lessons from the Malawian Experience";

Uma Lele, Robert E. Christiansen, and Kundhavi Kadiresan, "Issues in Fertilizer Policy in Africa: Lessons from Development Programs and Adjustment Lending, 1970-87";

Uma Lele and Robert E. Christiansen, "Markets, Marketing Boards, and Cooperatives in Africa: Issues in Adjustment Policy";

Uma Lele, "Managing Agricultural Development in Africa" *Finance and Development* 26 (March 1989): 45-48;

Uma Lele, "Sources of Growth in East African Agriculture" *World Bank Economic Review* 3 (January): 119-144.

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Overview

Comparisons between Kenya, Tanzania, and Malawi are of interest because all three countries started with somewhat similar initial conditions at independence but have followed quite different policy paths with very different economic outcomes. Agriculture is nonetheless the most important source of employment, income, and exports in all three countries. Not surprisingly, the performance of the agricultural sector and the agricultural policies pursued have been closely related to each country's overall economic performance and policies.

Kenya and Malawi have both done quite well in terms of growth of export crop production, but Kenya's performance has been far superior in reconciling growth with equity. Tanzania has done least well on growth of export crops, including those produced by smallholders. Tanzania's efforts to sustain policies to achieve equity have been hampered by the lack of growth of the economy. Malawi's strong export growth has until recently diverted the attention of many observers, including the Bank, from the sources of that growth, including examination of the basic structural policies the government has pursued as well as the technological constraints that have adversely affected Malawi's smallholder sector performance.

The relative performance of each country in the food sector is more difficult to compare due to weak data. Again, however, Kenya appears to be more advanced in promoting the process of technical change in the smallholder sector, especially in maize production.

The breadth of participation in growth has had a profound impact on the process of economic development in each country. Achieving equitable growth requires the development of a sophisticated network of institutions to service the needs of a large number of small, geographically dispersed producers with diverse resource endowments. Kenya, which admittedly started out with the most favorable institutional base at independence, derived from its large (European) farm structure, used this base and greatly broadened small farmer access to institutional services. Malawi's historical institutions serving a modern European agriculture were fewer than Kenya's. Subsequent growth has maintained this narrow European estate sector base along with an evolving but equally narrow indigenous estate sector in which growth appears to have occurred at the cost of incentives and investment opportunities for the smallholder sector. Tanzania pursued policies aimed at dismantling its historical institutional base, and experimented with many new institutional arrangements, which greatly destabilized the environment for smallholder production.

The structure of agricultural production and its growth is, however, not simply determined by institutional and microeconomic factors, but by the quality and the stability of the macropolicy environment within which agricultural production is carried out. Kenya's macroeconomic and sectoral policies were far more conducive to growth than Tanzania's throughout the 1970s. Depending on the particular policy under examination, Kenya and Malawi exchange places in terms of demonstrating superior macroeconomic management—if the interaction of structural (estate-oriented) policies with macroeconomic policies is considered, Kenya was certainly superior to Malawi. Both Kenya and Malawi have provided a more stable institutional environment for development than has Tanzania. Also, external shocks were more adverse in the case of Kenya and Malawi than of Tanzania.

Tanzania's resource base is far more diversified and favorable for growth than that of Malawi and perhaps even Kenya. Land availability, as reflected in land person ratios, is much greater in Tanzania compared to Kenya or Malawi, although a small proportion of Kenya's land (4 percent) is of very high quality.

Per capita ODA levels have, however, been substantially higher in Tanzania than in Kenya and Malawi. While they began to decline from their 1981 peak due to Tanzania's tardiness in adjusting its macroeconomic and sectoral policies, they were still higher than in Malawi and Kenya in 1984 as donors were slow to recognize the adverse effects created by Tanzania's domestic policy environment.

The above arguments lead to the conclusion that policy variables explain much of the growth or stagnation that has occurred in the three countries. Similarly, they help to explain how the benefits of growth have, or have not, been distributed.

The Role of the World Bank

With the exception of smallholder tea, coffee, and dairying in Kenya, there appears to be relatively little connection between where growth has occurred in the agricultural sectors of the three countries and where the Bank has provided about $994.1 million worth of agricultural project assistance as of 1986. In addition the Bank provided $440.9 million of assistance in the form of sectoral or structural adjustment lending in the three countries during the 1980 to 1986 period. The fungibility of resources diverted to the estate sector explains this phenomenon in Malawi, where the Bank concentrated its resources in the smallholder sector but with little growth. Growth in smallholder tea and coffee in Kenya—the main source of its agricultural growth—occurred contrary to the Bank's worldwide advice on tea and coffee expansion to countries producing these commodities (although, paradoxically, the Bank's lending for agroprocessing was crucial for expansion of smallholder production in Kenya).

In Tanzania the Bank's 1973 Agricultural Sector Report correctly identified the constraints to growth and stressed the need for a sequential approach to the development of smallholder agriculture that could capture the most obvious sources of growth. However, this approach conflicted with Tanzania's policies. The Bank's policy analysis after that was very constrained by the Bank's reluctance to directly question Tanzanian policies. Its project portfolio was, until about 1981, very conditioned by Tanzanian policies that were not growth-oriented.

By the early 1980s macroeconomic difficulties were reinforced by external shocks in all three countries. These were combined with severe project implementation difficulties, especially in Kenya and Tanzania, but also in Malawi. This was partly a result of the rapid expansion of Bank lending, as well as that of other donors, to the agricultural sectors of these countries, often for quite marginal activities under conditions of weak planning and institutional capacity.

The World Bank financed a total of 68 agricultural project operations in Kenya, Malawi, and Tanzania between 1965 and 1986—26 operations in Kenya with commitments of $500.50 million; 18 in Malawi with commitments of $172.69 million and 24 in Tanzania with commitments of $320.95 million. Of 24 World Bank agricultural project operations completed in the three countries between 1965 and 1986, involving investments of $266 million, only 14 had positive rates of return; ten had ERRs equal to or exceeding 10 percent. Not all these poor realized returns were the result of unanticipated problems. Many marginal investments were approved in support of political objectives of the governments, especially ones concerning interregional income distribution. While taking these concerns into account, it can nonetheless be argued that the projects financed were often not necessarily the most cost effective way of addressing such concerns. This and other evidence suggests that the countries would have been better-off if they had not borrowed from the Bank for many of the activities funded. This is more true for Kenya and Tanzania than for Malawi where ERRs for a larger number of projects suggest a more positive impact. However, economic evaluations are done immediately upon the completion of projects. More recent data on Malawian smallholder agriculture raise questions about the long-term effects of projects initially regarded as favorable.

Another noteworthy feature is that until quite recently the Bank's assistance (as well as aid levels) was not positively related to the conduciveness of policies or the level of performance of the three countries. Pressure to lend in the 1970s resulted in indiscriminate growth in lending and weak project portfolios that did not clearly reflect the positive features of the Bank's macroeconomic and sector analysis.

The early 1980s ushered in an era of greater appreciation within the Bank concerning the nature of the interactions between macroeconomic, sector, and micro constraints to growth and the need to more directly relate the level and the composition of lending to the macroeconomic and sectoral policy environment. This realization had three consequences: (1) attempts by the Bank to seek macroeconomic and sectoral policy and institutional reforms in each of the three countries;[1] (2) cancellation of poorly performing projects; and (3) development of new projects that were geared to improving the capacity of the governments to more effectively deliver basic agricultural services, e.g., research, extension, and input supply.

Policy distortions in the three countries have been the least in Kenya although some difficult institutional problems remain with regard to land tenure and the role of the private sector in agroprocessing and marketing. The Bank, however, was slow to appreciate the complexity of these issues. This led to an untimely effort at grain marketing liberalization attempted through the second SAL in a period culminating in a severe drought. By 1985, the Bank's

policy and project dialogue in Kenya had returned to a more balanced effort to address the problem of priorities in the sector as well as a number of institutional issues of a long-standing nature that had repeatedly been confronted in the course of project lending.

The past and future sources of growth in Kenya center on the issue of intensification in tea, coffee, maize, and dairying. The Bank would appear to be on the right track now in Kenya by concentrating on improving agricultural research and extension, credit, and marketing in order to achieve intensification. Nevertheless, the relatively limited diagnosis, through primary data collection and analysis, of the precise constraints to achieving growth, as well as the speed of reform may continue to be problems unless the balance of resources devoted to lending versus analysis changes. Secondly, the Bank needs to seriously reconsider its policy advice to Kenya concerning the development of coffee and tea. The policy has been prompted by concerns about limited world market prospects for tea and coffee and the collective good of beverage producing countries whose interests are served by limiting production. However, this advice has not served Kenya well and has been inconsistent with the realization of a dynamic comparative advantage. Equally important, the treatment of risks has been quite weak—including those related to the nonrealization of the Bank's price forecasts in the estimation of economic benefits. At a more general level the prospects for primary commodities produced in Africa and the implications for country and project specific advice needs serious review by the Bank.

The effects of macro and sectoral distortions on agricultural performance and on the Bank's portfolio have been the greatest in Tanzania. The Bank was tardy in taking into consideration the importance of the policy environment for the size and the content of its lending program and in several ways reinforced the government's worst tendencies through project assistance, i.e., support for the government's import substitution industrialization strategy and its excessive focus on equity. These problems were identified in the Bank's 1983 Agricultural Sector Report, which repeated many of the themes of the 1973 report. Once recognized, the difficulties of the large project portfolio combined with the government's slowness in responding to these problems, brought the Bank's agricultural lending activity to a virtual standstill from about 1983 to 1986 when the government began to reconsider structural reform.

In Malawi, on the other hand, the Bank, through the SAL process and several new projects in agricultural research and fertilizer distribution, has since the early 1980s helped the government to correct some of the more important policy distortions—those that favored estates at the cost of smallholders in the 1970s. On other sectoral policy issues that will have profound long-term effects on development, e.g., the land issue, the speed of removal of fertilizer subsidies, and the restructuring of ADMARC (the agricultural marketing parastatal), the Bank needs to go further in analyzing the basic sources of Malawi's structural problems and needs to help develop a long-term strategy of development that will address the question of how to better reconcile growth with equity. In this analysis the political economy aspects of policy reform need far greater emphasis than is true of the more narrowly defined economic analysis usually conducted by the Bank.

The most important conclusions of this research concern the recognition of the Bank's obvious comparative advantage in policy analysis and in the articulation of long-term country specific development strategies in support of which donor assistance and domestic resource mobilization can be organized through aid coordination. However, there is a pattern in the Bank's operations of insufficient analysis of specific constraints to long-term development, including consideration of the implications for sequencing and phasing of policy reforms and investments, *before* reform packages are put in place. This has been accompanied by the lack of a long-term view of development, one that in particular places greater emphasis on human capital/institutional development in the recipient countries relative to the emphasis placed on financial resource transfers. There is also inadequate effort at aid coordination in which the comparative advantages of other donors to undertake specific activities in support of a long-term strategy are explicitly recognized.

The issues of donor comparative advantage and lack of analysis of specific constraints are closely related. Lack of attention to critical constraints is due in part to the insufficient attention paid to micro-level factors that potentially inhibit the success of investments. This in turn stems from limited analytical capacity in recipient countries with which to undertake the necessary microanalysis. Thus, donors need to devote greater attention to building up such analytical capacity. While this is an area where the Bank does not have a particular comparative advantage, it needs to both recognize and encourage the efforts of those donors who do possess such comparative strengths.

Introduction

This paper on three East African countries, Kenya, Malawi and Tanzania, draws upon the results of a wider study of the role of foreign assistance in African agricultural development, which is in turn a component of a major World Bank research project, "Managing Agricultural Development in Africa" (MADIA). The focus of the MADIA study on agriculture is the result of the wide recognition among donors and African governments of agriculture's central importance in overall economic development and their acknowledgment that past failures in Africa have been largely a result of the failure of the agricultural sector.

The foreign assistance component of MADIA consists of case studies that examine the experience of eight donors, including the World Bank, in providing assistance to agriculture in six African countries since their independence. This synthesis paper summarizes the World Bank's experience in Kenya, Malawi, and Tanzania, drawing on detailed reviews of the Bank's activities in each. It draws on the World Bank's Tanzania Agricultural Sector Report prepared under Uma Lele's direction in 1981-83, and subsequent comparative work on Tanzania, as well as reports prepared for the MADIA study on the World Bank's role in Kenya and Malawi's agricultural development (Lele and Meyers 1986; Kydd and Spooner 1987).

The data on macroeconomic structure and performance were developed by Yaw Ansu. Those on agricultural performance and policies for Kenya were developed by Michael Westlake and Kevin Cleaver, Chandra Ranade for Malawi, and Uma Lele and Ellen Hanak for Tanzania.

The analysis of the Bank's role has involved a detailed review of the Bank's formal and informal economic and sector work as reflected in Basic Economic Reports, Annual Economic Memoranda, Agricultural Sector Reports, and various project related documents, including Staff Appraisal Reports (SARs), Supervision Reports, Project Completion Reports (PCRs), and Project Performance and Audit Reports (PPARs). Consultation with the concerned Bank's operational staff has also been an equally important independent source of data and analysis.

Field investigations were carried out by Uma Lele in April 1985, January 1986, and July 1986, involving discussions with cofinancers of Bank projects (in particular CDC, ODA, and USAID) and interviews with Kenyan and Malawian government officials and farmers. Lele's investigations in Tanzania extended from 1972 to 1974 and from 1977 to 1982. The study also draws on other research on each of the countries by Bank staff and outside researchers.[2] The study would not have been possible without the cooperation and encouraging support of the Bank's operational staff and the governments concerned.

While the analysis presented here is necessarily historical in approach, it is intended to be more than just a retrospective treatment of the Bank's involvement in the agricultural sectors of the three countries. Its *objective* in tracing past developments is to try to understand the relative roles of domestic policies and the Bank in the agricultural development of the three countries over the past two decades, and then to explore priorities for future government policies and donor (especially World Bank) assistance. Thus, the monograph examines in detail the nature and patterns of agricultural growth in Kenya, Malawi, and Tanzania and then reviews the contribution of the World Bank to the process of agricultural growth in each of the three countries.

The process of agricultural growth is examined from a specific point of view, derived from the work of a number of agricultural economists who have been concerned with the process of structural transformation.[3] These economists have explored patterns of agricultural growth that simultaneously created increased employment and incomes while expanding output. They recognized that at the early stages of development there are diminishing returns in agriculture under traditional technologies. They point out, however, that efficiency-increasing reallocation of resources in agriculture favoring the increased use of labor in agricultural output growth shifts effective demand outwards, while at the same time achieving rapid growth in employment and incomes. Further, this increased effective demand has important growth linkage effects that make the process of development self-sustaining. This study therefore examines the policies and performance of the three East African countries in their postindependence period from the viewpoint of the extent to which they have achieved equitable growth and have created growth linkages.

The process of agricultural growth has also been considered from the viewpoint of intensification, which is defined in three different and inter-related ways: (1) a shift from low to high value crops on any given land, (2) increase in yields per hectare of any given crop, and (3) a geographical shift in production of crops from areas of poor land quality to those of higher land quality. The policies affecting agriculture in each country are evaluated from this perspective.

Lastly, it is hard to review relationships between donors and the recipients of aid without seeming to be second guessing the protagonists with the benefit of hindsight. To some extent this is unavoidable if lessons are to be learned for the future. Nevertheless, the study devoted considerable effort to identifying *the information that was available at the time decisions were made*. It discusses how this information was (or was not) applied, and uses decisions and outcomes to suggest policy, analytical, procedural, staffing, and management implications for Bank/government interactions in the future.

Organization of the Paper

Part I provides a comparative overview of key macroeconomic indicators as well as the postindependence structure and performance of agriculture in the three countries. It also briefly summarizes the effects of external factors, including terms of trade effects, on economic growth. The cumulative effects of overall foreign aid levels are briefly reviewed, with particular attention to the relative contribution of the World Bank. Lastly, the domestic agricultural policies of the three countries that have contributed to the agricultural performance of each are discussed.

Part II describes the evolution of the Bank's assessment of the agricultural potential, performance, and policies of each country. It then reviews the nature of the Bank's policy advice to each country. A description of the Bank's agricultural lending by subsector follows, in which lessons learned by the Bank and the governments are identified as well as some that might still be learned.[4]

Part I
A Comparative Overview of the Three Countries

Structure and Performance of the Agricultural Sectors of Kenya, Malawi, and Tanzania

Initial Conditions at Independence

All three countries are former British colonies (or protectorates), have relatively similar ecological conditions, and grow many of the same crops. At independence they inherited similar agricultural structures, consisting of a large number of small African farms and a modern agricultural sector operated by colonial settlers. Of the three countries, Kenya had the most favorable conditions in terms of the size and development of its modern, largely European agricultural sector, and of its economy, physical infrastructure, and institutions. Both Kenya and Tanzania enjoy good ports, while Malawi is landlocked and has faced serious transportation difficulties since the late 1970s. In 1965 Kenya's per capita income of $103 in 1965 was the highest followed by Tanzania's $77 and Malawi's $63. Kenya and Tanzania had similar size populations (9.5 and 11.7 million in 1965, respectively) compared to Malawi's 3.9 million.

Agriculture's Role in Overall Economic Development and the Process of Structural Transformation

Agriculture accounted for quite similar employment shares (84 to 91 percent) in the three economies at independence in the mid-1960s (Table 1) and by 1980 the percentages were still quite high (78 percent in Kenya, 86 percent in Malawi, and 83 percent in Tanzania). In a Kuznetzian "normal" pattern of growth, agriculture's share in a country's GDP tends to be high early in the development process and to fall during later stages. Surprisingly, during the 1967-73 period, agriculture already contributed a relatively low 34.3 percent to Kenya's GDP, compared to 44.4 percent in Malawi, and 40.8 percent in Tanzania (Table 2), once again reflecting Kenya's more advanced stage of structural trans-

Table 1
Employment shares by sector (percent)

Year	Kenya	Malawi	Tanzania
Agriculture			
1960	86.0	92.0	89.0
1965	84.1	90.6	87.6
1970	82.0	89.0	86.0
1975	80.1	87.6	84.6
1980	78.0	86.0	83.0
Industry			
1960	5.0	3.0	4.0
1975	5.9	3.5	4.5
1970	7.0	4.0	5.0
1975	8.4	4.5	5.5
1980	10.0	5.0	6.0
Other Sectors			
1960	9.0	5.0	7.0
1965	10.0	5.9	7.9
1970	11.0	7.0	9.0
1975	11.5	7.9	9.9
1980	12.0	9.0	11.0

Note: Industry is defined here as manufacturing, mining and quarrying, construction, and public utilities (electricity, water, gas, sanitary services).
Source: World Bank, World Tables, Vol. II, 1983.

Table 2
GDP decomposition by sectors (percent of GDP)

Year	Kenya	Malawi	Tanzania
1967-73			
Agriculture	34.3	44.4	40.8
Industry[a]	12.2	11.0	11.5
(Manufacturing)	11.8	11.0	9.9
(Mining)	0.4	0.0	1.6
Infrastructure[b]	15.0	11.6	14.5
Public Administration and Defense	14.9	11.7	11.3
Others[c]	23.6	21.3	21.9
1974-78			
Agriculture	37.3	40.8	45.7
Industry	12.1	11.4	11.1
(Manufacturing)	11.9	11.4	10.5
(Mining)	0.3	0.0	0.6
Infrastructure	12.8	12.6	12.1
Public Administration and Defense	14.3	8.7	11.4
Others	23.5	26.5	19.7
1979-81			
Agriculture	33.0	38.0	51.5
Industry	13.3	11.8	11.0
(Manufacturing)	13.0	11.8	10.4
(Mining)	0.2	0.0	0.5
Infrastructure	14.2	13.4	10.5
Public Administration and Defense	14.8	9.8	9.9
Others	24.7	27.0	17.1
1982-84			
Agriculture	32.6	39.8	51.6
Industry	15.6	11.8	9.7
(Manufacturing)	15.4	11.8	9.3
(Mining)	0.2	0.0	0.4
Infrastructure	9.1	12.0	10.2
Public Administration and Defense	9.9	11.0	11.3
Others	32.8	25.4	17.2

[a] Industry is defined as mining (fuel and other metals) and manufacturing.
[b] Infrastructure is defined as construction and transport and communication.
[c] Others includes trades, bank/insurance/real estate services and unspecified.
Sources: World Bank, (IEC) for data up to 1983 for Kenya and Malawi, to 1982 for Tanzania. World Bank, "Country Economic Memorandum" for Kenya and Malawi 1984 data. Unpublished data obtained from the Bank of Tanzania and other Tanzanian authorities for 1983-84 data.

formation. By the 1982-84 period, however, agriculture's share had fallen slightly to 32.6 percent in Kenya and 39.8 percent in Malawi, but had *risen* to 51.6 percent in Tanzania. Meanwhile, industry's share in GDP, which was around 12 percent during 1967-73 in each country, had risen by 1982-84 to 15.6 percent in Kenya and 11.8 percent in Malawi, while *falling* to 9.7 percent in Tanzania. Tanzania's Basic Industrial Strategy of the 1970s (which strongly discriminated against agriculture) actually had the reverse of its intended effect: it raised agriculture's share in GDP and reduced industry's.

The share of trade in GDP was initially also similar in the three countries (Table 3), in which agricultural exports dominated. Trade shares amounted to 58.5 percent in Kenya, 51.2 percent in Malawi, and 53.8 percent in Tanzania for 1967-73 with agriculture's share in trade being over 90 percent in Malawi, and about 80 percent in Tanzania (Table 4). In Kenya, however, it had fallen over time, from 74.7 percent during 1967-73 to 56.6 percent in 1979-81. By 1974-78, trade shares had risen to 67.5 percent and 56.9 percent in Kenya and Malawi, respectively, reflecting increases in agricultural export volumes as well as prices. In Tanzania, however, trade shares had declined to 48.5 percent despite the relatively more favorable movements in its barter terms of trade compared to Kenya and Malawi (Figure 1). Tanzania's stagnancy or decline in exports is reflected in its much poorer income terms of trade (Figure 2). All three countries registered falling trade shares in the 1982-84 period. For Kenya and Malawi the terms of trade declines were far greater relative to the 1972 base than for Tanzania, and indeed during the 1983 and 1984 period Tanzania's terms of trade had recovered from a low of 1982, whereas in Kenya

Table 3
Trade shares in GDP[a] (percent of current values)

	Kenya	Malawi	Tanzania
Share of Exports[b]			
1967-73	28.5	19.7	25.6
1974-78	32.0	22.8	19.5
1979-81	26.8	25.2	14.9
1982-84	26.5	20.2	10.9
Imports[b]			
1967-73	30.0	31.5	28.2
1974-78	35.5	34.1	29.0
1979-81	35.6	39.1	26.2
1982-84	29.3	27.3	22.7
Share of Trade			
1967-73	58.5	51.2	53.8
1974-78	67.5	56.9	48.5
1979-81	62.4	64.3	41.1
1982-84	55.8	47.5	33.6
Share of Net Exports			
1967-73	-1.5	-11.8	-2.6
1974-78	-3.5	-11.3	-9.5
1979-81	-8.8	-13.9	-11.3
1982-84	-2.8	-7.1	-11.8

[a] GDP is at market prices.
[b] Both exports and imports include good and nonfactor services.
Source: World Bank (IEC) for data up to 1983 for Kenya and Malawi, to 1982 for Tanzania. World Bank, "Country Economic Memorandum" for Kenya and Malawi 1984 data. Unpublished data obtained from the Bank of Tanzania and other Tanzanian authorities for 1983-84 data.

Table 4
Composition of trade[a] (percent)

	Kenya	Malawi	Tanzania
A. EXPORTS			
1967-73			
Agriculture	74.7	97.0	78.2
(Food)	60.0	91.7	48.2
Manufacture	12.5	2.7	13.2
Fuels	12.0	0.1	7.8
Metals and Minerals	0.7	0.2	0.8
1974-78			
Agriculture	66.1	95.5	84.3
(Food)	54.5	93.5	58.0
Manufacture	13.1	4.4	11.1
Fuels	19.9	-	4.1
Metals and Minerals	0.9	0.1	0.5
1979-81			
Agriculture	56.6	93.8	79.5
(Food)	48.8	92.2	60.7
Manufacture	12.5	6.2	14.1
Fuels	28.5	-	2.7
Metals and Minerals	2.4	-	3.7
1982-84[b]			
Agriculture	61.9		
(Food)	55.4		
Manufacture	11.8		
Fuels	24.0		
Metals and Minerals	2.3		
B. IMPORTS			
1967-73			
Agriculture	9.5	15.3	9.3
(Food)	7.4	14.2	8.4
Manufacture	78.4	76.3	79.8
Fuels	10.8	7.1	9.4
Metals and Minerals	1.3	1.3	1.6
1974-78			
Agriculture	8.8	9.9	15.2
(Food)	6.7	9.1	14.0
Manufacture	66.3	76.8	68.4
Fuels	23.5	11.8	14.4
Metals and Minerals	1.4	1.5	2.0
1979-81			
Agriculture	8.2	9.1	9.3
(Food)	2.0	8.3	8.3
Manufacture	58.8	73.9	67.3
Fuels	31.7	15.6	21.9
Metals and Minerals	1.3	1.4	1.5
1982-84[b]			
Agriculture	10.5		
(Food)	8.6		
Manufacture	51.5		
Fuels	6.7		
Metals and Minerals	1.3		
Food imports per capita (in constant 1967 US$)			
1967-73	2.3	2.5	1.5
1974-83	2.6	1.7 (74-81)	2.3 (74-81)

[a] Legend: The Standard International Trade Classification (SITC) code has been used: Agriculture: SITC (0+1+2+4-27-28); (Food): SITC (0+1+22+4); Manufacture: SITC (5+6+7+8+9-68); Fuels: SITC 3; Metals and Minerals SITC (27+28+68). Total Merchandise Exports, Imports = Agriculture+Manufacture+Fuels+Metals and Minerals.
[b] 1982-84 figures are for 1982-83 for Kenya and are not available for Malawi and Tanzania.
Sources: The World Bank Trade System (EPI) for trade data. IMF, *International Financial Statistics Yearbook*, 1985, for population.

and Malawi they continued to remain depressed. Tanzania's trade share had fallen to 33.6 percent by 1982-84, over 20 points below its 1967-73 level, as volumes for a number of its agricultural exports (sisal, cashews, tobacco) stagnated or declined.

Table 3 also shows that Kenya has had the best record for net exports, which were -1.5 percent of GDP in 1967-73, then dropped to -8.8 percent in 1979-81 and rose to -2.8 percent in 1982-84. Tanzania's net exports were -2.6 percent of GDP in the 1967-73 period and worsened to more than -11 percent after 1979. Malawi has consistently had much larger negative net exports (slightly over -11 percent of GDP) than Kenya or Tanzania until 1982-84, when its negative balance improved to -7.0 percent. Current account deficits in the three countries showed roughly similar patterns to those of net exports. The reasons for the differential behavior of the trade shares and net exports are better understood through the more decomposed picture of export and food crop performance presented below.

Figure 1
Terms of trade index (base year = 1972)

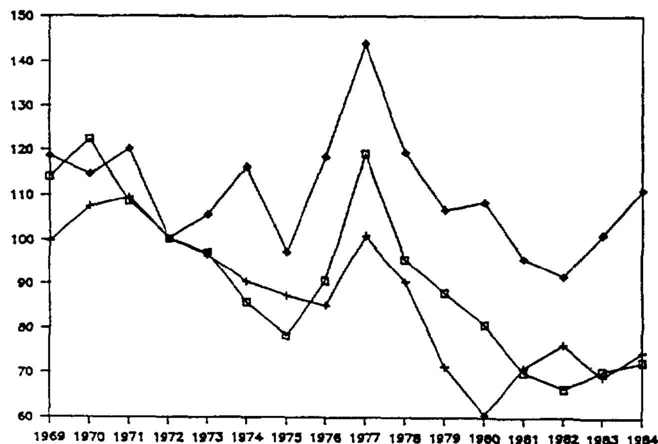
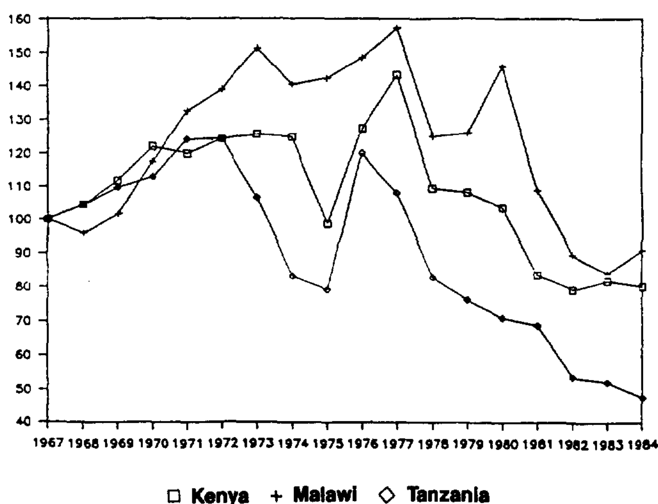


Figure 2
Income terms of trade (base year = 1967)



Source: IMF, *International Financial Statistics Yearbook*, 1985.

Agricultural Performance

Export Crops

Coffee and tea are the two major export earners in Kenya. The share of coffee ranged between one-quarter to one-half of agricultural exports, depending on international prices, and averaged 20-28 percent of total exports in Kenya during the 1970 to 1985 period. The share of tea in agricultural exports ranged between 13 percent and 36 percent. On average, tea constituted 12-19 percent of total exports. Coffee and tea export volumes increased at 3.8 percent and 7.5 percent, respectively, in the 1970 to 1985 period (Table 5). Kenyan exports of horticultural crops also grew rapidly (12.7 percent) between 1970 and 1985, but from a small base.

Smallholders have played an active role in Kenyan export crop production through a shift in cropping patterns to higher value crops. The growth rate of smallholder coffee production was 6 percent compared to 1 percent for estates, leading to an increase in the share of smallholder coffee production from 35 percent (60 percent of total area) in 1964 to around 60 percent in the 1980s (75 percent of area). Smallholder tea production increased at an impressive 13.5 percent compared to the 5.5 percent growth in volumes from estates, and the share of smallholder tea production (and area) increased from around 5 percent in the mid-1960s to 48 percent in 1985 (65 percent of total area). Smallholder sugar production grew at 16.9 percent and estate production at 5.3 percent with the smallholder share of sugar growing from 11 percent of the total in 1973 to 48 percent in 1984. Much of the impressive growth in the volume of horticultural crop exports in 1970-85 came from smallholders. The smallholder share of marketed maize sales, which was negligible at independence, is currently 45 percent. Smallholder dairying production increased at 8.5 percent with the smallholder share increasing to 50 percent of the country's milk (to which smallholders contributed little at independence). Almost all the marketed production of rice, pulses, cotton, and pyrethrum comes from smallholders.

In sharp contrast to Kenya, tobacco, tea, and sugar, the three important exports of Malawi, have all been estate crops, with tobacco earnings ranging from 43 percent to 51 percent of the total earnings during 1970 and 1985, those of tea between 15 percent and 22 percent, and sugar rising from a low base of 1.7 percent in 1970 to 17 percent during 1979-81, but then declining to 9.3 percent during the 1982 to 1985 period. Production of burley tobacco increased by 15.4 percent annually, flue-cured tobacco by 10.4 percent, tea by 4.5 percent, and sugar by 14.7 percent. Groundnuts (the only crop grown by smallholders), which was previously a major export generating about 11 percent of total export earnings in the 1970-73 period, declined to 1.2 percent in the 1982-85 period. Groundnuts export volumes declined by 13.2 percent annually and the production of cotton (another smallholder crop) also declined by 12.5 percent annually.

Tanzania has had a much more diversified export base compared to either Kenya or Malawi with coffee contributing 23-35 percent of total export earnings during the 1970 to 1985 period, but with other important exports either stagnating or declining in shares. Cloves and tobacco remained steady at around 10 percent and 4 percent of earnings, respectively, but cotton declined from 20 percent to 14 percent, sisal from 11 percent to 6 percent, and cashewnuts from 9 percent to 4 percent. Only coffee and tea export volumes grew in Tanzania, but by only 0.8 percent

and 1.9 percent, respectively. Export volumes of all other major crops showed a decline: cloves annually by 2.7 percent, tobacco by 4.7 percent (both of these at statistically insignificant levels), cotton by 2.3 percent, sisal by 5.9 percent, and cashew nuts by 6.8 percent.

Unlike in Malawi where estate crop production showed a sharp rise, in Tanzania it declined even more sharply than agricultural exports, leading to an increased share of smallholders in export crop production, if only by default. For example, estate coffee production declined by 4.1 percent annually whereas smallholder production increased by 2.3 percent annually. Smallholder tea production increased by 13.7 percent annually from a small base, whereas estate production increased only by 1 percent. Both smallholder and estate tobacco production declined by 4.8 percent and 7.5 percent annually from 1979 on. Sugar production increased only by 0.8 percent.

Food Production

The comparative performance in food production in the three countries is of interest from the viewpoint of its effect on welfare as well as balance of payments. However, the relevant data from FAO and the respective ministries of agriculture are relatively less consistent than in the case of export crops. With the exception of Malawi, the data have come from the ministries of agriculture, which appear to be internally more consistent, although they are based on subjective reporting systems whose validity is not very certain.

This paper focuses on maize as the most important food crop in the three countries. Kenya shows a growth rate of 3.9 percent annually between 1970-85, compared to 2.1 percent for Tanzania and only 1.5 percent for Malawi (Table 5). While Kenya appears to have done better, other related indicators of maize performance need to be considered to

Table 5
Structural change and growth: Agricultural performance in Kenya, Malawi, and Tanzania, 1970-85

Export	
Product	**MT**
Kenya	
Coffee	3.8
Tea	7.5
Horticultural crops	12.7
Malawi	
Tobacco	
Burley[b]	14.1
Flue-cured[b]	9.2
Tea[b]	5.2
Sugar[b]	28.1
Groundnuts[c]	-13.2
Cotton[c]	-12.5
Tanzania	
Coffee	0.8*
Cloves	-2.7*
Tobacco	-4.7*
Cotton[c]	-2.3
Sisal	-5.9
Cashewnuts[c]	-6.8
Tea	1.9

Production		
Product		**MT**
Kenya		
Coffee	—Smallholder	6.0
	—Estate	1.0*
Tea	—Smallholder	13.5
	—Estate	5.5
Sugar	—Smallholder	16.9
	—Estate	5.3
Dairying	—Smallholder	8.5
	—Large Farm	0.0*
Rice	—Smallholder	2.8
Cotton	—Smallholder	4.9
Tanzania		
Coffee	—Smallholder	2.3
	—Estate	-4.1
Tea	—Smallholder	13.7
	—Estate	1.0
Tobacco	—Smallholder	-4.8*
	—Estate	-7.5
Sugar		0.8*
Cotton	—Smallholder	1.6*
Malawi		
Tea	—Estate	4.5
Tobacco	—Smallholder	0.3*
	—Burley	15.4
	—Flue-cured	10.4
Sugar	—Estate	14.7
Rice	—Smallholder	-2.7
Groundnuts	—Smallholder	-7.2
Cotton	—Smallholder	1.1*

Food Imports		Food Aid (Total Cereals)	
Country	**MT**	**Country**	**MT**
Kenya	6.4	Kenya	42.1[e]
Malawi	3.1	Malawi	28.6
Tanzania	3.0*	Tanzania	23.5

Highlight on Maize[d]

Country	Production	Purchases	Sales	Net Sales
Kenya	3.9	2.4*	9.2	(6.8)
Malawi	1.5*	19.1	23.7	(4.6)
Tanzania	2.1	1.1*	1.9	(0.8)

*Statistically insignificant (all other figures significant at the .05 level).
[a] In some cases data are not available for the complete 1970-85 period.
[b] Estate crop.
[c] Smallholder crop.
[d] Purchases and sales refer to "official" purchases and sales. "Net sales" are sales minus purchases.
[e] Started from a very low base during 1970-78 and then dramatically increased in 1979.
Sources: Export volumes: Kenya, Economic Surveys; Malawi, ADMARC; Tanzania, IBRD, International Tea Committee, MDB, Ministry of Agriculture, USDA. Production volumes: Kenya, Cotton Seed and Lint Marketing Board, Economic Surveys, Kenya Coffee Board, Kenya Tea Development Authority, Kenya Statistical Abstract, I.R. McDonald (dairying data); Malawi, ADMARC; Tanzania, EEC, MDB. Maize production: Kenya, NCPB; Malawi, ADMARC, FAO; Tanzania, FAO, MDB. Food imports: World Bank Trade System (IEC), Country Economic Memoranda. Food aid: FAO, "Food Aid in Figures," December 1983.

make a firm judgment given the paucity of reliable production data. From this viewpoint, Kenya's food imports show a faster rate of growth (6.4 percent annually) compared to Tanzania's (3.0 percent) and Malawi's (3.1 percent). There are three possible explanations for this. First, food import volumes are greatly influenced by the incidence of droughts. Kenya's largest imports took place in 1985, i.e., at the end of the period under consideration, whereas Tanzania's imports were great in 1974 and 1975. The timing of these increases affects the growth rates.[5] Second, food aid data show higher receipts for Tanzania (1,647 million tons of cereals in the 1970/71–1984/85 period), compared to Kenya (1,058 million tons) and Malawi (only 37,000 tons). Although rates of cereal food aid once again show higher growth rates for Kenya (43.1 percent) compared to Malawi (28.6) and Tanzania (23.5 percent), though from a small base, Tanzania also received more skim milk powder than Kenya, which had a much more thriving domestic dairy industry.[6]

Thirdly, higher food imports may be a result of more rapid growth in domestic demand, which would be a function of urbanization and overall population as well as income growth.[7] Kenya's population growth rate has been higher than Tanzania's or Malawi's. However, its income growth was also greater and more broad-based than the other two countries, supporting Mellor's observation that the 29 most rapidly growing developing countries have experienced the most rapid rate of growth in food imports (Mellor and Johnston 1984). As a result of the greater dynamism of the smallholder sector in Kenya, stronger growth linkages with the rest of the economy are noticeable relative to Malawi, where the skewed distribution of income has kept the demand for food under control and allowed food exports (until 1986), despite the fact that per capita food production did not increase, while in Kenya food imports increased. The weaker growth linkages in Malawi are noticeable in a variety of ways, including the weaker growth of small private enterprises. In Tanzania, the result of the slow growth has been the diversion of the economy from official to nonofficial channels. The greatest policy challenge has been one of bringing production from the parallel economy into the official economy.

Mellor's point also applies to the supply of maize offered to official channels by producers. Because much of the growth in Kenya resulted from the settlement of small farmers on formerly European lands, the productivity per hectare of maize increased. However, marketed surpluses did not increase commensurately due to increased domestic demand (Lele and Meyers 1986, Chapter VI).

Data on "officially" marketed surpluses and official maize sales allow determination of the extent of net official sales, which provides additional insights concerning the growth of domestic food production, performance, and consumption. In Kenya the growth of volumes sold to the official monopsonist National Cereals and Produce Board (NCPB) from 1970-85 was 2.4 percent (a statistically insignificant growth rate) and maize sales by NCPB were 9.2 percent annually, or a growth in net sales of 6.8 percent (see Table 5). In contrast, in Tanzania official maize purchases by the National Milling Corporation (NMC) increased by only 1.1 percent annually and sales by 1.9 percent, reflecting a growth rate of net sales of 0.8 percent annually.

In Malawi, on the other hand, ADMARC purchases increased by an unprecedented annual rate of 19.1 percent annually whereas ADMARC sales increased by 23.7 percent annually suggesting a growth of net sales of 4.6 percent annually. It is thus evident that of the three countries Kenya has had the highest rate of growth of net sales, even in the face of the highest growth rate of maize production, suggesting increased dependence on the market by the Kenyan population.

The growth of ADMARC's maize purchases has baffled many observers in view of the low growth rate of maize production, although they seem to be less puzzling when considered in relation to sales. Some observers have argued that growing official maize purchases reflect an element of distress in the postharvest season resulting from the lack of growth of agricultural incomes and purchasing power among the vast majority of small producers (Ministry of Agriculture Undated). Critics of Malawi, including government officials, point to the high level of malnutrition and infant mortality—one of the worst in Africa—in support of this conclusion (Department of Economic Planning and Development et al. 1986).

The role of price and technology policies in explaining the likely growth of food production and consumption in these three countries will be examined in the section on agricultural policies.

Agriculture and GDP Growth

The three countries have had strikingly different GDP growth records since the mid-1960s, closely related to the growth of their agricultural sectors. Over the 1967-73 period, GDP at factor cost grew at 7.8 percent in Kenya, compared to Malawi's 4.6 percent and Tanzania's 4.4 percent (see Table 6). Agricultural GDP grew at a high 5.4 percent in Kenya during the same period mainly due to the growth of smallholder coffee, tea, maize, and dairying compared to 2.8 percent and 2.3 percent in Malawi and Tanzania, respectively. During 1974-78, GDP growth was similar in Kenya and Tanzania (at 4.5 percent and 5.1 percent) as was agricultural GDP growth (4.1 percent and 4.7 percent, respectively). In Malawi, however, GDP growth accelerated to 6.4 percent and, due to the policy of estate expansion detailed below, agricultural GDP was also much higher at 5.8 percent. Kenya experienced a robust 4.3 percent GDP growth rate during 1979-81 after the second oil shock, whereas Malawi's growth rate declined to -0.8 percent and Tanzania's to 1.7 percent. During this period agricultural growth once again mirrored overall growth performance. Kenya's agricultural growth rate was also the best (1.5 percent) of the three compared to a sharp drop of -3.9 percent in Malawi (due to a severe drought during the 1979/80 growing season) and -1.0 percent in Tanzania.

By 1982-84, GDP growth had been restored to 4.6 percent in Malawi, rose to 3.7 percent in Kenya, but remained only 1.1 percent in Tanzania. Once again, the agricultural sector growth rates contributed to the GDP growth rates, being 4.4 percent in Kenya, 5.8 percent in Malawi, and only 1.8 percent in Tanzania. Several other sectors of the Tanzanian economy also experienced negative growth (-10.0 percent in industry and -5.6 percent in infrastructure) resulting from the foreign exchange crisis created by stagnant exports. Thus, the gap between the performance of Kenya (and to a lesser extent of Malawi) and that of Tanzania had widened considerably by the beginning of the 1980s with Kenya's performance being the best of the three.

Table 6
Real GDP growth rates[a] (percent)

Year	Kenya	Malawi	Tanzania
1967-73			
Agriculture	5.4	2.8	2.3
Industry[b]	14.0	5.3	4.8
(Manufacturing)	14.2	5.5	7.8
(Mining)	12.8		-6.2
Infrastructure[c]	7.7	8.2	9.5
Public Administration and Defense	10.1	0.1	7.8
Others	8.7	5.0	2.7
GDP[d]	7.8	4.6	4.4
1974-78			
Agriculture	4.1	5.8	4.7
Industry	6.6	6.7	4.1
(Manufacturing)	6.6	6.7	4.7
(Mining)	6.5		-2.7
Infrastructure	3.3	2.6	3.9
Public Administration and Defense	6.4	5.7	11.8
Others	3.8	7.6	4.0
GDP	4.5	6.4	5.1
1979-81			
Agriculture	1.5	-3.9	-1.0
Industry	5.3	2.8	-9.4
(Manufacturing)	5.5	2.8	-10.2
(Mining)	-8.3		2.7
Infrastructure	5.9	-2.2	5.6
Public Administration and Defense	6.1	8.2	10.0
Others	6.3	-2.6	-0.3
GDP	4.3	-0.8	1.7
1982-84			
Agriculture	4.4	5.8	1.8
Industry	3.0	3.4	-10.0
(Manufacturing)	3.0	3.4	-9.9
(Mining)	0.0	-2.7	
Infrastructure	1.6	0.8	-5.6
Public Administration and Defense	4.0	7.7	8.2
Others	4.0	5.1	0.9
GDP F.C.	3.7	4.6	1.1

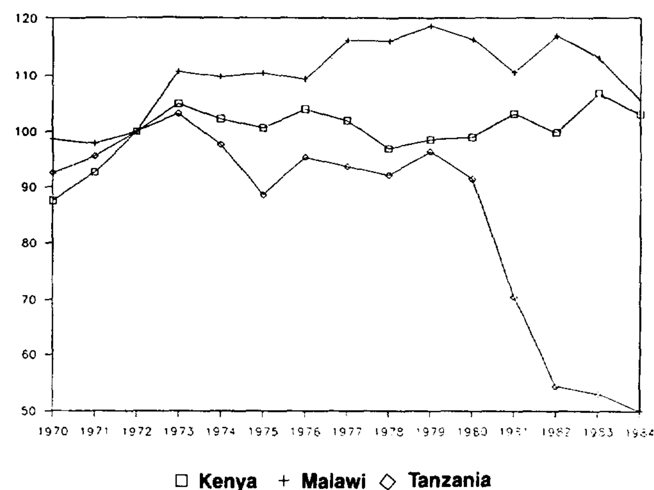
[a] Average annual growth rates.
[b] Industry is defined as mining (fuel and other metals) and manufacturing.
[c] Infrastructure is defined as construction and transport and communication.
[d] GDP is at factor cost to be consistent with individual sectors whose output are at factor cost.
Source: World Bank (IEC) for data up to 1983 for Kenya and Malawi, and up to 1982 for Tanzania. World Bank, "Country Economic Memorandum" for Kenya and Malawi 1984 data. Unpublished data obtained from the Bank of Tanzania and other Tanzanian authorities for 1983-84 data.

Macroeconomic Environment

Kenya's superior agricultural performance is partly a result of the extent to which Kenya adopted generally moderate macroeconomic policies. Figure 3 shows the trade weighted real effective exchange rates for Kenya, Malawi, and Tanzania using the 1972 base. Malawi and Kenya each avoided overvaluation of their currency through regular adjustment of the nominal rates whereas Tanzania's exchange rate overvaluation increased sharply over time with the index having reached 33.9 in 1985 compared to 98.9 in Kenya and 112.1 in Malawi.[8] Kenya's gross domestic savings rate was also the highest (20.8 percent in 1967-73), falling slightly to 18.3 percent in 1982-84 (Table 7). In Malawi it was 8.2 percent in 1967-73, rose to 18.3 percent in 1974-78 and fell to 14.9 percent in 1982-84. In Tanzania the domestic savings rate fell sharply from 18.2 percent in 1967-73 to 8.3 percent in 1982-84.

Gross capital formation as a share of GDP was 22.3 percent in Kenya in 1967-73, rose to 27 percent in 1979-81 following the coffee boom and declined to 21 percent in 1982-84. Concomitant with Malawi's higher growth rate in this period, gross capital formation reached a high of 29.6 percent in Malawi during 1974-78 (through a combination of increased borrowing and savings), but by the early 1980s it had fallen to a level similar to Kenya's. In Tanzania, the rate remained at approximately 21 percent from 1967-73 to 1982-84. Kenya's savings and investment behavior involved broader participation than in Malawi, as in the latter case it was closely associated with the growth of estates and other investments financed by implicitly taxing the smallholder sector through a producer price policy.

Figure 3
Real effective exchange rates
Constant weights



Sources: IMF, *International Financial Statistics Yearbook,* 1985; IMF, *Direction of Trade Statistics,* 1985.

Table 7
Indicators of average economic performance (percent)

Indicators	Kenya	Tanzania	Malawi	Kenya	Tanzania	Malawi
		1967-73			**1974-79**	
Real GDP growth rates (gdp m.p.)	8.5	5.2	5.2	4.7	4.7	6.6
Growth rate of population	3.5	2.7	2.5	3.6	4.0	3.4
Per capita GDP growth	5.0	2.5	2.7	1.1	0.7	3.2
Investment to GDP ratio	22.3	20.8	20.0	23.5	20.6	29.6
Total saving ratio	20.8	18.2	8.2	20.0	11.0	18.3
Net exports ratio	-1.5	-2.6	-11.8	-3.5	-9.6	-11.3
Current account deficit to GDP ratio	-3.0	-2.9	-11.7	-6.2	-8.1	-8.9
Total debt to exports	61.4	120.6*	148.7*	74.6	187.1	181.7
Debt service to exports	4.7*	5.6*	7.1*	6.4	6.6	12.5
Fiscal deficit to GDP ratio	-3.4	-5.0	-2.4	-3.6	-7.6	-0.9
Inflation rate (cpi)	4.2	8.5	12.5	16.0	15.1	8.5
Inflation rate (gdp deflator)	3.3	6.2	5.8	14.5	14.7	10.2
Real growth rate of agriculture output	5.4	2.3	2.8	4.1	4.7	5.8
Real growth rate of manufacturing output	14.2	7.8	5.5	6.6	4.7	6.7
Real growth rate of mining	12.8	-6.2		6.5	-2.7	
Real growth rate of exports	3.1	3.6	5.9	2.0	-6.8	-0.7
Real growth rate of imports	4.0	6.1	8.7	7.8	2.8	6.1
Borrowing from the Central Bank as % GDP	1.0	3.6	1.4	3.6	8.2	2.9
Rural population as % of total	89.7	92.8	93.6	87.4	90.1	91.6
		1979-81			**1982-84**	
Real GDP growth rates (gdp m.p.)	4.2	1.8	2.0	1.8	1.1	3.5
Growth rate of population	5.3	3.2	2.6	4.1	3.2	3.8
Per capita GDP growth	-1.1	-1.4	-0.6	-2.3	-2.1	-0.3
Investment to GDP ratio	27.0	22.2	27.0	21.2	20.1	21.9
Total saving ratio	18.2	10.8	13.2	18.3	8.3	14.9
Net exports ratio	-8.8	-11.4	-13.8	-2.9	-11.8	-7.0
Current account deficit to GDP ratio	-10.5	-10.2	-12.7	-4.7	-11.9	-3.0
Total debt to exports	120.2	261.1	211.4	158.8	490.6	257.0
Debt service to exports	14.3	9.4	24.8	20.9	12.7	21.7
Fiscal deficit to GDP ratio	-4.6	-10.1	-1.0	-3.9	-3.9	-0.7
Inflation rate (cpi)	11.2	23.2	4.0	14.0	30.6	5.4
Inflation rate (gdp deflator)	9.0	21.9	9.1	9.6	12.9	9.4
Real growth rate of agriculture output	1.5	-1.0	-3.9	4.4	1.8	5.8
Real growth rate of manufacturing output	5.5	-10.2	2.8	3.0	-9.9	3.4
Real growth rate of mining	-8.3	2.7		0.0	-2.7	
Real growth rate of exports	-1.3	8.5	11.9	2.9	-15.8	-0.9
Real growth rate of imports	-9.9	-8.3	-4.6	-6.4	-4.1	-0.4
Borrowing from the Central Bank as % GDP	6.0	18.6	9.3	10.4	21.9	19.3
Rural population as % of total	85.8	88.2	90.5			

*The Average is over 1970 to 1973.
Source: World Bank, Country Economic Memorandum," IEC; IMF, *International Financial Statistics Yearbook*, 1985.

Levels and Sources of Government Expenditures

This section examines budget deficits (i.e., total revenues exclusive of grants minus total budgetary expenditures exclusive of lending minus repayments) and *overall* deficits (to include foreign grants and net lending). Kenya's expenditure (less net lending) as a percentage of GDP ranged between 21 percent in 1974 and 1984 to 32 percent in 1979. However, the average share was very stable and accounted for about 24 percent except between 1979 and 1981, when it reached 30 percent (see Table 8).

In Malawi, the GDP share of total expenditure (less net lending) ranged from a low of 20 percent in 1974 to a high of 36 percent in 1981. In Tanzania, the GDP share of total expenditure (less net lending) showed a continuous increase ranging between a low of 20 percent in 1972 to a peak of 40 percent in 1982.

Expenditure as a share of GDP was the highest in Tanzania followed by Malawi, then Kenya. Also the share grew faster in Tanzania than in Malawi and Kenya. Shares showed a decline after 1982 in all three countries.

The share of revenue (exclusive of foreign grants) in GDP does not differ greatly among the three countries. It ranged between 19 percent in 1974-79 and 24 percent in 1979-81 in Kenya; between 14 percent in 1974-79 and 18.9 percent in 1979-81 in Malawi; and between 16.7 percent in 1971-73 and 22 percent in 1982-83 in Tanzania. Both Malawi and Kenya show a very similar pattern in terms of domestic fiscal revenues. Revenues fell between 1974-79, then increased between 1979-81, then fell in subsequent periods. On the other hand, Tanzania showed a steadily increasing trend throughout all these periods.

In terms of magnitude, Kenya had the highest revenue/GDP share, followed by Tanzania and then Malawi. The lowest expenditure share combined with the highest revenue share meant that Kenya's "budgetary deficit" was the lowest in terms of share of GDP. Malawi comes second

Table 8
Composition of government financial operations (percent of GDP at market prices)

	1971-73	1974-79	1979-81	1982-86
Kenya				
1 Government Expenditure	24.8	24.1	30.4	24.5
2 Government Revenue	19.3	18.8	23.9	22.6
3 Budgetary Deficit (2-1)	-5.5	-5.3	-6.5	-1.9
4 Government Expenditure & Net Lending	25	24.3	31.8	28.9
5 Government Revenue & Foreign Grants	19.5	19.3	24.6	24.2
6 Overall Deficit (5-4)	-5.5	-5.1	-7.2	-4.7
7 Financing The Deficit (8+9-10)	5.5	5.1	7.2	4.8
8 External Borrowing	2.1	1.9	3.5	1.2
9 Domestic Borrowing	3.2	2.9	4.2	3.4
10 Change in Cash Balances	-0.2	-0.3	0.5	-0.2
Malawi				
1 Government Expenditure	23.5	22.1	33	30.2
2 Government Revenue	14.2	14.1	18.9	18.1
3 Budgetary Deficit (2-1)	-9.2	-8	-14.1	-12.1
4 Government Expenditure & Net Lending	25	23.3	35.1	30.3
5 Government Revenue & Foreign Grants	15	15.3	22.3	20.8
6 Overall Deficit (5-4)	-10	-8	-12.8	-9.5
7 Financing The Deficit (8+9-10)	10	8	12.9	9.5
8 External Borrowing	6.9	5	7.4	5.9
9 Domestic Borrowing	1.6	1.7	3.9	4.3
10 Change in Cash Balances	-1.5	-1.3	-1.6	0.7
Tanzania				
1 Government Expenditure	21.1	28	34.5	38.3
2 Government Revenue	16.7	18.7	21.1	22.1
3 Budgetary Deficit (2-1)	-4.5	-9.3	-13.5	-16.3
4 Government Expenditure & Net Lending	22.3	28.2	34.5	38.3
5 Government Revenue & Foreign Grants	17	20.6	24.6	26.2
6 Overall Deficit (5-4)	-5.2	-7.6	-9.9	-12.2
7 Financing The Deficit (8+9-10)	5.3	7.7	9.8	12.1
8 External Borrowing	1.9	2.7	3.2	1.4
9 Domestic Borrowing	2	2.6	8.3	9
10 Change in Cash Balances	-1.4	-2.4	1.7	-1.7

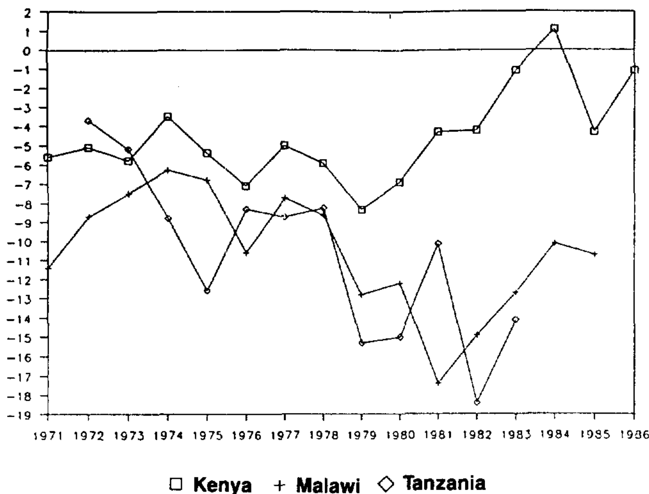
Notes: Most of the data are reprinted in corresponding CEMs. Tanzania series starts in 1972 and ends in 1983. Malawi series ends in 1985. Kenya's 1985 and 1986 data are from budget estimates. Overall deficit and total financing may not match exactly, because of rounding.
Sources: United Republic of Tanzania 1983; Government of Malawi 1985; Government of Kenya 1984.

with a relatively higher expenditures share but with a relatively lower revenue share.

Tanzania showed the highest budgetary deficit in terms of GDP share with the highest expenditure share and relatively higher revenue share. The pattern for the budgetary deficit is the same as the pattern for the revenue share in all three countries. However, *overall* deficits showed different ranking, altering slightly the position of Malawi and Tanzania. In Kenya, the budgetary deficit and overall deficit were very similar up to 1980, after which the overall deficit worsened significantly due to the combination of steady foreign grants and increasing net lending (see Figures 4 and 5). Similar trends were noticeable in Malawi up to 1980. From 1980 on, while the overall deficit worsened in Kenya relative to the budgetary deficit, in Malawi the overall deficit improved over the budgetary deficit, due to an increasing GDP share of foreign grants to Malawi, especially since 1978.

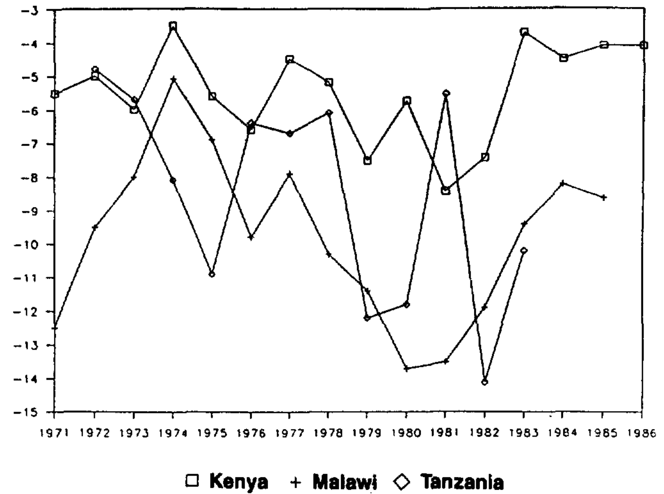
In Tanzania, the overall deficit was smaller than the budgetary deficit throughout the period, due to an increasing share of foreign grants in GDP, with the share of foreign grants in GDP being largest since 1979. Malawi, with its largest overall deficit, relied more on foreign borrowing as compared to domestic borrowing to finance its overall deficit while Kenya and Tanzania used relatively more domestic borrowings.

Figure 4
Budgetary deficit
Percent of gdp



Source: Government of Kenya.

Figure 5
Overall budget deficit
Percent of gdp

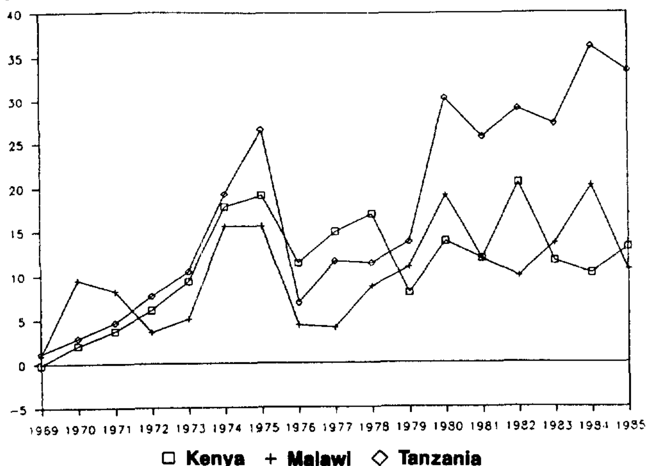


Source: Government of Kenya.

Inflation Rates

Malawi had the lowest overall inflation rates of 12.5 percent in 1967-73, declining to 5.4 percent in 1982-84. Tanzania had the highest, rising from 8.5 percent in 1967-73 to 30.6 percent in 1982-84. Kenya's inflation rates have been intermediate, ranging from 4.2 percent in 1967-73 to 14.0 percent in 1982-84. While these general patterns obtain overall, there is considerable year-to-year variation in inflation rates (see Figure 6). To the extent that the stability, as well as the level of inflation rates is important, Kenya's rates showed less fluctuation than did those in Malawi or Tanzania. Tanzania's discount rates were the least adjusted to its inflation rates compared to Kenya's or Malawi's, although all had negative discount rates.

Figure 6
Inflation rates (consumer price index)
Percent



Source: IMF, *International Financial Statistics Yearbook*, 1985.

The Effects of External Shocks

A comparative examination of the effects of external shocks was undertaken in this study as African, especially Tanzanian, policymakers have emphasized the adverse effects of shocks on their economies. Ansu decomposed the sources of variations in current accounts in terms of shocks (i.e., variation in terms of trade, interest payments, and the growth of foreign demand less interest rates) and policy-based changes (changes in market shares, in real GDP, changes in import demand due to expenditure switching for import substitution policies, and interest payments due to increased debt). Tanzania's terms of trade index fell the least over the period from 1967 to 1984, while Kenya's fell the most (see Table 9) (Ansu 1986, pp. 64-65). This may be because Tanzania and to a lesser extent Malawi have more diversified trading partners including African, Asian, and OECD countries while Kenya relies only on the latter.

It is noteworthy that Tanzania's pure terms of trade effects are negligible while these are substantial in both Kenya and Malawi. On the other hand, policy-based changes in market shares were the most unfavorable in Tanzania, followed by Malawi and Kenya, as Tanzania lost market shares to a greater extent than did Malawi and Kenya. All three countries compressed imports, but to a lesser degree in Kenya than in Malawi and Tanzania. This is because the income elasticity of imports is greater in Malawi and Tanzania than in Kenya. The income growth effect contributed the most to the worsening of the current account through increased imports. Import compression, on the other hand, had a positive effect on the current account.

Both Kenya and Malawi experienced greater shocks due to changes in interest rates and increased payments due to an increased debt burden, but each of these was greater for Malawi than for Kenya due to Malawi's higher and increased borrowings. Kenya, on the other hand, was paying the highest interest rates on foreign loans, followed by Malawi. Tanzania was a distant third with declining rates due to greater reliance on public loans.

Table 9 shows that the contributions of policies have been negative in each of the countries. However, this picture is misleading for the following reasons. In all three countries, the income growth effect contributed the most to the worsening of the current account through increased imports. As Ansu (1986) has put it: "Certainly no one would argue that it was bad policy to allow real GDP to grow." One can also argue that growth itself is not a policy; it is the result of policies. Hence, to better understand the effects of policy-controlled factors, one has to substract the induced import effect of real growth. Table 9 indicates that in Kenya the net effect of policies (policies less GDP growth) was virtually nil; in Malawi the net effect was positive, and in Tanzania negative, thus reinforcing the effects of shocks in the latter.

The effects of other shocks such as Tanzania's involvement in the Ugandan war or the breakup of the East African Community were not measured, as reliable data on these subjects are difficult to obtain. In any case each country had some unique shocks (e.g., the return of the migrant workers in Malawi in the early 1970s, and the effect on Malawi's transport routes of the Mozambican war—costing $50 million or 20 percent of its export earnings in 1985).

Patterns of Government Expenditures

Figures 7a and 7b show the pattern of capital and recurrent budgetary expenditures of the three governments by sectors over the 1970 to 1986 period. The share of agriculture in total expenditures was highest in Malawi (ranging between 10 percent to 16 percent) and lowest in Tanzania. Also in Tanzania, agriculture's share declined sharply from 11 percent in the early 1970s to 7 percent by the end of the 1970s, whereas that of the industrial sector increased from 2 percent in 1972 to 11 percent in 1980, a result of Tanzania's adoption of the Basic Industrial Strategy.

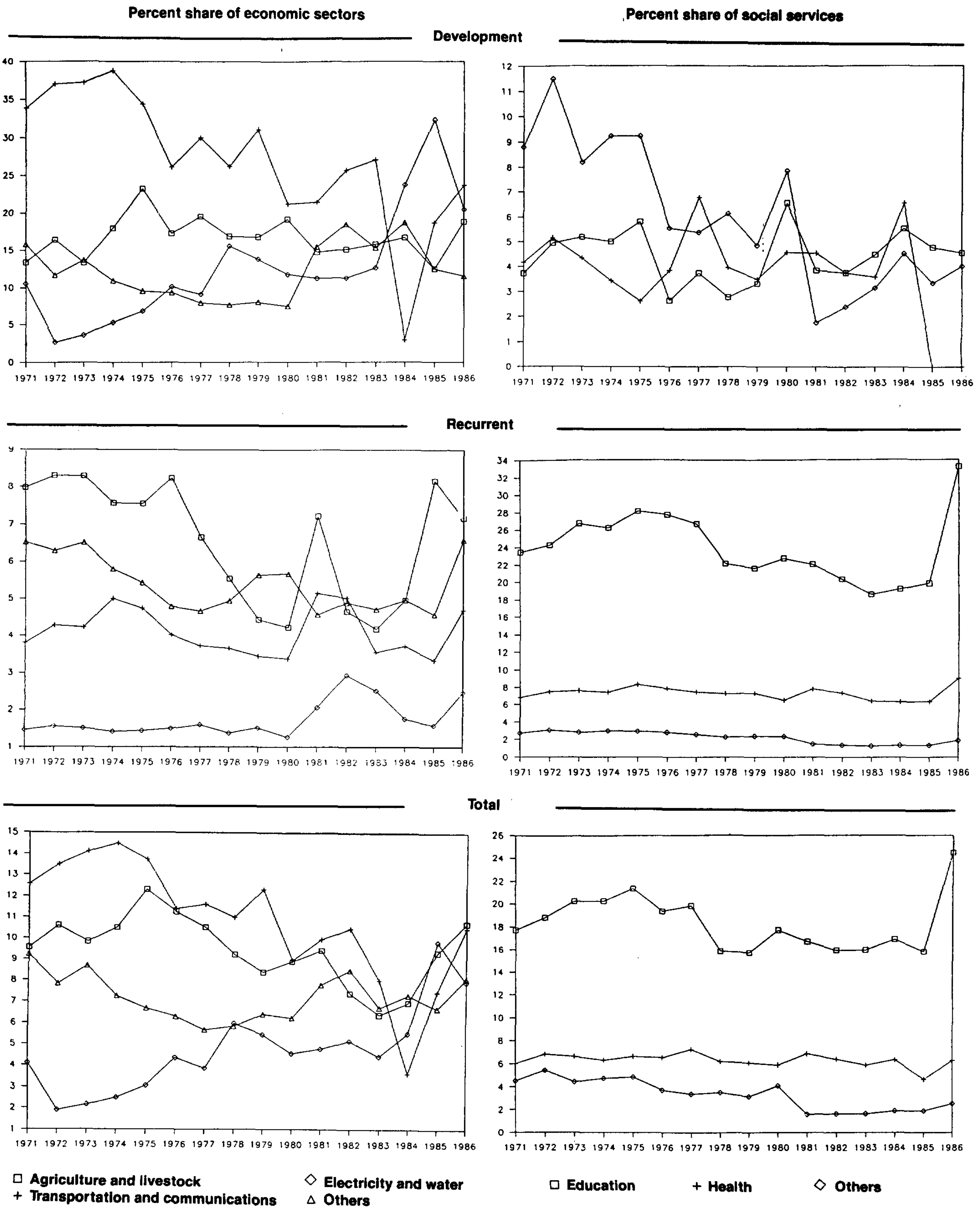
Reflecting a steadier policy environment, agriculture's share fluctuated between 8 percent and 12 percent in Kenya. In Kenya's case the share of the developmental budget going to agriculture increased sharply reaching a peak of 23.3 percent in 1974 from a base of 13 percent and declined to a low of 12 percent in 1985 while showing some fluctuations from year to year. The share of the recurrent budget going to agriculture had declined from a high of 8 percent in 1970 to 4.4 percent in 1979-80 resulting in a shortage of recurrent finance in agricultural projects.[9] Recurrent funding problems were also prevalent in Malawi and Tanzania due to a similar switch in shares of recurrent and capital expenditures.

Table 9
Decomposition of external shocks and policies (percent of current GDP)

External Shocks and Policies	Kenya Averages					Malawi Averages					Tanzania Averages				
	1974-84	1967-73	1974-78	1979-81	1982-84	1974-84	1967-73	1974-78	1979-81	1982-84	1974-84	1967-73	1974-78	1979-81	1982-84
Variation in the current account	-6.1	-1.2	-5.3	-9.0	-3.6	-9.9	-4.7	-6.3	-13.7	-12.0	-6.9	-4.1	-6.7	-8.2	-5.7
Shocks	-6.5	-0.6	-5.7	-10.1	-4.4	-3.7	3.9	0.0	-11.0	-2.5	-2.6	0.6	-1.8	-4.4	-2.4
Terms of trade	-9.0	-1.8	-7.4	-12.1	-8.5	-6.9	1.5	-6.0	-11.1	-4.1	-7.1	-0.6	-6.3	-8.6	-7.0
Foreign demand	4.8	2.8	4.7	3.9	5.8	4.1	0.9	4.2	4.1	3.8	3.7	0.5	3.9	3.7	3.5
Interest rate price effect	-0.3		-0.1	-0.4	-0.4	-0.4		0.0	-1.3	-0.3	0.3		0.3	0.2	0.6
Net factor income (less capital income)	-2.0	-1.6	-2.9	-1.5	-1.2	-0.5	1.5	1.8	-2.8	-2.0	0.4	0.7	0.3	0.4	0.5
Policies	-3.8	-3.8	-3.9	-3.2	-4.1	-7.2	-6.2	-7.9	-6.7	-6.3	-10.0	-6.0	-12.5	-7.9	-7.7
Exports market share	-1.9		-2.0	-1.6	-2.0	-2.2		-2.4	-2.3	-1.8	-5.9		-7.3	-5.0	-4.6
Real GDP growth	3.7	3.8	3.9	3.1	3.9	9.4	6.2	9.7	9.1	9.0	8.6	6.0	8.7	8.4	8.6
Change in import function	-2.6	0.0	-2.2	-2.4	-3.2	-5.6	0.0	-4.9	-6.1	-6.4	-5.2	0.0	-3.9	-6.1	-6.6
Interest payment due to increased debt	-0.8		-0.3	-0.9	-1.4	-1.2		-0.7	-1.5	-1.8	-0.7		-0.5	-0.6	-1.1
Others	5.2	3.2	5.6	4.1	5.7	2.4	-2.1	3.4	5.9	-2.5	5.4	1.3	7.5	4.1	3.0
Fluctuations around average market share	0.4	0.2	2.0	-0.2	-1.7	2.4	-0.2	2.6	2.7	1.8	0.4	0.7	2.0	0.3	-2.2
Fluctuations around import elasticity	-0.3	0.2	0.2	0.3	-1.6	-0.1	0.4	0.6	0.5	-1.8	-0.4	0.5	-0.4	0.0	-0.9
Transfer payment	1.5	1.7	1.2	1.6	1.8	1.7	-2.1	0.4	4.0	1.3	2.5	0.0	2.8	3.0	1.7
Net export of nonfactor services	3.1	1.5	2.6	3.0	4.0	-1.7	0.5	0.9	-0.3	-7.4	2.0	1.1	2.4	0.9	2.6
Residual	-1.0	0.0	-1.3	-0.6	-0.8	-1.4	-0.3	-1.8	-1.9	-0.7	0.3	0.0	0.0	0.0	1.4
Mean															
Imbalanced terms of trade[a]	-1.2	-0.6	-1.9	-3.1	2.0	-2.7	-0.6	-5.3	-2.0	1.1	-6.5	-0.2	-6.7	-6.9	-5.6
Pure terms of trade	-7.8	-1.2	-5.5	-9.0	-10.5	-4.2	2.1	-0.7	-9.1	-5.2	-0.6	-0.4	0.5	-1.7	-1.4
Net policy effects[b]	-0.1	0.0	0.0	-0.1	-0.2	2.2	0.0	1.8	2.4	2.7	-1.4	0.0	-3.8	0.5	0.9

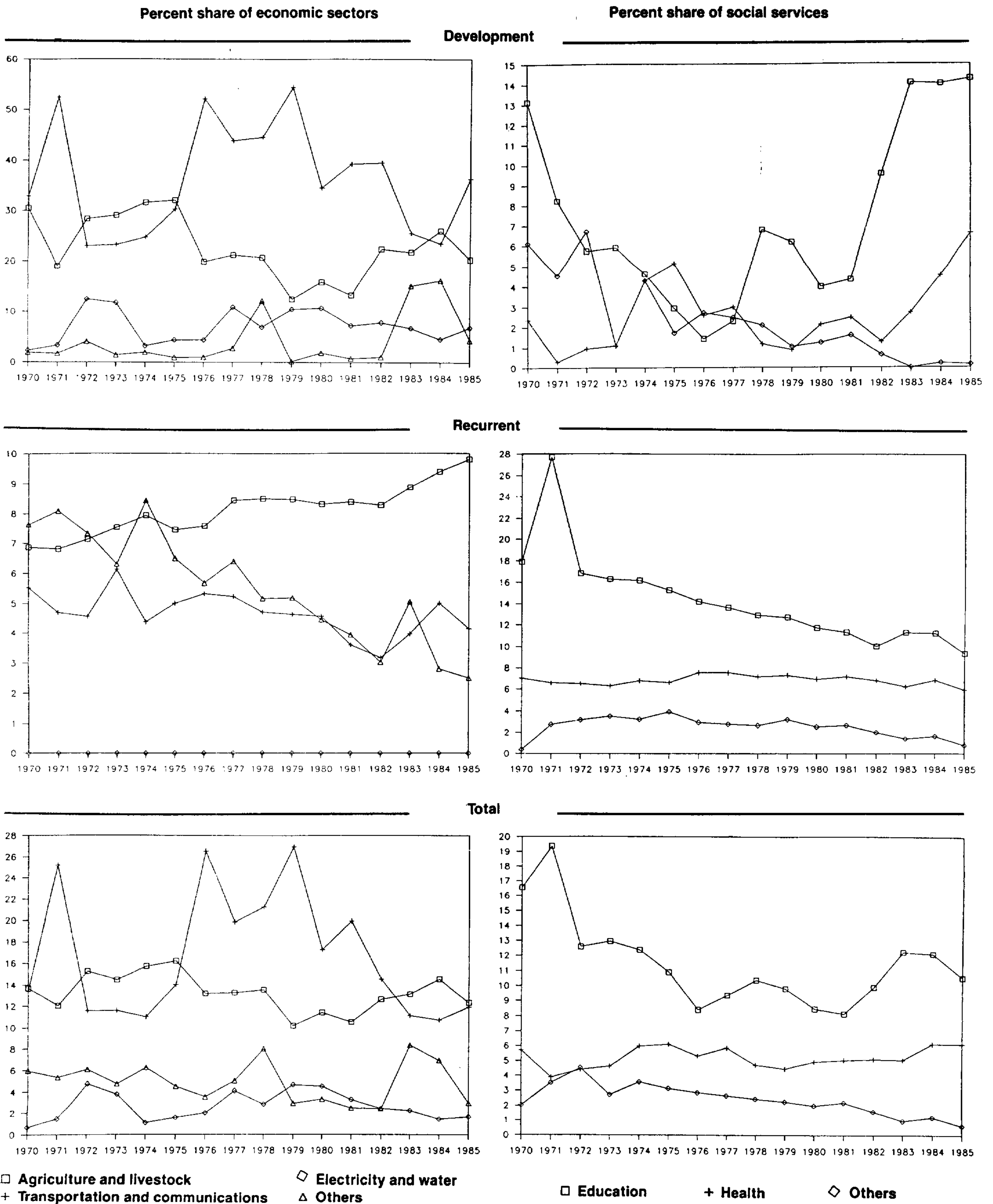
Notes: [a] When imports exceed exports the current account could deteriorate even as the terms of trade improves.
[b] Policy affects less real gdp growth effect.
Source: IMF, *International Financial Statistics Yearbook*, 1985 and 1986.

Figure 7a
Kenya expenditures



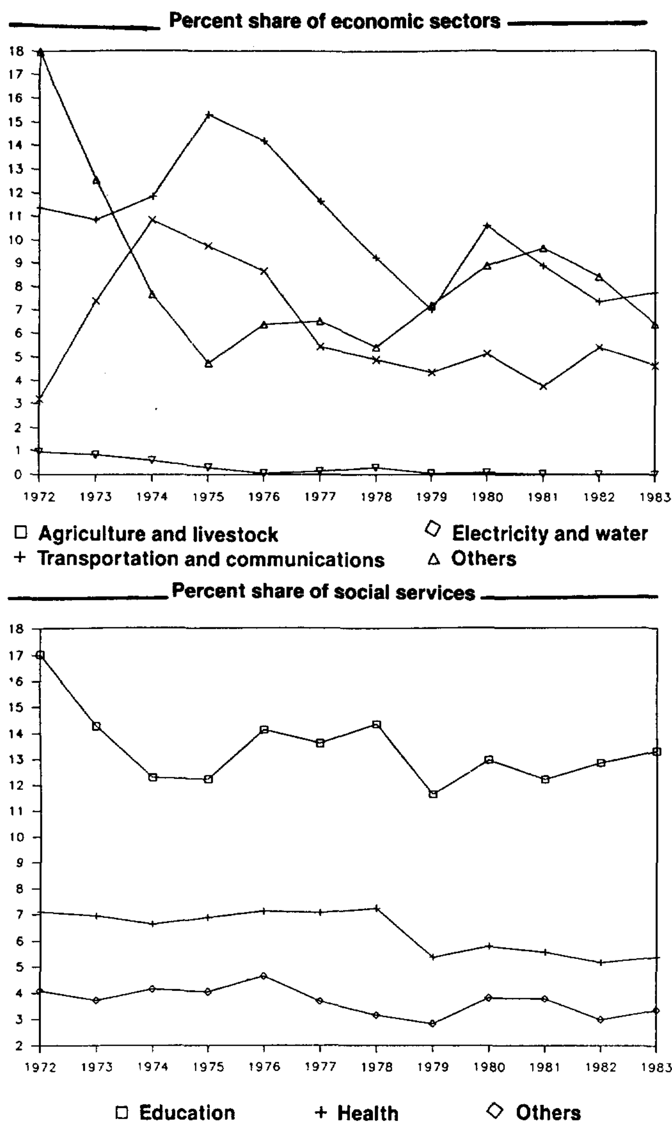
Source: Government of Kenya.

Figure 7b
Malawi expenditures



Source: Government of Malawi

Figure 7c
Tanzania total expenditures



Source: Government of Tanzania

Total government expenditures (developmental and recurrent) showed major differences in Kenya, Tanzania, and Malawi. Kenya showed the highest share of central government expenditures going to social services (ranging between a low of 25 percent and a high of 33 percent).

Commensurate with its poor social indicators (see next section), Malawi had both declining and the lowest shares of expenditures on social services with the levels being well below 20 percent—15 percent in 1980 and 1981 compared to the high of 25 percent in 1970. Malawi's expenditures on education were the lowest of the three and Kenya's the highest. Tanzania's share of social services declined in the latter half of the 1970s from a high of 28 percent to a low of 21 percent. In contrast, the share of its defense expenditures rose from a low of 9.7 percent in 1973 to a high of 24.4 percent in 1979.

It is paradoxical that Tanzania, a large country with low population densities, poor initial infrastructure, and population concentrations mostly in the areas bordering on other countries, devoted a smaller share (averaging about 7 percent) of its resources to transportation and communications compared to Kenya and Malawi.[10] Kenya and Malawi's expenditures on transport and communications have been similar (12 percent to 14 percent) although Malawi's rose to a high of 26 percent between 1976 and 1979. Additional expenditures in Malawi, however, included the construction of the capital city and government buildings, including the State House, which did not benefit the rural population.

Tanzania's expenditures on transport and communications declined to 4-6 percent in the late 1970s from a high of 18 percent in 1972.[11] Even this limited budget reflects the fact that like Malawi, Tanzania devoted resources to nonproductive construction of a new capital city in Dodoma.

A factor contributing to the growth of expenditures and the shortage of recurrent funding for operating expenses was rapidly increasing public sector employment in all three countries. The growth of public sector employment was, however, the sharpest in Tanzania, i.e., 15.6 percent annually between 1976-77 and 1977-78. Reflecting the lower priority attached to agriculture relative to other sectors, public sector employment growth in the agricultural sector was nonetheless slower than in other (especially education and industry) sectors. A small fraction of these employees (10 percent) were involved in the provision of basic services in the Ministry of Agriculture, but the Ministry of Agriculture lost control over them subsequent to the decentralization of the Tanzanian administration. Seventy-seven percent were working for parastatals.

Indicators of Investments in Human Capital

The extent to which each government allocated resources to the building of human capital has affected rural welfare as well as growth possibilities by increasing capacity to plan and manage the economy. Rapid population growth can erode many welfare gains. It is therefore important to note at the outset that Kenya started out with higher population growth rates (3.8 percent) between 1967 and 1973 than Tanzania (3.2 percent) and Malawi (2.8 percent). While the population growth rate accelerated in all three countries, in Kenya it reached the highest level—4 percent during the 1973-84 period.

Tanzania and Malawi started out with poorer initial conditions than Kenya in 1965 as regards social welfare (see Table 10). Malawi had the lowest life expectancy for males and females compared to Tanzania and Kenya. Kenya continued to hold a lead in female life expectancy over Tanzania and Malawi. However, the percentage gain in Kenya's female life expectancy was greater (22 percent) compared to Malawi's (15 percent) and Tanzania's (20 percent). The same applied in the case of male life expectancies, with Kenya holding the lead but with Tanzania showing a slight edge (22 percent) compared to Kenya (21 percent), and Malawi showing the least percentage change (16 percent).

With regard to the number of persons relative to physicians, Malawi started out with a ratio over three times (46,900 persons/physician in 1965) that of Kenya (13,450). The ratio for Tanzania was about one and a half times as bad (21,840) as Kenya's. Malawi's situation, however, appears to have deteriorated over time (with the persons/physician ratio rising to 52,960 in 1981) while Kenya *reduced* the persons/physician ratio by half from 13,450 persons to 7,540 during the same period. Tanzania's ratio was 19,810

Table 10
Social indicators for Kenya, Malawi, and Tanzania

	Kenya	Malawi	Tanzania
Population			
Total 1984 (mil)	20	7	21
Growth Rates			
1965-73 (percent)	3.8	2.8	3.2
1973-84 (percent)	4.0	3.1	3.4
Nonurban population as percent of total	82	88	86
Life expectancy at birth			
Female 1965 (years)	46	40	44
Female 1984 (years)	56	46	53
Male 1965 (years)	43	38	41
Male 1984 (years)	52	44	50
Physicians			
1965	13,450	46,900	21,840
1981	7,540	52,960	19,810[a]
Number enrolled in school (as percent of age group)			
Primary			
Female 1965	40	32	25
Female 1983	97	52	84
Male 1965	69	55	40
Male 1983	104[b]	73	91
Secondary			
1965	4	2	2
1983	19	5	3
Safe Water Access (percent of population)			
1973	15	33	13
1980	26	41	34

[a] 1978 (1981 figure not available).
[b] Gross enrollment ratios may exceed 100 percent because some pupils are above or below standard primary-school age.
Source: World Bank 1986b; World Bank, *World Development Report*, 1986; United Republic of Tanzania 1983 (1978 population per physician).

persons per physician in 1978 (the latest year for which figures are available).

Kenya also continued to hold the lead in the spread of primary education, increasing the percent of those of school-going age attending school from 40 percent to an impressive 97 percent for females and from 69 percent to 104 percent for males. Its lead in secondary education, with 4 percent to 19 percent of that age group receiving secondary education, is even more impressive. Tanzania's gain in primary education (84 percent of the age group) was the greatest given the low base (40 percent in primary education) but there was no significant movement in the numbers attending secondary education in Tanzania (an increase from 2 percent to 3 percent). Malawi made the least progress on the growth of primary education although its relative position on secondary education improved from 2 percent to 5 percent both over time and relative to Tanzania's.

Malawi had the lead in access to safe water (33 percent of the population) in 1973 over Tanzania (13 percent) and Kenya (15 percent). However, Tanzania's relative gain (an increase to 34 percent) was the greatest compared to the total coverage achieved in 1980 in Malawi (41 percent) or Kenya (26 percent). Encouraged partly by the donors, Tanzania adopted a policy of providing piped water to the entire rural population by 1991. However, in 1984 half of the rural water supplies provided were either inoperative or operating at reduced capacity (Radetzki 1986). It is thus not possible to indicate the actual extent of rural water access.

Levels of Foreign Assistance

Judging the appropriateness of Official Development Assistance (ODA) levels is not easy. Nor is it easy to sort out the degree to which overall ODA levels have contributed to agricultural growth. ODA levels may be considered on a "need" basis, in which case it could be argued that Kenya (with its higher per capita income than Tanzania's and Malawi's) may "need" less ODA than the other two countries. On the other hand, if demonstrated overall economic performance is the criterion, then Kenya would clearly seem to have been more qualified for higher ODA levels than Tanzania and perhaps Malawi. In actuality, Tanzania received substantially higher ODA, in both absolute ($669.0 million in 1981) and per capita terms (a peak of $35 in 1981) than either Kenya (a peak of $428.3 million in 1982 and $26 per capita) or Malawi (a peak of $140.3 million in 1979 and $24 per capita) (see Figures 8a and 8b). Although Tanzania's ODA peaked in 1981 once a poor commitment to policy reform was noted by donors, it nevertheless remained higher in absolute and per capita terms ($25) in 1984 than Kenya's ($21) and Malawi's ($23). Kenya's showed a significant rise from 1977 to 1982, declining thereafter.

ODA is also given by donors to induce policy changes, an approach initiated in the early 1980s. On this basis, the country with the least distorted policies, Kenya, should have received less assistance than Tanzania or Malawi, because Kenya's performance had the least need to improve. In fact, however, since Kenya and Malawi appeared to be more willing to undertake policy reforms than Tanzania, they received greater structural adjustment support than Tanzania. Thus, "nonproject lending" for the period 1980-86 was 24 percent and 37 percent of the Bank's total portfolio for Kenya and Malawi, respectively, compared to 10 percent for Tanzania. As of June 1986, Malawi had received three structural adjustment loans with amounts of $170 million by the Bank, and Kenya three structural and/or sector loans amounting to $245.9 million, whereas Tanzania received no funding from the Bank for projects in the agricultural sector from 1982 nor for SALs until 1986.

Overall, ODA constituted a smaller share of GDP and government expenditures in Kenya than in Malawi or Tanzania. Between 1970 and 1984, ODA averaged 5.3 percent of Kenya's GDP (21.9 percent of government expenditures). In Malawi and Tanzania, ODA was 9.6 percent and 9.7 percent, respectively, of GDP (43.8 percent and 31.9 percent of their respective government expenditures).

The Bank's share in ODA could be a reflection of its influence in two quite different ways. A smaller share might mean lower financial influence but great need for aid coordination. It might, however, also mark the fact that through cofinancing of projects or programs with other donors the Bank could influence project level investments or sector level policies and institutions. ODA was a small 9.5 percent in Kenya during 1970-84, compared to nearly 22 percent in Malawi (see Figure 9). The share of Bank lending (as distinct from IDA credits) to Kenya was larger than to Tanzania and Malawi. The Bank's 19.4 percent share in net resource transfers (TRN) to Kenya was similar to the 20.3 percent in Malawi while TRN to Tanzania was only 11.6 percent.

The Bank's influence on Kenyan policies and investment allocations has been distinctly more significant than that suggested by ODA levels, owing to three factors: (1) other donors' perceptions of the Bank's professionalism in the field and status as an international institution—which have tended to give its presence and advice to the government more weight than its direct contribution to ODA might suggest; (2) the Bank's extensive practice of cofinancing individual projects with other donors (Lele and Meyers 1986); and (3) its recent active role as an aid coordinator, especially given the growing importance of macro and sector policy reforms.

The Bank's influence has, however, been less strong in Kenya than in Malawi, where the sources of assistance are less diversified. Malawi's debt has also been increasing more rapidly than Kenya's. World Bank and U.K. assistance

Figure 8a
Official Development Assistance (ODA), 1970-84

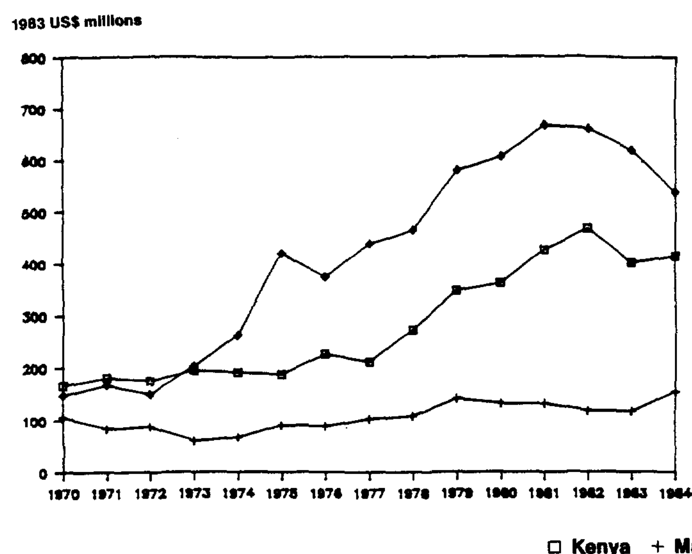
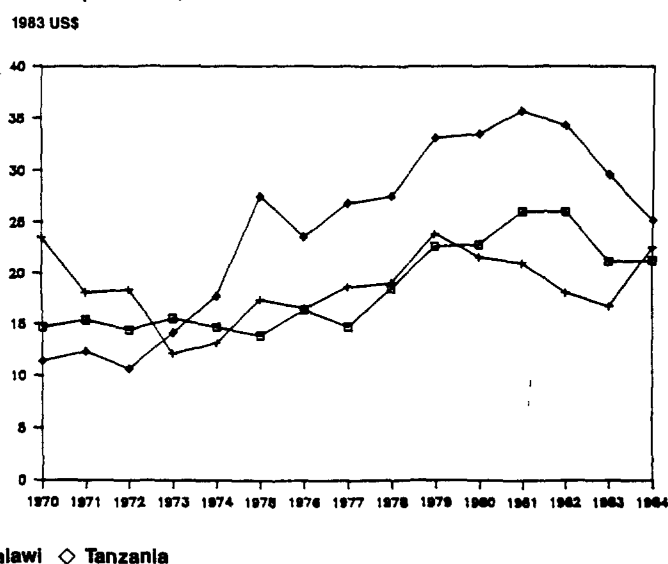


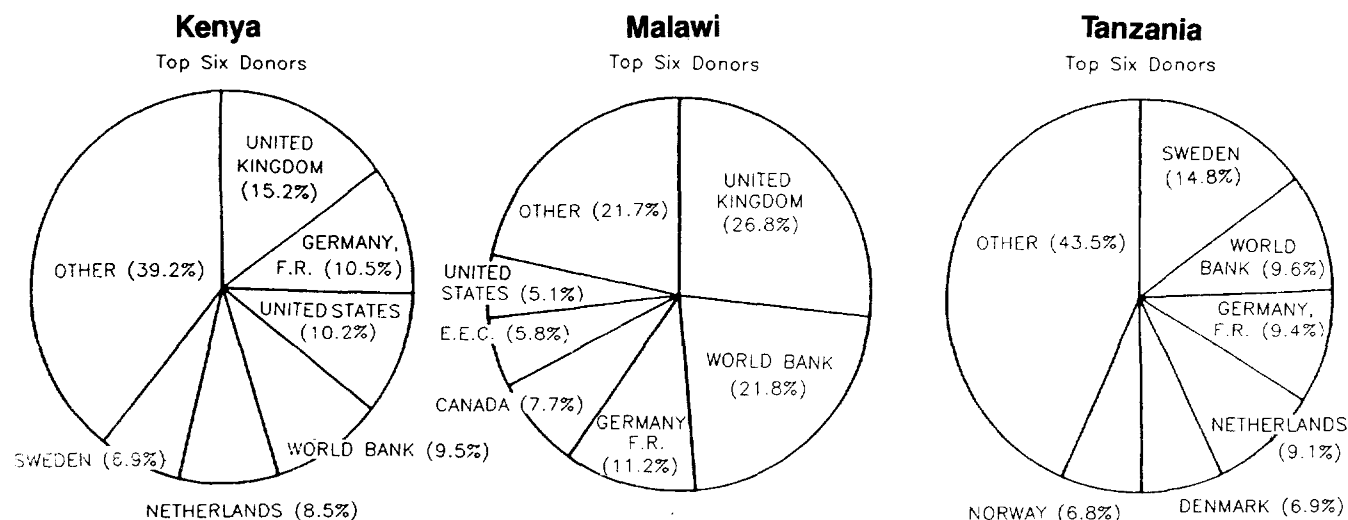
Figure 8b
Per capita ODA, 1970-84



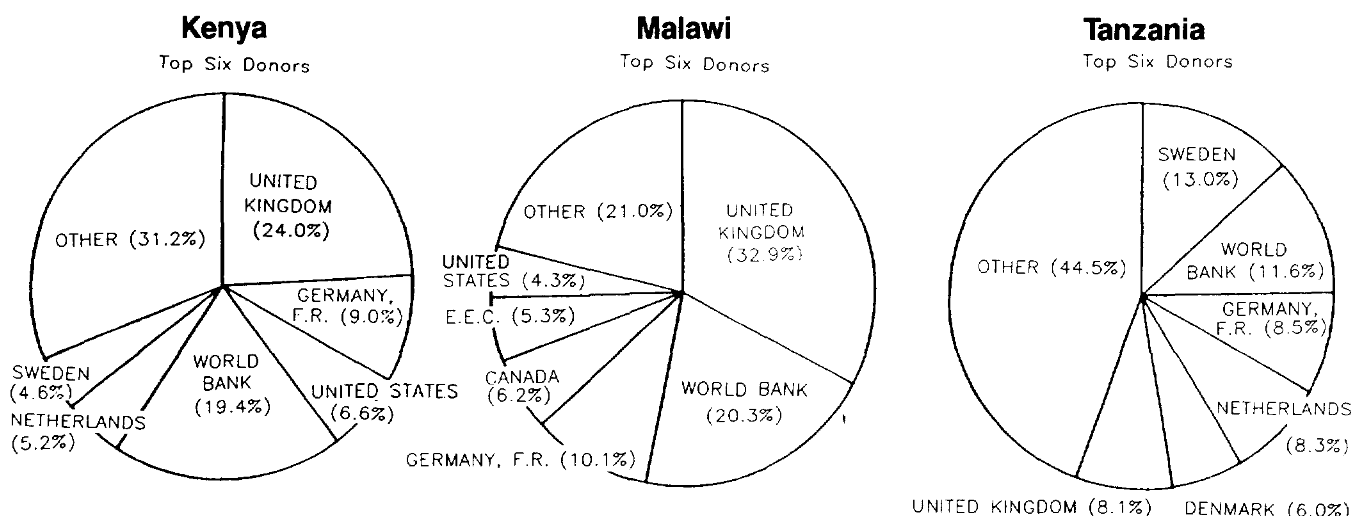
□ Kenya + Malawi ◇ Tanzania

Source: OECD, "Geographical Distribution of Financial Flows," various years.

Figure 9
Official Development Assistance (ODA), 1970-84



Net resources transfers (TRN), 1970-84



Source: OECD, "Geographical Distribution of Financial Flows," various years.

together constitute one-quarter of ODA and nearly half of TRN. Further, the United Kingdom has tended to align itself with the Bank on major policy issues (Howell 1988). The Bank's influence has, however, been stronger in Kenya relative to Tanzania. Tanzania receives over a third of its ODA from the so-called "friendly donors" (Scandinavian countries and the Netherlands) who have been far more tardy in recognizing the adverse consequences for the efficiency of the economy of Tanzania's industrialization and other public sector dominated policies, and have been reluctant to tie their assistance, as have the Bank and USAID, to macropolicy adjustments.[12] The Tanzanian government has also been reluctant to call an aid coordination meeting on grounds that the donors would gang up and push for macropolicy reforms that it was not ready to undertake. The first aid coordination meeting for Tanzania after 9 years was held in Paris in June 1986.

Despite greater and more effective attempts at aid coordination by the Bank in recent years, this paper will argue that failure on this important front continues for a variety of reasons, including: (1) the lack of an overall agreed upon long-term strategy of development for each country; (2) the lack of donors' willingness to focus on those aspects of assistance which they have the greatest comparative advantage to address, within the confines of the limitations posed by the recipient countries' absorptive capacities; (3) the lack of flexibility among donors in providing assistance to countries in the areas of the countries' greatest need due to aid tying and assorted pressures from domestic constituencies; and (4) inadequate emphasis in the recipient countries on maximizing aid effectiveness by directing aid toward alleviating their most important long-term developmental constraints, rather than for meeting immediate short-term political objectives.[13]

Agricultural Policies

This section examines why Malawi has had a high rate of growth of exports, achieved through an estate-oriented strategy, and why its smallholders have done poorly. It also examines why Kenya has performed the best in reconciling the objectives of growth with equity. Tanzania's performance has been poor both in terms of income generation for the poor as well as growth. This paper will also show why Tanzania's welfare-oriented policies had become unsustainable by the end of the 1970s. The argument will be that the relative performance of the three countries is not explained by a single policy, nor indeed even by a few key policies that can be "fixed" relatively quickly. Rather a *combination* of macroeconomic and sectoral policies, structural factors influencing the mobilization of land, labor, and capital, and institutional and human capital factors brought to bear on the development and application of technology to smallholder agriculture all explain agricultural performance.

Table 11
Population and agricultural land

	Kenya	Malawi	Tanzania
Total Land	56,416	9,300	88,360
Agricultural land ('000 ha)	14,703	3,550	49,100[a]
Agricultural land as % of total land	26.1%	38.2%	55.6%
1984 rural population (millions)	16.0	6.0	18.4
Rural population/hectare of agricultural land	1.09	1.69	0.37

[a] If "Other Woods, Forests" is included, the area for Tanzania rises to 86,760 hectares.

Source: Land Areas: Kenya—Mkandawire and Phiri 1987; Malawi—World Bank 1986a, Table 3.2; Tanzania—World Bank 1974a, Table 23.
Population: IMF, *International Financial Statistics Yearbook, 1985.*
Rural Population: World Bank, *World Development Report,* 1986.

Natural Resource Endowments and Policy Choices

Agricultural performance is to a large extent determined by the quality of natural resource endowments. Land quality differences and regional differences in population densities, however, make intercountry comparisons difficult. In addition, each country uses a different classification system for categorizing land by agricultural potential. Table 11 presents rough estimates of the ratio of rural population to agricultural land for all three countries. Tanzania clearly has a much larger land resource base than Kenya and Malawi where land pressures are far greater. Only 26 percent of Kenya's land (square kilometers) is classified as agricultural compared to 56 percent for Tanzania and 38 percent for Malawi.

Aggregate figures can, however, mask considerable internal variation. Only 16 percent of the agricultural land in Kenya consists of Zone I and II ("humid and subhumid" land), the primary area for production of high value cash crops such as coffee and tea. Another 29.3 percent consists of Zone III and IV ("semi-humid and transitional" land), suitable for basic cereals production.[14] Finally, 54.7 percent of all agricultural land consists of Zone V and VI ("semiarid and arid") areas in which farming is mainly limited to subsistence production and (nondairy) livestock—the latter especially in Zone VI.

While for Tanzania breakdowns using exactly the same categories are not available, it appears that while high quality land comprises only a small proportion of total land in Kenya, it is more abundant *relative* to Tanzania's endowment of this type of land. However, Tanzania clearly has proportionately vastly more of what is usually referred to as medium quality land suitable for rainfed annual cropping of various food crops, cotton, tobacco, and certain perennials like cashews and sisal (in areas where in the 1950s and 1960s there was impressive growth through expansion of area under cultivation). Kenya has relatively little medium potential land of the quality enjoyed by Tanzania.

Malawi has proportionately more medium potential land than Kenya but proportionately considerably less than Tanzania. The important point about land quality in Malawi is that almost all of the best quality land suitable for tea and coffee is already under use and therefore there is virtually no room for smallholder expansion into these areas. There is land available that could be brought under smallholder tobacco production, however. The evidence suggests that much of this land, currently under estate control, is greatly underutilized. Thus, the issue with respect to increased smallholder acreage centers on reallocation of underutilized land rather than expansion into new unallocated areas.

Smallholder Intensification

As indicated in the Introduction, intensification of agriculture is considered in this paper in three different and interrelated ways: (1) a shift from low to high value crops on any given land, (2) increase in yields per hectare of any given crop, and (3) a geographical shift in production of crops from areas of poor land quality to those of higher land quality.

In view of the overall shortages of high quality agricultural land in Kenya, both external analysts of Kenyan agriculture and Kenyan policies have emphasized all three types of intensification of agricultural production as principal means of increasing employment and income generating opportunities. In contrast, the Malawi government's concern about smallholder intensification in the sense of shifting from low to high value crops and a geographical shift to high potential areas has been relatively minor until recently. Tanzania has made major strides in geographically diversifying the production of maize, coffee, and tea to the previously uninhabited high potential Southern Highlands from regions of Northern Arusha, Kilimanjaro, and Bukoba. But its poor agricultural policies have generally arrested intensification. (Part II of this paper will show how donor policy analysis and investments reinforced domestic policy tendencies in Malawi and Tanzania in the 1970s.)

Small Versus Large-Scale (or Estate) Production

How production units (small and large) are defined, how factors of production are mobilized, the prices at which those factors are mobilized, the markets in which produce is sold, and the prices at which it is sold are all policy issues that have major implications for the process of intensification. These topics are discussed in the sections below.

Defining "Large" and "Small"

Differentiating between small and large holders is important, but not easy. Apart from the problem caused by differences in land quality, conventions vary across countries with respect to definitions of small and large farmers. In Kenya, for instance, the definition of a smallholder holding (with significant implications for access to institutional credit) is one with less than 20 hectares. Yet three-quarters of all smallholder holdings are under 2 hectares.

Different policy and institutional rules also apply to small and large holders. Thus, there are differences among countries in terms of the way in which the right to cultivate, own, or transfer land, produce specific crops, and have access to the markets in which specific crops are sold are conferred by the government and/or traditional authorities. In Malawi, for instance, estates (regardless of size) are defined in terms of whether cultivation takes place on leasehold or (in a small number of cases) on freehold or titled land. Customary rights to cultivate and transfer the land through lineage, on the other hand, is conferred by the traditional tribal chiefs and this area is designated for smallholders.

The term estate infers a large-scale farm, but this is not the case in Malawi where many estates are farming hectarages similar to those of larger scale smallholders. Further, the size of estates has declined sharply over time, although initially the expansion of burley tobacco estates involved the very large farms. Since then the demand for "estates" has increased due to the rent element they confer. It is for this reason that the distinction in nomenclature is significant. Rights to grow export crops such as burley and flue-cured tobacco are conferred by the government through the granting of licenses to estates. Estates are also allowed to sell their crops in auctions at close to world market prices, but produce grown on customary land is sold to ADMARC at lower prices determined by the government. Access to input supply, credit, and extension is similarly determined by the distinction in nomenclature.

In Kenya the right to grow certain crops is also restricted by licenses. Thus due to world market demand concerns, smallholders in western Kenya were not permitted to grow coffee in the 1970s. However, on the whole, titles to land and licenses to grow crops such as tea and coffee have been made far more freely available in Kenya in areas that formerly were European settled or were used as grazing land. For instance, the area under tea estates in Kenya increased from 19.6 thousand to 25.9 thousand hectares or a 1.8 percent annual growth rate between 1970 and 1985, but that under smallholder tea increased from 4.9 thousand hectares to 48.9 thousand hectares or at a 15.3 percent rate of growth. The area under coffee estates increased from 29.9 thousand hectares to 35.7 thousand hectares or 1.3 percent in the same period compared to that under smallholders from 54.1 to 116.3 thousand hectares at 5.5 percent. Data for total area under large-scale farming for recent years are not available, but there appears to be little reason to believe that much new area has been brought under large-scale farming. On the contrary, considerable numbers of large farms have been broken up over time and while there is currently political resistance to expanding tea and coffee production through estates, a general policy of expanding production of these crops has been adopted.

In Malawi, on the other hand, the area under flue-cured tobacco estates increased from 5.8 thousand hectares in 1970-71 to 16.3 thousand hectares in 1984-85, or at 12.1 percent annually; area under burley tobacco increased from 7.2 thousand hectares to 22.6 thousand hectares or 14.3 percent annually, and that under sugar from 2.6 thousand to 14.9 thousand hectares by 1981-82 or 47.0 percent annually. It is noteworthy, however, that the area reportedly cultivated under burley is only 6 percent of the area licensed as estate land, reflecting substantial underutilization of land (Ranade 1986).. This alienation has been taking place in Malawi despite the fact that overall land pressure is greater than in Kenya. Table 12 shows both the increase in the amount of land under estate control in relation to total available arable land and the negative balance in arable land suggesting that smallholders may be cultivating marginal land.

Table 12
Availability of land in Malawi* (in million hectares)

	Northern	Central	Southern	Malawi
Total hectares	2.66	3.51	3.13	9.30
Area possible for cultivation under present technological limitations	0.89	1.51	1.15	3.55
Customary land under agriculture	0.49	1.20	1.15	2.84
Area under cultivation in customary land	0.14	0.68	0.51	1.33
Area under all estates				
1979-80	0.05	0.24	0.15	0.44
1984-85	0.11	0.44	0.23	0.78
Balance of arable land	0.20	-0.28	-0.35	-0.43

Source: Malawi Agricultural Estate Sector, Devres Inc., 1979, p. 10; Government of Malawi 1984, p. 3; Tobacco Control Commission and Government of Malawi 1981; Records at Ministry of Agriculture, Government of Malawi.
*This table is from Ranade 1986.

Differential Marketing Institutions

This section explores the implications of the more diversified and more decentralized nature of the marketing institutions in Kenya and Tanzania compared to Malawi. Both cooperatives and the private sector have played a more active role in the two countries than is true for Malawi. These differences are first outlined. Kenya broadened the scope of its marketing arrangements to increase participation of small farmers, whereas Tanzania's policies created very great institutional instability in marketing institutions, contributing to the growth of the parallel market in food crops. Malawi continued to have a relatively monolithic centralized marketing structure. This allowed cross-subsidization of the smallholder agricultural sector and provided a mechanism for resource transfers from the smallholder to the estate sector.

There are both differences and similarities in the structure and diversity of marketing institutions responsible for various crops in each country. For instance, in all three countries the governments have a *de facto* monopsony on the purchase of cereals—all have discouraged the role of the private trade in grain markets (on grounds of curtailing the activities of Asians or other African ethnic groups dominant in trade). Malawi went the farthest by formally

mandating that Asians not reside in smaller towns and rural areas. Donors have, however, tended to somewhat mistakenly view Malawi as a strictly private sector-oriented country.

ADMARC, the only marketing board in Malawi (until 1973 the Farmers Marketing Board), buys all smallholder crops, whereas in Tanzania and Kenya there are separate marketing organizations for each major export crop grown by smallholders. The National Cereals and Produce Board (NCPB) in Kenya and the National Milling Corporation (NMC) in Tanzania have had responsibility for the purchase and sale of cereal crops in the 1970s either directly or through private or cooperative agents.

ADMARC's responsibility for buying all smallholder crops enabled it to cross subsidize maize producers using the proceeds of implicit taxation on tobacco, a possibility that Tanzania's and Kenya's maize parastatals have not had (see Table 13). This partly explains the fact that the NCPB in Kenya and the NMC in Tanzania experienced substantial financial difficulties resulting from year-to-year fluctuations in official maize purchases and sales in the 1970s. The governments' failure to provide adequate working capital to these agencies contributed to their high interest payments and debts and the subsequent financial difficulties of these boards received considerable donor attention. In contrast, only when ADMARC's financial difficulties were accentuated by the rise in the maize producer price and the less than expected profits on the tobacco account due to lower world market prices in 1981 did ADMARC's pricing policies receive donor attention. ADMARC was considered efficient despite the substantial growth in its purchasing centers in the 1970s, which increased its overhead in much the same way as occurred in Tanzania and Kenya.

As in Malawi, export crop produce from small and large holders goes through different channels in Kenya (e.g., tea through KTDA and coffee through the coffee marketing cooperatives). Large private estates process and sell their own produce at local auctions and export directly to international markets. However, in Kenya there is no differential taxation of smallholders and estates for coffee and tea as reflected in the prices received by the two, except for those resulting from differences in marketing costs where scale economies are enjoyed by estates. Because the Kenyan marketing agencies (the coffee cooperatives and KTDA) are generally quite efficient, the marketing margins are low in relation to actual costs. In Malawi, on the other hand, the prices received by smallholders are considerably lower than those received by estates. This is mainly due to the price policy that has involved implicit taxation of tobacco as well as cotton and groundnuts. This is shown by the profits and losses made by ADMARC on the various crops, as presented in Table 13.

The extent to which export marketing arrangements are stable and reflect world market conditions in the terms received by producers also affects incentives for maintaining the quality of the export produce. At independence, some exports such as coffee and sisal, produced by estates in Kenya and Tanzania, were handled on private account through local auctions (in the case of coffee) and direct sales in Europe. Asian traders handled food crops for small African farmers and sold rural consumer goods and agricultural implements to them. Marketing and credit cooperatives operated by smallholders were far more active in Kenya and Tanzania than in Malawi. Dairying, pyrethrum, and coffee were handled by cooperatives in Kenya, as were cotton, tobacco, and coffee in Tanzania.

In the case of export crops, especially tea and coffee, Kenya has retained and nurtured its earlier export marketing strategies consisting of local auctions in Mombasa and Nairobi and sales in European markets. It has also brought a large number of small producers into the process of export marketing. After the breakup of the East African Community and the closure of the Tanzanian border, Tanzania suffered from lack of access to the Mombasa tea auctions. In the case of coffee, Tanzania's bilateral sales outside the quota market increased, in part reflecting a poorer quality product. The quality of Tanzanian tobacco and cotton has also deteriorated due to poor handling and processing of the products, and poor export arrangements (World Bank 1983).

Table 13
ADMARC'S profits (losses) on crop trading for 1971/72 to 1983/84 (millions of 1980 kwacha)

Year	Tobacco	Rice	Maize	Groundnuts	Cotton	GNPD	(Loss)
71/72	11.3	(0.4)	(0.1)	4.3	1.6	(1.2)	15.6
72/73	7.8	(0.3)	(0.1)	4.4	1.9	(2.7)	10.5
73/74	4.9	0.3	3.0	3.4	2.8	1.9	12.4
74/75	7.9	0.9	0.4	1.7	5.1	(2.5)	13.4
75/76	15.3	(0.0)	(4.3)	1.9	0.7	0.8	14.8
76/77	21.3	(1.5)	(2.2)	8.1	2.6	2.3	30.6
77/78	30.3	(1.0)	(2.8)	3.0	1.7	1.7	33.4
78/79	5.0	(0.8)	(4.0)	2.6	1.4	0.6	5.0
79/80	3.1	(1.4)	(4.3)	4.3	0.5	(1.2)	0.1
80/81	3.2	(1.4)	(4.5)	4.2	(0.8)	(0.4)	0.3
81/82	7.9	(0.6)	(4.4)	2.8	2.4	(0.5)	7.7
82/83	13.4	(0.8)	(4.1)	(0.6)	1.6	(0.8)	8.8
83/84	11.1	(0.4)	(4.6)	0.3	(0.3)	(0.4)	5.7

Source: Data from 1971/72 through 1981/82, Christiansen and Kydd 1987, p. 42. Data for 1982-83 and 1983-84, ADMARC's Annual Reports.
*This table is from Ranade 1986.

Taxation of the Smallholder Sector

Malawi's exchange rate policies have been superior to those of Tanzania. In Tanzania the exchange rate appreciation explains the implicit taxation of export agriculture resulting in adverse effects on export crop production, as noted earlier. However, direct taxation of smallholder agriculture has been prevalent in Malawi through ADMARC producer prices. This issue was overlooked until recently by analysts of Malawi's performance, who explained Malawi's good performance mainly in terms of the outwardness of the economy as reflected in Malawi's exchange rate and trade policies (Balassa 1984). The prices paid by ADMARC to smallholders for tobacco were as low as 13-27 percent of the international prices throughout the 1970s, whereas the estate producers selling on the auction floor enjoyed prices that were between 250-300 percent higher than those received by smallholders (see Table 14).[16]

Profits made by ADMARC from paying low prices to smallholders were invested in estate agriculture and in Press Holdings with equity interests by President Banda. Table 15 shows the sharp increase in ADMARC's equity shares in estates from K.072 million in 1972 to K14.9 million in 1984, and in unsecured loans from K0.5 million to K3.0 million. The sharpest increase was in income notes in Press

Table 14
Malawi: Average tobacco prices paid to estate and smallholder growers and ratios of average producer prices to export unit values by nomenclatures* (1970-81)

	Estate Tobacco						Smallholder Tobacco		
	Burley			Flue-cured			Dark-fired		
	Export unit value t/kg	Average grower price t/kg	Ratio of grower price to export unit value	Export unit value t/kg	Average grower price t/kg	Ratio of grower price to export unit value	Export unit value t/kg	Average grower price t/kg	Ratio of grower price to export unit value
1970	106.30	62.58	0.59	134.30	83.69	0.62	83.70	20.50	0.24
1971	92.70	52.58	0.57	134.70	90.76	0.67	107.80	22.40	0.21
1972	78.50	55.56	0.71	144.40	89.15	0.62	100.00	23.40	0.23
1973	120.50	80.87	0.67	184.30	129.26	0.70	90.80	21.30	0.23
1974	162.50	109.46	0.67	224.10	148.90	0.66	116.80	21.00	0.18
1975	178.80	93.32	0.52	207.60	129.76	0.63	192.80	25.80	0.13
1976	156.60	103.35	0.66	236.40	147.84	0.63	225.50	29.50	0.13
1977	227.80	137.35	0.60	275.40	172.16	0.63	265.80	33.50	0.13
1978	196.10	115.72	0.59	311.90	171.25	0.55	211.60	42.10	0.20
1979	187.50	107.72	0.57	240.60	158.31	0.66	153.60	41.20	0.27
1980	137.00	117.74	0.86	195.30	100.95	0.52	157.60	41.90	0.27

Source: Government of Malawi 1981; Minster Agriculture Ltd. 1982.
*This table is from Ranade 1986.

Table 15
Details of ADMARC's investment and loan portfolio 1972, 1983, and 1984 (thousands of 1980 kwacha)

Item	Value as of 1972	Value as of 1983	1984	Net change (1972-84)
Equity shares (at cost)				
Estate agriculture	72	10,299	14,947	14,875
Estate related industry	242	884	868	626
Nonestate agriculture	95	1,354	1,321	1,226
Nonagriculture	1,475	10,405	9,576	8,101
Subtotal	1,884	22,942	26,712	24,828
Debentures and other secured loans	3,819	2,103	1,591	-2,228
Unsecured loans				
Estate agriculture	508	3,220	3,004	2,496
Estate related industry	835	3,878	2,381	1,546
Press Holdings Ltd.	1,358	25,745	—	1,358
Nonestate agriculture	378	204	138	-240
Nonagriculture	—	1,776	1,514	1,514
Subtotal	3,079	34,823	7,037	3,958
Income notes (at cost)				
Nonagriculture	—	2,127	1,842	1,842
Press Holdings Ltd.	—	—	29,206	29,206
Subtotal	—	2,127	31,048	31,048
Total investment (at cost)	8,782	61,995	66,388	57,606
Less provision for diminution in value of investment	2,037	2,792	2,361	324
Current value of investment	6,745	59,203	64,027	57,282

Source: Christiansen and Kydd 1987; ADMARC's Annual Report 1983 and 1984.
*This table is from Ranade 1986.

Holdings during 1983-84 from 0 to K29.2 million.

In Tanzania's case, at official exchange rates the nominal protection rates as reflected in the ratios of domestic to international prices were considerably better than those for smallholder tobacco producers in Malawi (see Table 16) but worsened in the 1970s. They recovered their 1970 levels in the early 1980s. However, given that the overvaluation of the Tanzanian shilling increased sharply by the end of the 1970s and the early 1980s (see Figure 3), the implicit taxation of agriculture had increased greatly in Tanzania.

It is also important to consider taxation of export crops relative to that of food crops competing in production. In this respect, while in Tanzania the ratios of cotton and tobacco prices to maize moved sharply in favor of maize by the end of the 1970s and early 1980s (see Table 17), they remained relatively stable in Malawi over the 1970s. In Tanzania maize showed even more favorable ratios if parallel market prices are considered, as these prices were between 4 and 6 times as high in the early 1980s as the official prices. In Malawi, on the other hand, the higher incentives for export crops relative to those in Tanzania were eroded partly by the increased cost of purchased inputs (especially fertilizers) as a result of devaluation and removal of fertilizer subsidies (see below).

The situation has been different in Kenya. Not only has the exchange rate not been greatly overvalued (see Figure 3), but in the case of tea and coffee—Kenya's major exports—smallholders have received more than 85 percent of the international prices, net of the costs of handling and processing (see Table 16). Indeed, since the government is bearing the increased cost resulting from devaluations of the previous international loans of KTDA, rather than recovering them through an increased cess on tea, smallholder producers of tea are being subsidized, albeit inadvertently (Lele and Meyers 1986, Chapter II).

Table 16
Ratios of producer prices to international prices for major smallholder crops in East Africa 1970-85

	Kenya		Malawi	Tanzania		
	Coffee	Tea	Tobacco	Tobacco	Cotton[a]	Coffee
1970	0.91		0.30	0.78	0.73	
1971	0.90	0.79	0.33	0.84	0.61	
1972	0.98	0.77	0.29	0.84	0.57	0.57
1973	0.96	0.77	0.27	0.84	0.35	0.43
1974	0.97	0.67	0.20	0.68	0.33	0.43
1975	1.01	0.75	0.20	0.70	0.52	0.36
1976	0.96	0.74	0.23	0.65	0.42	0.30
1977	0.93	0.89	0.22	0.63	0.46	0.35
1978	1.02	0.85	0.30	0.70	0.56	0.39
1979	0.99	0.75	0.24	0.51	0.51	0.29
1980	1.04	0.83	0.23	0.47	0.53	0.41
1981	0.89	0.89	0.20	0.50	0.62	0.53
1982	0.82	0.86	0.18	0.50	0.73	0.52
1983	0.90	0.68	0.31	0.70	0.67	0.47
1984	0.83	0.98	0.28	0.55	0.65	0.47
1985			0.29	0.72	1.03	0.50

[a] Seed cotton producer price converted to lint cotton equivalent using 34 percent conversion ratio.

Sources: International Prices: World Bank 1985; Kenya Coffee and Tea: Economic Surveys; Malawi Tobacco: ADMARC; Tanzania Tobacco and Cotton: MDB; Tanzania Coffee: IBRD (72-77), MDB (78-85).

In all three countries partial price elasticities of supply appear to have been quite high (perhaps between 1 and 3) in the case of major export crops. Kenya's growth of tea and coffee hectarage is at least partly explained by the increase in the international prices of tea and coffee that farmers received.[17]

Table 17
Trends in ratios of export to food crop prices in Kenya, Tanzania, and Malawi

	Kenya		Malawi				Tanzania			
	Coffee/ Maize	Tea/ Maize	Tobacco/ Maize	Coffee/ Maize	Groundnuts/ Maize	Cotton/ Maize	Cotton/ Maize	Tobacco/ Maize	Cashwnuts/ Maize	Coffee/ Maize
1967			6.09	9.79	3.30	2.73				
1968			4.30	10.07	3.07	3.23				
1969			6.83	14.69	3.31	3.38				
1970	27.2		7.84	11.66	3.31	3.28				
1971	19.1	19.5	7.71	8.03	3.03	3.37	4.23	22.31	3.46	
1972	20.0	15.5	7.32	9.90	3.61	2.87	4.58	24.17	3.75	18.75
1973	23.7	15.2	5.97	9.49	3.51	3.43	4.35	21.88	3.46	15.96
1974	21.7	15.5	4.86	10.73	3.59	4.34	3.42	18.91	2.73	13.33
1975	15.3	11.6	6.05	11.19	3.70	3.77	2.73	14.29	1.87	7.00
1976	32.9	13.8	5.40	8.75	3.11	2.25	2.50	9.66	1.29	10.00
1977	44.7	24.2	6.24	8.70	3.39	3.52	2.50	10.90	1.33	18.75
1978	31.7	17.8	7.80	11.28	3.70	3.94	2.71	10.67	1.31	12.81
1979	36.8	17.6	7.88	12.54	5.81	4.19	2.82	10.51	1.92	10.67
1980	27.6	16.7	6.31	0.40	4.60	3.25	3.00	8.95	1.73	11.42
1981	22.6	17.7	6.53	7.58	4.65	3.24	3.20	9.64	2.75	12.36
1982	25.8	18.0	4.03	4.50	2.87	2.45	2.47	7.41	3.09	9.93
1983	22.7	14.2	7.56	9.35	4.64	3.39	2.69	9.96	2.65	8.67
1984	22.0	29.6	6.61	8.33	4.89	3.31	2.73	7.61	2.95	10.40
1985	21.2	18.0	8.11	—	5.57	3.56	2.10	6.30	2.42	6.75

Sources: Kenya: Economic Surveys; Malawi: ADMARC; Tanzania: cotton, tobacco, and cashew nuts: MDB; Coffee: IBRD (72-77), MDB (78-85).

Land Policies

In addition to those for land distribution, other land policies have also been more supportive of productive smallholder farming in Kenya than in Malawi and Tanzania. The amount of land registered in Kenya increased from 1.75 million hectares in 1970 to 6.5 million hectares in 1983, constituting a quarter of the total cultivable land (i.e., in zones I to IV). The share of smallholders in total registered land was 43 percent overall but it was well over 80 percent in Western, Nyanza, Central, and Eastern provinces, the heart of the smallholder production areas in Kenya. In addition to progress in land registration there is also an active land market in Kenya, although due to differential access to institutional credit and ethnic factors, land access is far from equal. (The Bank's credit projects may have facilitated further inequality of land ownership through providing unequal access to credit (Lele and Meyers 1986).)

In Malawi, on the other hand, there has been very little registration of customary land. Land registration has also not been encouraged in Tanzania. Tanzania formally abolished the traditional tribal village authority, replacing it with public ownership of land whereby an individual has no right of ownership or sale. Communal land rights nevertheless obtain (at least informally) in most parts of Tanzania except in parts of Arusha, Kilimanjaro, Moshi, Irringa, and Mbeya where coffee, tea, tobacco, and estate agriculture prevail. The government nationalized many private estates in the 1970s and prevented the development of further private property ownership in land as well as a land market.

Tanzania has, moreover, pursued another land policy which has been detrimental to production. Villagization, enforced without the consent of villagers, led by the middle of 1975 to the settlement of over nine million people or about 60 percent of the population into 6,000 villages, making "Operation Vijiji" the largest settlement effort in African history. Poor citing of villages and their large size increased the distances villagers had to walk to farms.

The introduction of communal cultivation following villagization came at a time of severe drought in 1973-74 and was achieved through minimum acreage laws. By the end of the 1970s agroeconomic evidence had begun to accumulate showing that without a substantial improvement in land resource management, increasing doses of inorganic fertilizer and the introduction of block-farming would be unlikely to counteract or reverse the damage to the environment and the decline in soil fertility being caused by continuous production on fragile soils.

Greater walking distances to production units also increased the cost of fuelwood and caused deforestation and reduction in soil fertility. Deforestation had a major adverse effect on smallholder tobacco and pyrethrum production as obtaining fuelwood for curing these crops had become a more labor-intensive activity. Government also attempted to promote village wood lots with little response from producers. Attempts at collectivization were followed by the local party bosses of TANU and later CCM dictating the amount of acreage that should be allocated to different crops as well as the type of husbandry practices that producers should follow.

Policies Affecting Labor Markets

Labor policies have profound effects on incentives to intensify crop production, especially as export crops tend to be highly labor intensive. There are major differences in the way labor markets have evolved in each country.

Labor markets (including intrarural ones) are quite active in Kenya. A minimum wage provides guidelines for rural earnings but does not hinder the growth of labor markets, especially in the smallholder sector. Hired labor accounts for as much as 50-60 percent of smallholder tea and coffee employment, explained partly by an equivalent extent of urban male migration from smallholder families with females heading up rural households. While out-migration is high from the semiarid parts of Kenya, where there are limited production and income generating possibilities, labor markets are surprisingly tight in areas of high value crops, despite the high growth rates of population and evidence of increases in real rural wages in tea and coffee areas since the early 1970s (World Bank 1983, (Kenya) annex). The wage increase is, of course, partly explained by structural obstacles to the migration and settlement of populations from low potential areas into the highlands, constraints imposed by ethnic and political barriers.

Malawi's minimum wages similarly do not hinder the growth of labor markets. On the contrary, prevailing discriminatory producer pricing, and the land policies mentioned above that have favored the estate sector, have limited income earning opportunities in the smallholder sector. They appear to have created a highly elastic supply of smallholder labor for wage employment in the estate sector, thus facilitating estate growth (Christiansen and Kydd 1987). Wage employment in the estates is estimated to have increased from 30,000 in 1969 to 148,000 in 1978. The total estimated wage employment in Malawi in 1983 was 387,000. This impressive growth still leaves about 60 percent of the total rural labor force living a near subsistence existence. Not surprisingly, unlike in Kenya, the real rural wage rate in Malawi has not increased due to the fact that employment generating possibilities in the smallholder sector, which contain the bulk of the labor force, have been so limited.

In Tanzania, active implementation of a minimum wage, restrictions on interregional movements of labor, encouragement of trade unions in the case of estate agriculture, and the ideologically prompted discouragement of the use of hired labor by small and medium holder export crop producers (to avoid creation of a laboring class) have tended to create artificial labor shortages. This has provided a disincentive for the production of labor-intensive crops such as coffee, tea, sisal, and tobacco. Indeed, crops such as tea and sisal have suffered from acute labor shortages (World Bank 1983 (Tanzania)).[18]

Stability of Agricultural Service Institutions

As mentioned earlier, Kenya and Malawi have provided a relatively more stable institutional environment whereas in Tanzania there has been great instability of institutions. Disruption of marketing and processing arrangements has occurred in Tanzania due to many changes in institutional arrangements. These have involved first the discouragement of private traders in the early 1970s, the 1976 rapid promotion and the subsequent abolition of cooperative unions, the establishment of crops parastatals followed by their abolition in 1983 and replacement with the cooperatives in the early 1980s, and then the creation of marketing boards with the introduction of some liberalization in agricultural marketing in 1985. In addition, Tanzania also decentralized its administration, which greatly reduced the role of the parent technical ministries such as agriculture.

This had an especially adverse effect on agriculture as a result of the transfer of responsibility for planning and implementation, including control of the field staff, from the Ministry of Agriculture to the prime minister's office.

Tanzania's institutional problems have arisen as well from increased public sector control through a multiplicity of institutions. The number of parastatals increased from 64 in 1967 to 373 in 1979-80 and over 1,000 prices were controlled in 1979. In addition to the rapid growth of employment mentioned earlier, the management of parastatals suffered from *ad hoc* political interference and commandeering of public resources for party and political objectives, inadequate financial control, a shortage of working capital, and erosion of assets leading to a virtual lack of agricultural services.

There are indications that in recent years Kenya's institutional responses are also becoming politically prompted and thus more unstable and centrally directed. Like Tanzania, Kenya split the ministries of agriculture and livestock in 1980 and then reunited them, and recently shifted the responsibility for grain marketing from KFA (a cooperative of large European and African producers) to the Kenya Grain Grower's Association.[19] This step was taken by Tanzania in the mid-1970s when it reduced the role of the Tanzanian Farmer's Association (TFA), consisting of large farmers in input marketing, by declaring it a "private" institution.

Agricultural Research

Kenya and Malawi both have excellent agricultural research systems for their major export crops financed through a cess on the crops, i.e., tea, sugar, and tobacco in the case of Malawi, and coffee and tea in the case of Kenya. One indicator of the productivity of research systems is the specific innovations they generate. Clonal teas were developed and issued by the Tea Research Foundation in the late 1960s in Kenya and the Coffee Research Foundation has recently issued a new CBD resistant variety of coffee, Ruiri II. The research systems for food crops and those export crops in which the three countries are marginal exporters or importers, e.g., sugar and cotton, have, on the other hand, suffered from uncertain general budgetary support, too rapid a pace of indigenization of research management, frequent staff turnover, lack of clear research priorities, too many research stations, and fragmented donor support for various low priority activities (Jha 1986; Anthony 1986).

Although very weak on adaptive on-farm research, Kenya's hybrid maize program has nevertheless been quite successful in developing an effective improved seed distribution program and facilitating rapid adoption of hybrid or improved maize. Sixty percent of area under maize in Kenya was under improved maize at the end of the 1960s. This cannot be said for the hybrid maize research program in Malawi.

Malawi's national research system was reorganized in 1986 under the auspices of the National Agricultural Research Project funded by the Bank. A similar reorganization is under active consideration in Kenya under the umbrella of a World Bank-funded project involving several donors. Tanzania's research system has been the weakest, even for export crops such as tea and coffee. One reason is that Tanzania suffered from the breakup of the East African Community upon which it had depended for research input on export crops when subresearch stations were located only in Tanzania. Cotton research suffered from the sudden withdrawal of the British Cotton Research Corporation (CRC) in 1975 (Howell 1988).

Tea and tobacco research has similarly been weak in Tanzania due to the shortage of qualified personnel, severe recurrent budgetary shortages, lack of foreign exchange for importation of critical supplies, and the breakdown of the transport system, which has greatly inhibited supervision of field trials.

The fragmentation caused by donors is equally prevalent. In 1981, a regional research station in Mbeya supported by the Nordics had a budget larger than the entire national agricultural budget. Unfortunately, although the World Bank and USAID took an early lead in the reorganization of the research system in 1979, due to internal political difficulties Tanzania never made the basic political decisions necessary to act on this effort. The current stagnant or declining crop production and deteriorating quality of marketed produce is at least partly a result of the poor quality of Tanzanian research.

Fertilizer Policies

Increased use of fertilizer along with improved planting material is frequently an important source of growth in factor productivity. Fertilizer supply and pricing policies are therefore of considerable interest in understanding the sources of production and productivity increases. The profitability of fertilizer use is determined by the relative prices of fertilizers and crops and by the nature of the production function as reflected in input/output coefficients. Fertilizer subsidies often have been considered an acceptable way of promoting fertilizer use in the crucial learning period of early adoption when risks are high.

The historical trends in the nutrient price/maize price ratios faced by smallholders in Malawi, Kenya, and Tanzania are compared in Table 18; ratios for a few selected Indian states are also presented in that table for illustrative purposes. The most striking aspect of Table 18 relates to the contrast between the ratios for Malawi on the one hand, and those for Kenya and Tanzania on the other. Not only are the ratios for Malawi (in the 9-10 range) generally much larger than those for Kenya (4-5 range), but they are also characterized by a substantial increase over time.[20] These differences in ratios are all the more striking in light of the fact that fertilizer response coefficients in the areas most favorable for maize production in Kenya are about 30 percent higher than the best responses in Malawi. Parenthetically, it is also interesting to note that the ratios for the Indian states are similar to those for Kenya and Tanzania.

Table 19 compares the maize and nutrient prices used to compute the above price ratios for the three countries.[21] In most years covered by the data, the maize prices prevailing in Kenya (more closely approximating the international prices) were substantially higher than those in Malawi at the official exchange rates; the exceptions were 1973-74, 1979-80, and 1981-82 when the Kenyan prices were only somewhat higher.

At the official dollar exchange rate, the maize prices in Tanzania also exceeded those in Malawi by a considerable margin. The Tanzanian maize prices became higher than even the Kenyan ones in 1981-82 and 1982-83. However, because of Tanzania's currency overvaluation, the dollar price of Tanzanian maize would be lower at a real effective exchange rate.

Turning to the nutrient price differentials, once again at official exchange rates, Malawian smallholders come out at

Table 18
Nutrient price/maize price ratios for Malawian, Kenyan, and Tanzanian smallholders, and for selected Indian States[a]

	Malawi[b] (SA/CAN)	Kenya[c] (DAP)	Tanzania[d] (urea+TSP)	Selected India States (urea)[e] Andhra Pradesh	Madhya Pradesh	Rajasthan	Uttar Pradesh
1972-73	7.5	—					
1973-74	5.9	6.2					
1974-75	14.9	3.4					
1975-76	9.5	5.3					
1976-77	9.6	5.3					
1977-78	9.7	4.2					
1978-79	10.1	4.5	4.5				
1979-80	7.9	5.5	4.5	3.8	3.3	3.0	3.3
1980-81	9.4	5.9	5.2	4.8	4.5	3.7	4.4
1981-82	7.7	5.0	3.8	5.1	4.7	3.9	—
1982-83	9.4	4.2	3.3	4.7	4.3	4.1	—
1983-84	9.0	5.0	—	—	—	—	—
1984-85	9.8	—	—	—	—	—	—
1985-86	11.9	—	—	—	—	—	—

[a] The product prices of S/A (21-0-0), CAN (26-0-0), DAP (18-46-0), Urea (46-0-0), and TSP (0-46-0) are transformed to reflect the nutrient contents of these fertilizer types, i.e., the ratios are computed as:

$$\frac{\text{Price of 1 kilogram of nutrient}}{\text{Price of 1 kilogram of maize}}$$

[b] Based on the smallholder price of S/A for 1972-73 to 1982-83 and of CAN for 1983-84 to 1985-86, and the ADMARC purchase price of maize.
[c] Based on the f.o.r. Nakuru price of DAP and the official price of maize.
[d] Based on the average price of urea (unsubsidized) and TSP (subsidized) and the officially announced producer price of maize.
[e] The ratios are based on the official Government of India price of urea, and the farm harvest price of maize in individual states. The official price of urea is inflated by 15 percent to account for distribution costs that may be passed on to farmers.
Source: World Bank, 1983; Kirchner and Kandoole, "Effects of Fertilizer Subsidy Removal in Malawi," 1986; Indian Fertilizer Association, "Fertilizer Statistics"; D.S. Tyagi, Chairman of Indian Agricultural Prices Commission.

Table 19: Comparative maize and nutrient prices for smallholders in Malawi, Kenya, and Tanzania[a]

	Maize[b] U.S.[d] Gulf Ports (f.o.b.)	Malawi	Kenya (US$ per m.t.)	Tanzania	Nutrients[c] Malawi	Kenya (US$ per m.t. of nutrient)	Tanzania
1972-73	98	41	—	—	307	246	—
1973-74	132	52	56	—	309	349	—
1974-75	119	51	101	—	759	337	—
1975-76	112	61	108	—	582	567	—
1976-77	95	60	107	—	577	564	—
1977-78	101	62	112	—	604	466	—
1978-79	115	64	120	115	648	542	517
1979-80	126	83	99	122	655	548	548
1980-81	131	80	140	122	750	825	632
1981-82	115	122	140	180	944	701	683
1982-83	136	97	138	183	912	574	594
1983-84	136	92	127	—	829	637	—
1984-85	111	78	—	—	762	—	—
1985-86	103	73	—	—	870	—	—

[a] The prices have been converted from local currencies to US$ using the official exchange rates as published by the IMF.
[b] ADMARC price of maize for Malawi, and the official prices for Kenya and Tanzania.
[c] Based on the smallholder price of S/A for 1972-73 to 1982-83 and of CAN for 1983-84 to 1985-86 in the case of Malawi; the f.o.r. price of DAP in the case of Kenya; and the average price of urea (unsubsidized) and TSP (subsidized) in the case of Tanzania.
[d] U.S. No. 2 yellow. 1972-73 refers to 1972, etc.
Source: International Monetary Fund, *International Financial Statistics Yearbook*, 1986; World Bank 1983; World Bank 1982.

a disadvantage relative to their Kenyan and Tanzanian counterparts. In 1973-74, the nutrient prices were lower in Malawi than in Kenya. But since 1974-75, when they increased two and one-half times over the 1973-74 level, the nutrient prices in Malawi have been higher than those in Kenya; this is despite the fertilizer subsidies in Malawi throughout the period in question, whereas fertilizer subsidies in Kenya ended in 1976 (Lele, Christiansen, and Kadiresan 1989).

The main conclusion arising from this analysis is that the nutrient price/maize price ratios for Malawi vary from those for Kenya and Tanzania because Malawian smallholders pay higher nutrient prices and receive less for their maize from ADMARC. These prices appear to reflect differences between Malawi and Kenya in internal transportation costs, differences that in turn reflect the political situation in southern Africa (which has prompted the closing of the Beira and Ncala routes)—a variable that is beyond the control of small farmers in Malawi.

Fertilizer prices in Malawi need to be considered in light of the fact that Malawian smallholders have few production alternatives to growing maize. In Kenya more than two-thirds of the fertilizer used by smallholders is accounted for by export crops (especially tea and sugar), which have very high output/nutrient price ratios; similarly, in Tanzania export crops account for 50 percent of the total smallholder use of fertilizer. In Malawi, on the other hand, nearly 85 percent of the fertilizer used by smallholders is on maize.

It is difficult to estimate the growth of fertilizer use on a comparative basis across countries as data on fertilizer use by crop is not readily available except from occasional surveys. Also, the composition of nutrients has changed over time and thus data on fertilizer imports and supply from various sources present conflicting figures. Moreover, fertilizer is often subsidized and directed toward use on certain crops, areas or types of farms by fiat, but alternative more profitable uses lead to its diversion to other areas; the extent of such diversion is usually not known. For instance, estimates of fertilizer leakages to the estate sector in Malawi from subsidized supplies for smallholders vary from 10-25 percent. It is also not clear how much of the fertilizer in Tanzania provided by crop parastatals for export crops is diverted for use on food crops. Bearing these measurement problems in mind, the authors' best judgment (based on field investigations) is that smallholder use of nutrients on maize in Kenya is now plausibly only half as much as in Malawi, but is similar to that in Tanzania. This may be the result of both inadequate foreign exchange allocations in Kenya for fertilizer imports as well as fertilizer's greater profitability in coffee and tea production.

Tanzania's fertilizer use was considerably higher than Malawi's in the early 1970s. However, it has declined at the rate of 0.3 percent annually since then. On the other hand, fertilizer use has increased annually by almost 6 percent in Kenya and by over 8 percent in Malawi.

The rather low rate of growth of maize and other smallholder crop production in Malawi contrasts strikingly with the considerable growth in smallholder use of fertilizer. This contrast raises important questions concerning the reliability of estimated fertilizer response coefficients, maize crop production figures, estimates of fertilizer use in the smallholder sector and, more generally, the factors affecting fertilizer use both within a single country and across countries. It seems clear that unless a substantial investment in primary data collection is made to investigate these various important issues, few insights are likely to result concerning the factors affecting fertilizer use, and the impact of policies on its use, from simply reshuffling the existing data.

In spite of the uncertainties enumerated above, in the case of Malawi it can be argued that higher fertilizer prices will likely result in a reduction in fertilizer consumption, in substitution of land and labor for fertilizers in the production of subsistence crops, and in setting back progress toward achieving the Bank-supported objective of crop diversification into higher value export crops. Though changing crop licensing and producer pricing policies in Malawi will increase incentives for use of fertilizer on high value export crops, fertilizer subsidies nevertheless need to be considered on a selective basis. For example, there is no reason why the cost of fertilizer distribution in Malawi should not be subsidized rather than its price. Thus, to be fully effective, the principle of subsidy abolition needs to be applied selectively, involving careful analysis of its possible impact *before* rather than after policy prescriptions for the abolition of subsidies are made.

Concluding Comment

This section of the paper (Part I) has reviewed the contributions of macroeconomic, sectoral, and domestic agricultural policies to agricultural development in each of the three countries. The ways in which individual policies as well as various combinations of policies have influenced the nature and structure of agricultural growth in each country have been indicated.

The policies reviewed in this section of the paper have provided the context in which World Bank policy advice and lending have operated. They have influenced, and have also been influenced by, the Bank's activities in each country. Part II reviews the results of the Bank's policy advice and lending experience in light of the policy environment in each country outlined in Part I.

Part II
Activities of the World Bank in Kenya, Malawi, and Tanzania

Part I of this paper provided a comparative overview of the macroeconomic and sectoral policies of Kenya, Malawi, and Tanzania with a particular focus on policies and performance in their agricultural sectors. The policy environments reviewed in Part I have provided the context in which World Bank agricultural operations have functioned in each country. They have played a critical role in determining the extent to which Bank lending to agriculture has or has not been successful, and they have in turn also been influenced by Bank economic and sector analysis, policy advice, and lending. A discussion of this interaction between country policy environments and Bank analysis, advice, and lending follows.

Part II first examines World Bank economic and sector analysis and advice in each country. It then reviews the pattern and content of project lending to agriculture. Finally, it examines the Bank's experience with structural and sectoral lending. In treating this threefold involvement of the Bank in each country, an attempt is made to show the relationship (or lack thereof) between economic and sectoral analysis and the content of projects financed. The results of the policy advice and lending provided to each recipient country are also examined. The paper ends with some brief conclusions that emerge from this review of the Bank's experience in the three East African countries.

Bank Economic and Sectoral Analysis and Policy Advice

The Bank's economic advice to Kenya, Malawi, and Tanzania has been provided either in the context of economic and sectoral analysis or the financing of investments. This first section summarizes the Bank's economic assessments of each of the three countries and indicates how these assessments have changed over time. The following section examines the lending programs in each and relates this to general policy advice provided by the Bank.

Bank economic analysis has consisted of basic economic reports, annual economic memoranda, and agricultural sector reports through which periodic assessments have been made of the countries' economic (or sectoral) performances, policies, and potentials. Areas have been identified in which policy (and, in the more recent period, also institutional) reforms have been considered necessary. These reports have also been a vehicle for identifying a lending program for the Bank. Major basic economic reports were written for Kenya and Tanzania between 1973 and 1977 as well as agricultural sector reports for all three countries. In the early 1980s another basic economic report was produced for Kenya and an agricultural sector report was written for each of the countries. In between (and subsequently) there have been periodic updating economic memoranda.

A considerable amount of informal sector work has also been done on specific issues in Kenya such as agricultural credit, land policy, input supply, and grain marketing, and in Malawi on food security and land policy. As policy reform has become more important, the resources devoted to issue-specific informal sector work, e.g., budget rationalization or parastatal finances, have greatly increased relative to the more comprehensive basic economic report work.

In general, however, the Bank's reports have tended to suffer from lack of microeconomic analysis of some of the most fundamental processes of development. It will be demonstrated in this part of the paper that it is the lack of adequate links between macroeconomic, sectoral analysis, and micro-level processes influencing the decisions of individual economic actors that has often limited the effectiveness of the Bank's policy advice and lending program. This problem continues despite the greater degree of specificity of topics being examined in recent years and the increased knowledge accumulated from concentrating analysis on individual subsectors, e.g., the attention given to parastatals.

Another striking feature of the Bank's economic work has been the lack of agricultural economics input (especially micro but also sectoral) in the preparation of many of its economic reports. This reflects the lack of an adequate appreciation of the need for both in-depth knowledge of the sector and the need to link that knowledge to macroeconomic processes. The Basic Economic Reports for Kenya (1974) and Tanzania (1977) had annexes on agriculture and each drew on earlier agricultural sector reports (but contradicted some of the major conclusions in those reports). The 1983 Basic Economic Report for Kenya included some excellent analysis on agriculture in the annexes of the report. Unfortunately, its significance for major economic policies was not explored in the main body of the report. In fact, the report contradicted several of the conclusions contained in the annexes (Lele and Meyers 1986, Chapter I). Given the overwhelming importance of agriculture in these economies, the omission in this work of a central treatment of the process of agricultural development and its relationship to overall economic development is quite striking.

The contradictory conclusions on specific issues contained in different Bank reports that were produced at similar times (and even found in the same report, as mentioned above) have sometimes made it difficult to establish precisely the Bank's positions on a given issue. This is also a problem for the recipient governments, especially as the reasons for the differences in conclusions are not usually contained in the reports. They appear to result more from the differing perspectives of the individuals involved rather than necessarily being based on thorough analysis of the situation, including explicit comparisons of conflicting viewpoints. This problem is compounded by the fact that there is a lack of both an institutional memory and therefore a historical treatment of

the reasons for changes in the conclusions reached.

In light of the above, it is perhaps not surprising that there was only a weak connection between the spirit of the Bank's individual economic and sector reports and the way the Bank's lending program evolved in the 1970s. Nevertheless, it is possible to discern some central tendencies. These will be focused on first by identifying the content of economic and sectoral judgments made in each country.

It is important to note at the outset the great diversity of issues treated in the Bank's work on the three countries (despite the many similarities between them) in terms of possible types of growth and how these might be exploited through a systematic agricultural strategy. This diversity appears to be the result of a lack of a common analytical framework, even an informal one, for identifying constraints to and potentials for growth. It also reflects a minimally data-based orientation to agricultural sector and economic work, especially with respect to the importance of viewing the experience of any given country from a broader cross country perspective. Consequently, personalities rather than a framework and facts have frequently unduly influenced the scope and conclusions of the Bank's analysis. These points are documented by reporting below the main themes of the Bank's economic and sector work in each country and also by comparing these themes across countries, in light of where growth occurred or could occur (as discussed earlier in Part I). The last section will examine the size, pattern, and the impact of the Bank's lending program and pick up again the theme of the Bank's policy advice in connection with lending.

While reports beginning from the period in the 1960s, when the Bank first commenced its operations in each of the three countries, have been reviewed, the period focused on is 1970 to 1986. This is because the bulk of the Bank's lending growth in East Africa, and its heightened concern with development, took place in the 1970s after Mr. McNamara's 1973 Nairobi speech.

The Bank deserves very high marks in its economic (especially basic and sector) reports for focusing attention on the central importance of the smallholder agricultural sector in the overall economic development of each of the three countries. It is in the translation of this concern into advice and investments that problems have occurred. This is in part a result of the aforementioned poor link between the Bank's macroeconomic and agricultural sector work. Key general policy concerns through which this problem is illustrated are:

1. The Bank's treatment of equity issues, especially its approach to reconciliation of equity and growth in its policy analysis and project financing;
2. The Bank's treatment of international market prospects and domestic pricing issues in its economic and lending work;
3. The importance attached by the Bank to resource transfers vis-a-vis that attached to long-term institutional and manpower development in order to increase the capacities of governments to utilize resources more efficiently; and
4. The Bank's treatment of policy reform in the 1980s and the relationship of this treatment to issues idencified by the Bank as being critical policy concerns in earlier periods.

Policy Advice to Kenya

Changes Over Time in the Overall Policy Context

It was established in Part I that there are major differences in the agricultural policies and performance of Kenya, Tanzania, and Malawi despite considerable commonality in the types of crops they grow. These differences partly result from the fact that Kenya's economy has not suffered from major (domestically induced) macroeconomic distortions like that of Tanzania. Most of Kenya's institutions have been more stable and effective than Tanzania's. Kenya has also not evidenced the acute structural problems of Malawi. The primary focus of the Bank's attention in Kenya has therefore been on sectoral issues (although it will be argued that both structural and institutional issues have nonetheless figured in the Bank's economic analysis to a greater extent in Kenya than in Malawi and Tanzania, perhaps due to the greater willingness of the Kenyan government to examine these issues in the 1970s).

Given Kenya's relatively more conducive policy and institutional environment, it is reasonable to expect that the Bank's financial assistance has been more effective in Kenya than in the other two countries. This has not been the case, and this paper argues that the reasons lie more in the Bank's project selection and approval process, which succumbed to political pressures from the Kenyan government and pressure from the Bank's top management to expand lending to agriculture, rather than in Kenya's policy weaknesses. In Tanzania and Malawi, on the other hand, the important questions that will be explored focus less on the effectiveness of the Bank's assistance—which has been generally recognized as low—than on when the Bank detected major policy, institutional, and structural weaknesses and how it interacted with the two governments to correct them, as well as how quickly this learning was reflected in the level and composition of lending, especially in light of the way the governments reacted to policy advice.

This paper will argue that the Bank's 1974 Kenya Economic Report was more accurate in identifying constraints to Kenya's development, and in integrating its analysis of agriculture's fundamental role in Kenya's economic development with the policies, institutions, and investment strategy needed for the type of overall development the Bank was supporting, than was the case either in Tanzania or Malawi. In Kenya there were stronger conceptual links between the Bank's sectoral and macroeconomic strategy than in the other two countries. In spite of this, some of the most important prescriptions that emerged from the Bank's economic analysis in Kenya are questionable in terms of their assessment of growth potential. Also the connection between the Bank's economic analysis and its agricultural portfolio has been weak. The projects financed in the 1970s were more a result of lending pressures within the Bank and political pressures emanating from Kenya than they were a product of Bank economic analysis. They were also influenced by the stance the Bank took at the time (worldwide) toward lending for expansion of tea and coffee. The cumulative result of these factors was a large agricultural portfolio which, with the exception of a handful of projects (credit for smallholder dairying in addition to the tea and coffee projects), contributed little to Kenya's agricultural development. Paradoxically, precisely because of the lack of a close connection between macropolicy advice and lending, the tea and coffee projects made a useful contribution.

Kenya's macroeconomic difficulties in the second half of the 1970s were a blessing in disguise because they led to the closing down of a number of Bank-funded projects, which Kenya was clearly better-off without. Attempts by the Bank to promote macro and sectoral policy reform in Kenya were, however, less successful than they were in Malawi, partly because its weak project portfolio had been accompanied by an attitude in the Bank that most of the problems with the projects in Kenya were almost exclusively the result of the policies and weaknesses of the Kenyan government. This strained relationships with the Kenyans at a time when Kenya was in economic difficulty. Also the timing for policy changes urged by the Bank, such as grain marketing liberalization, unfortunately turned out to be inopportune as this coincided with the emergence of a severe drought, a situation which made the government less willing to incur any risks that might be entailed by policy change.

Budget rationalization is one major area in the 1980s in which a Bank sponsored lead in the agricultural sector appears to have had genuine impact, as well as broader payoffs in other sectors. However, given the lack of any major macro or structural weaknesses in Kenya (in which the Bank had clearly demonstrated potential to be of assistance), and given the government's lukewarm reaction to such proposals as grain marketing liberalization, the Bank appears to have returned to a strategy for agricultural development that focuses on agricultural research and extension, as well as on institutional issues such as parastatal reform—problems that were at the heart of the project difficulties experienced in the 1970s.

Import support funds have provided greater leverage for these reforms in the 1980s than did the vehicle of project lending in the 1970s. However, the legacy of the Bank's long-term involvement in Kenyan agriculture also necessitates that it have a more precise diagnosis of the reasons for past failures. This presents a mixed story. To the extent that the lessons of past project experience can serve as a guide, the Bank is on the right track. On the other hand, to the extent that future success depends on doing things differently, including radically altering Bank procedures, it is less clear that the Bank will be able to achieve its objectives in Kenya either alone or in collaboration with other donors.

The 1974 Basic Economic Report

While the Bank's operations in Kenya began in 1953 when the first economic mission was mounted, and two agricultural projects (focusing on resettlement) were financed as early as the 1960s, the 1974 Basic Economic Report (BER) was clearly a watershed in the Bank's relationship with Kenya. It followed McNamara's famous 1973 Nairobi speech and was the first comprehensive report prepared after Kenya's initial decade of independence. The time was considered right for assessing the economic performance of the first decade, and for designing a strategy for the second. Reflecting the high esteem and trust in which the government held the Bank, it requested the Bank's input in the Third Plan (1974-78), then in draft form. Finally, the BER directly followed the ILO/UNDP "Report on Employment, Incomes and Equality in Kenya." The ILO report's emphasis on the issues of unemployment and poverty had been reinforced by McNamara's Nairobi speech. It is therefore not surprising that these issues took center stage in the BER, which emphasized development of smallholder agriculture as fundamental to Kenya's overall development, a position the Bank has consistently adhered to over time.

The BER concluded that while Kenya's performance up to 1973 had been remarkable in expanding employment and alleviating the poverty of the lowest income groups, the Kenyan economy had reached a turning point. The task of mobilizing resources and using them efficiently was likely to become increasingly complex over the next decade. A fast pace of development might be harder to sustain, and the problems of widespread poverty and growing unemployment could worsen significantly, without a pronounced shift in the nature of the development process (World Bank Summary and Conclusions, paras 2 and 3).

Stressing the emergence of constraints on the resources available for development and the need to enforce a "... harsher discipline on the economic choices facing Kenya," the report called for a change in the pattern of growth, so as to increase employment intensity, and for a change in the process of growth, so as to increase the efficiency of resource use. This meant allocating a larger proportion of investment, foreign exchange, and skilled manpower to directly productive sectors such as agriculture, and to rural roads and low-cost housing. The report recommended that the average annual growth rate of agriculture should be raised from the 6.5 percent assumed in the Third Plan to 7.5 percent.[22]

The BER also saw the strategies for agriculture and industry as highly complementary. Reform of the manufacturing sector involved eliminating inefficient firms and reducing the extent to which protection allowed industry to operate at the expense of agriculture and other sectors. A switch of emphasis from import substitution to resource-based export industries was recommended, a recommendation that this paper will document was not satisfactorily reflected in the Bank's lending program in the sugar and the cotton sectors. Implementing a dynamic agricultural strategy posed critical problems. The report recognized that the overriding constraint on the development of an integrated export-oriented, agro-industrial sector was the "*absorptive capacity of the agricultural sector*" (emphasis added). It observed that the heart of the problem was to "increase the sector planning capacity, and particularly the capacity to design large-scale productive programs for the mass of small-scale farmers, in the Ministry of Agriculture" (World Bank 1974, para 5.11).

While recommending improvements in the efficiency of project design and appraisal, the report stressed the need to avoid complex social costing in favor of simple techniques, since the former could be "spuriously used to justify unsound projects and thus to mislead the policymaker." In any case, shadow pricing and other social costing methodology were not to be regarded as substitutes for bringing actual prices into line with the real economic scarcity value of domestic and foreign resources" (World Bank 1974, para 5.30).[23] The report also stressed the importance of improving incentives to agriculture by reducing taxes, correcting interest rates, and aligning domestic and world market prices. The public sector was expected to become more efficient by using better project design and appraisal methods.

Evaluation of the BER. The BER presented an excellent overall diagnosis of Kenya's economy and recommended an appropriate macroeconomic strategy whose many components interlocked, especially in terms of the linkages between agriculture and the rest of the economy. With hindsight, however, the report's recommendations for the

crucial agricultural sector now seem flawed in several respects. First, the idea that the critical shortage of agricultural policy planning and implementing capacity could be remedied by simply shifting macroplanners to work on agriculture was naive, and underrated the importance of technical expertise for managing a modernizing agricultural sector. Second, the major increases in public investment in agriculture it called for were to be achieved primarily through large-scale Integrated Area Projects rather than through a phased approach aimed at improving Kenya's planning and implementing capacity, an approach that was recommended in the Bank's Tanzanian Agricultural Sector Report in 1974 (see below) and also in a study commissioned by the Bank at around the same time, based on an analysis of the experience of 20 agricultural and rural development projects (Lele 1975).

The study of 20 projects pointed out that integrated projects had been ineffective due to the demands they made on the limited planning and implementing capacity of recipient governments. Instead, it recommended a sequential approach similar to that recommended in the Bank's 1974 Tanzanian Sector Report. A policy of financing Integrated Rural Development projects was simultaneously adopted by the Bank following Mr. McNamara's Nairobi speech. Also, informal but well understood guidelines were instituted that required 25 percent of the Bank's resources be committed to agriculture and rural development, resulting in a substantial growth of commitments to this sector in all three countries.

Third, new technologies were assumed to be available. This technological optimism had not been shared by the 1973 Agricultural Sector Report (ASR), which provided the basis for the BER's strategy. Apart from maize, for which hybrids had been successfully introduced in high potential areas of assured rainfall, the 1973 ASR had not been particularly sanguine about the prospects for new technologies—either for maize (in other areas) or for several other crops. The Bank's subsequent economic and project work in Kenya has continued to be ambivalent on this important issue due to lack of systematic, extensive data-based analysis of existing technologies within particular crops and areas.[24] While some limited farm management data certainly show high fertilizer response coefficients in selected assured rainfall areas, as in the case of the IADP earlier, the T and V project has involved expansion of geographical coverage to 30 districts (with a focus on the high potential portions of these districts). This problem of expansion of projects to additional areas, without clear evidence that technologies appropriate for these areas are available, has plagued Bank projects everywhere in Africa.

The ASR on which the BER was based had weaknesses of its own. While the projects it proposed constituted the basis of the Bank's lending to Kenya, none were envisaged for the development of technical crop packages, or for establishing a national agricultural research capacity (although such an effort had been mounted a decade earlier in Asia to address some of the same problems—the IADP in India had not had any major impact until the new technologies became available for wheat and rice). Moreover, the investments proposed in the ASR were not prioritized even though the ASR acknowledged the government's limited planning and implementing capacity and the uncertain availability of technical packages. Finally, on its own admission, the ASR's analytical foundations were shaky. For example, some of its recommendations were rather vague, "Some type of integrated area based program is the best approach.... Such programs form the backbone of the development effort in many countries, as for example, the Lilongwe Project in Malawi and the package programs in Ethiopia."

Both *pricing and marketing* as well as *land tenure* issues, which were later to become major bones of contention between the government and the Bank, were addressed early on in the Bank's economic and sector work. With respect to *grain marketing*, the 1974 BER recommended loosening of direct controls and opening up of opportunities for more private initiative by limiting "...parastatal activity in grain markets to implementing government price and stock management programs." On *land tenure*, it urged the government to encourage and facilitate the subdivision of large farms into smallholdings, giving land titles to those who had *de facto* ownership. It also urged the development of a competitive land market.

One additional important policy position at this time concerned the rather pessimistic view the Bank took of export market prospects for tea and coffee. It then advised and has continued to advise the government to diversify out of these two crops. It also adopted a policy in 1972 of not financing expansion of tea (and coffee) production except in situations where countries had no other options. It was shown earlier that Kenya's good agricultural performance in terms of reconciling agricultural growth with equity is explained mainly by its success in shifting to these two high value crops, actions which Kenya took in contradiction to the Bank's advice. Also, the effects of the Bank's lending with respect to this issue have ended up being inconsistent with the intent of its formal policy. Because the issue of expansion of tea and coffee production is currently of major importance for future growth in Kenyan agriculture, it is taken up below in the context of the Bank's more recent analysis and advice to Kenya.

Economic Policy Assessment in Subsequent Reports

Much of the policy dialogue on agriculture between 1974 and 1979 took place through project lending, which grew rapidly in line with the emphasis placed upon agriculture and rural development in McNamara's speech and the 1974 BER. (The growth of the lending portfolio and its generally poor performance is discussed later.) Until the early 1980s, annual economic memoranda served more to report on new economic developments than to spell out a strategy. For example, they commented intermittently on the extent to which the prices of particular agricultural commodities—maize, milk, or beef—had been out of line with border prices from year to year, noted the problem of maize surpluses (and deficits), and endorsed various government commissions' conclusions that the maize board should be the buyer and seller of last resort.

The Bank's treatment of the effects of weather, which caused great production and marketed surplus instability in Kenya in the 1970s, was, however, relatively casual and was in no way commensurate with the importance the government attached to food security. The reports tended to criticize the government for the fact that realized international prices had not been in line with those formulated by the government (formulated nearly 18 months prior to the time they were to take effect), even though prices projected by the Bank also often did not materialize. Bank investments based on price projections, and the govern-

ment's response to Bank advice on prices for commodities in which Bank investments were involved, were later to be major bones of contention, e.g., in the case of sugar (these issues are discussed in the section on lending experience).

The economic memoranda also commented on the lack of cost of production data (which hampered the government's ability to formulate agricultural pricing policies), the weak analytical capacity within the Ministry of Agriculture for policy formulation, and the need to draw more heavily on Kenyan professionals from IDS and the University of Nairobi for more basic analysis of the sector. These critical issues of creating analytical capacity in the government or of tapping the capacity that already exists in the University and the IDS have, however, not received priority in the Bank's program. The Bank's philosophy of capacity building contrasts with that of USAID, which has in many countries sought to strengthen indigenous analytical capacity by supporting research and analysis carried out by nationals. Also in contrast to the practices of USAID field offices, the Bank uses few financial resources to finance local consultant input in economic and sector work (Lele and Goldsmith 1989). Instead, much of the Bank's economic work is done in Africa using expatriate consultants from Western universities.

The coffee boom in 1977 and 1978 and the second oil shock in 1979 ushered in a turbulent period for Kenya's economy. Another BER was begun in 1978, but was not completed until 1982; it incorporated a review of macroeconomic developments and an evaluation of the policy reforms undertaken by the government.

By 1979 accumulating implementation difficulties had led to the classification of several loans and credits approved in the 1974-79 period as "problem projects" and the ensuing macroeconomic policy dialogue increasingly emphasized agricultural sector issues. Reflecting these concerns, the 1981 Country Economic Memorandum contained a separate annex on agriculture, and the 1982 Basic Economic Report contained substantial annexes on agriculture and poverty. The 1982 BER argued that poverty in Kenya was largely rural, and explored the relationship of both poverty and agricultural development to growth. A separate agricultural sector report was issued in draft form in 1983 and in final form in 1986. The latter was preceded by a series of subsectoral reports on grain pricing and marketing, land and credit policy, and input use.

Strategy Recommended by the 1982 BER

By 1982, the Bank had a policy mandate to consider structural adjustment loans. It is therefore not surprising that the 1982 BER stressed that Kenya's problems were not exclusively caused by external developments and identified several fundamental structural problems, including the slowing of agricultural growth, the diminishing scope for import substitution, and the stagnation of nontraditional exports.

It ascribed the slowdown in agricultural growth to (1) the reduced scope for expansion of agricultural production on new or underutilized high potential land (a problem not fully recognized in the 1973 BER, which had projected an acceleration of the agricultural growth rate to 7.5 percent a year); (2) the lack of readily available technical packages for farmers in the semiarid zones; (3) the limited opportunities for switching to higher value crops such as tea and coffee; (4) government intervention in agricultural pricing and marketing; (5) severe problems in the management of vital programs and projects; and (6) the pursuit of import substitution policies that favored industry at the expense of agriculture.

Recognizing that between half and three-fourths of all additions to the labor force would have to find agricultural jobs, the report concluded that "*the major constraints to achieving this are economic and policy related rather than technical and agronomic*" (World Bank 1982, p. xvii). The priority areas for policy reform were identified as being liberalization of the grain market and the issue of land titling, both of which were later to become conditions for structural adjustment lending.

The 1982 BER also spelled out a number of ways to raise employment and output. It left unclear, however, to what extent Kenya's growth had been constrained by weak policies (as stated in the main body of the report), or limited by a whole range of technical factors (as suggested in the annex on agriculture). The report also gave little indication of an appropriate time frame for dealing with the policy and technical problems outlined in the annex, thus leaving undefined the issue of optimum sequencing and phasing of proposed policy and technological reforms.

A comparison between the main report and the annex on agriculture aptly illustrates the conflict between principles and practice in the Kenyan context. The main text's recommendations for revitalizing the agricultural sector included "expanding the supply of agricultural land through irrigation, drainage, clearing of forest or dryland farming, switching cropping patterns to high value, high labor input crops such as tea and coffee, or intensifying land use through better farming practices and land redistribution" (World Bank 1982, p. xvii).

The annex, however, spelled out some of the formidable technical constraints involved in these and other proposed sources of additional output and employment. First, it expressed "skepticism about *irrigation* due to its high cost" (by then the $25,000 per hectare costs of the Bank-financed Bura had made irrigation questionable) and the "technical and economic problems in some irrigation schemes" (World Bank 1982, p. 348). Second, on the drainage of *valley bottoms*, which the main report recommended as being cheaper than irrigation, the annex pointed out the externalities of drainage development, the need for a strong government role in its organization, and the difficulties of apportioning the costs and benefits in view of the "little experience with drainage projects in Kenya" (World Bank 1982, p. 350). The latter concern was an implicit admission that establishing government capacity for planning and undertaking valley bottoms development would entail a long-term effort, though this was not explicitly acknowledged in the report.

Third, on the *clearing of forest for crop development*, especially for the expansion of tea, the annex noted "its highly controversial nature because of its unknown ecological effects" (World Bank 1982, p. 350). In the specific case of tea, the main report said that the potential for tea expansion was limited. (The reasons were not spelled out but presumably centered on the Bank's long-standing concern with international market prospects.) The annex observed that "if, as claimed, 400,000 hectares of high potential (forest) land could be safely cleared, it would provide 800,000 jobs and KL-200,000 million of gross output. In practice of course, it is highly unlikely that this amount of land could be planted to tea" (World Bank 1982, p. 351). The annex did not specify whether future development was

expected to be impeded by the limited international market prospects, inadequate local planning and implementing capacity, competition from other crops, ecological problems associated with forest clearing, the loss of wildlife and tourist potential—or a combination of several or all of these factors; the annex simply concluded that "There is little doubt...that converting forest to permanent crop land could significantly increase output and employment. But as long as environmental effects...remain unclear...extensive clearing of forest cannot be permitted" (World Bank 1982, p. 351).

The question of whether tea production should be expanded is currently an important policy issue in Kenya. The Bank's position on this all-important issue is not clear. In its 1986 Sessional Paper the government adopted a policy of expanding tea and coffee production—a policy that it pursued with much success in the 1970s. Consistent with the policy it adopted in 1972, the Bank has continued to recommend diversification out of tea and coffee on grounds of limited world markets. On the other hand, at the operational level the Bank is currently actively participating in a review of the coffee subsector. In the case of tea, however, it has yet to address many of the technical problems of tea expansion associated with the reduction of forest land that was set forth in the 1983 BER. The Bank also continues to be against providing financing for expansion of tea and coffee production.

Fourth, regarding the *semiarid and arid ecological zones*, the annex stressed their limited farming potential "contrary to the widespread perception that dryland farming could provide income and employment to much of Kenya's growing population" (World Bank 1982, p. 351). It also noted the effects of intensification on "the fragile environment of many marginal areas, high risks and limited land potential and the impact of their development through migration of population from high potential areas on the traditional pastoralism." It is noteworthy, however, that the Bank has little basis for making recommendations to the government on the important issue of land utilization in a long-term context. The Bank's project lending has dealt with the problems of semiarid areas mainly by investing in area development projects, with relatively limited success (i.e., Baringo and Narok). Few systematic, in-depth studies of land tenure or soil degradation have been undertaken, especially studies that investigate migratory patterns, the nature of land markets and the factors affecting them, and ethnic factors affecting land access.

Fifth, as regards the *high potential areas*, the annex to the 1983 BER recognized the tremendous potential for shifting cropping patterns to high value labor-intensive crops—an issue, incidentally, that was not related in the BER to growing land pressures in semiarid areas—but the annex observed that the "most important limitation on changing cropping patterns is the need to fit into the farming system—as peak seasonal labor requirements...constrain production of some high value crops, [there are] high risks in complete specialization for low income small farmers due to weather and price induced risks, and [there is] the high degree of variability in the optimal crop mix by farm size and region...finally the supporting services are inadequate" (World Bank 1982, p. 360).[25]

The contrasts drawn above between the general policy recommendations in the main text of the 1982 BER and the technical and sociopolitical problems identified in its annex on agriculture illustrate the dichotomy between the desirable and the feasible, or planning and implementation, that runs like a fault line through the structure of the Bank/Kenya relationship. Problems associated with the interaction of economic policy with technical and institutional issues have persistently plagued the Bank's agricultural policy dialogue with Kenya and its project portfolio. Thus, the failure to translate the general principles of policy into practical implementation mechanisms or to define a time horizon in which policy objectives could be realistically achieved has limited the Bank's success.

Interaction of Poverty with Growth

The attention devoted to the poverty issue has been far greater in the Bank's economic and sector work on Kenya than on Malawi, although the problem of poverty is quite serious in Malawi due to the dualistic nature of the government's policies. In its project lending in Malawi in the 1970s, however, the Bank primarily financed smallholder projects designed to alleviate poverty. While several of the Bank-financed projects in Kenya (Bura Irrigation, South Nyanza Sugar, AFC Credit) were direct attempts at poverty alleviation, they benefited relatively few of the poor. This was either because of the capital intensity of these projects or because some, such as the earlier AFC credit projects, excluded farmers with small holdings from eligibility altogether.

The BER's analysis of rural poverty contained a number of new insights but few clear policy conclusions of immediate relevance were drawn from these insights. There was little examination of the implications of the BER's findings for the Bank's already substantial program of lending to agriculture.

Using data from the Central Bureau of Statistics' Integrated Rural Surveys, the report argued that, contrary to the general concern about employment and income distribution (based on assumed structural rigidities and poor intersectoral linkages), the proportion of Kenya's population below the poverty line had fallen between the early 1960s and the mid-1970s, although population growth had increased the absolute number of the poor. The poorest 40 percent on average experienced no gains whereas most of the gains had accrued to the 60 percent of smallholders with the highest incomes. Further, adoption of cash crops was highly concentrated both among and within regions. Smallholder poverty was thus closely related to the level of innovation (as measured by adoption of cash crops, hybrid maize, improved livestock, and use of purchased inputs). Nonfarm income earning opportunities were, however, fairly widespread with only about 20 percent of households not enjoying nonfarm income or substantial sales of food.

The report's novel contribution related to the examination of intersectoral linkages in explaining these observed changes. Contrary to the general view of agriculture as the engine of overall economic growth—and also in contrast to the themes of the 1973 BER—the 1982 BER argued that nonfarm income greatly influenced smallholder income.[26] Differences in innovation and the use of purchased inputs were said to be related to availability of finance from nonfarm income and loans.[27] The availability of loans was in turn seen as being closely related to the availability of nonfarm income, influencing both the ability and the willingness of smallholders to borrow. Finally, variations in nonfarm income depended on differences in the urban-based component of that income, which was in turn related to education.

One major (and presumably long-term) policy implication of this analysis stressed by the BER was the need to provide more formal sector, urban jobs for poorer smallholders, so as to facilitate rural innovation; wider access to education was also recommended. Given the Bank's criticism of Kenya's weak urban industrial policies, however, it is noteworthy that the BER had relatively little to say about the immediate operational policy implications of this analysis for agricultural policy. For instance, while it stressed the importance of finance as an explanation of agricultural innovation, the role of agricultural credit in alleviating poverty was not mentioned—even though the Bank had been actively involved in four self-contained agriculture credit projects and seven other projects involving credit, and had achieved little success in reaching lower income farmers. Also, the report clearly documented the lower average incomes in Western and Nyanza provinces compared to Central province, but drew no policy conclusions about the former regions' differential potential for agricultural innovation nor implications for the development of suitable agricultural technology. Sugar and cotton, two of the most important crops in western Kenya, are both crops with major technological problems in which research and agricultural services had been weak (facts that the Bank was aware of as a result of its project lending experience). Thus, the practical implications of this analysis for doing things differently were not made clear.

In line with the spirit of the report, general recommendations were made for raising agricultural prices and changing the terms of trade between agriculture and industry (through removal of protective QRs and uniform tariffs), although which crops and regions would benefit, what magnitude of price increases were required, and how poverty would be alleviated were not made explicit. This lack of specificity in the Bank's recommendations in terms of particular policy and investment implications, including whom they might benefit in what time horizon, has been a continuous problem.

The report assumed the policy issues involved in the growth/equity debate had been settled in favor of distributing land to smallholders. It used regression analysis to indicate that "both output and employment per hectare are closely linked to size of holding keeping soil quality constant." One implication of this analysis is that rural labor markets do not function well because of intrarural structural rigidities in contrast to rural/urban flows. These rigidities have influenced the supply of labor for tea, coffee, and other crops.

Other recommendations for revitalizing the agricultural sector included preventing land concentration, encouraging subdivision, imposing a ceiling on holding size and a capital gains tax, restricting borrowing to discourage land purchases, raising interest rates, and redistributing large farms. A project was to be prepared to "accelerate the regularization and rationalization of individual holdings on informally subdivided large farms" (World Bank 1982, p. 101). As shall be shown later, however, in practice rural labor markets have been easier to organize for large estates than for smallholders in the important cases of tea and coffee, and much greater intensification has been possible on estates than in smallholder production.

Recommendations of the 1986 Agricultural Sector Report

The issues identified in the 1986 Agricultural Sector Report were in substance quite similar to many of those discussed in earlier reports. One important exception was a new emphasis on increasing and improving input use (on which original work was done involving field investigations of input pricing and distribution policies). Many very useful recommendations were made. The Bank's increased awareness of Kenya's limited planning and implementing capacity was also reflected in the sector report. Otherwise, its subsectoral components essentially summarized information that already existed in Kenya or that was drawn from the Bank's project implementation experience. However, a large number of constraints were considered to be "key." The report conveyed little sense of priorities that the government should focus on (this was also a major problem in the Bank's lending to Kenyan agriculture in the 1970s). Proposed individual investments were viewed as a "window of opportunity" rather than as integral components of an overall strategy involving sequencing and phasing of the most important investments and elimination of those of lesser priority.

Although the changes the Bank has proposed in Kenyan agricultural policies and practices have generally been sectorally based (focusing on maize pricing, land policy, agricultural planning, and budgeting), in the 1980s it has tended to look to the exchange rate policy for the desired realignment of inter (and intra) sectoral incentives (e.g., see Annex to the CPP and CEM Initiating Memorandum of April 1985). Kenya's management of the exchange rate has, however, not been bad from a macroeconomic standpoint (see Figure 3 in Part I) and has received a stamp of approval from the IMF.

Two other weaknesses of the Bank's economic and sector work are worth highlighting in conclusion. First, there has been a relatively poor link between the Bank's examination of agricultural development concerns and its examination of other sectors, especially education and infrastructure, in light of their relationship to the development of agriculture. This narrow focus has tended to result in translating priority to agriculture into *lending* for agricultural projects, even though the lack of absorptive capacity in agriculture has been recognized as a problem (this has been an even more serious problem in Tanzania where both infrastructure and education are major constraints). Second, analysis of the industrial sector has generally excluded the problems of agro-based industry, i.e., sugar and textiles, and follows almost textbook recommendations on liberalization with relatively little attention to the fact that at least some of Kenya's inefficient industries, e.g., sugar processing and cotton ginning, have been supported by the Bank's project lending.

The Bank's current agricultural strategy in Kenya represents a substantial improvement in addressing the above weaknesses, although it is perhaps not as fully articulated, nor considered in a long-term and broad context, as it might be. The strategy involves emphasis on agricultural research, extension, credit, and developing the planning and budgeting capacity of the Ministry of Agriculture. The Bank has also begun to formulate a number of pilot operations. Hopefully lending pressures will not, as has been the case in the past, lead to premature expansion of and increased funding for these pilot operations before their potential is adequately tested.

Policy Advice to Tanzania

The 1974 Agricultural Sector Report

The most striking difference in the Bank's treatment of agricultural issues in Tanzania and Kenya has been the general neglect of factors that promote intensification (i.e., the shift from low to high value crops) and the lack of awareness of the extent to which a variety of agricultural policies pursued by the Tanzanian government (discussed in Part I) were causing retrogression in the agricultural sector.

Although the Tanzanian agricultural sector and economy had done well in the 1960s, by 1969 Tanzania had begun to experience a trade deficit. Only tea and tobacco were showing (mild) growth. By 1972 the Bank observed that overall growth was clearly sluggish and uneven and attributed this at least partly to domestic policies in addition to the effects of poor rainfall and world prices. By 1974 the oil price shock and a drought had brought on the first of the two severe economic crises Tanzania was to encounter in the 1970s.

The 1974 Agricultural Sector Report (ASR) was a benchmark in the Bank's analysis of the sector in terms of the correctness of its diagnosis of Tanzania's problems. Observing that there had been negative growth, the report concluded that the country faced critical production problems and recommended a sequential (as opposed to integrated) production oriented approach with top priority to be accorded to those investments that would have an immediate production impact. The report observed that the government's equity objectives were being achieved at substantial cost in terms of growth. It stressed the importance of feeder roads for crop production, laying stress on road maintenance, and decried the reduced private activity observed in the transportation sector. It recommended establishment of a transport authority to plan and coordinate road maintenance and transportation development.

On agricultural technology, the report based its argument on the assumption that farmers would first adopt improved technologies (use of modern inputs) and that improved husbandry would then follow, a phenomenon observed in much of North America, Europe, and Asia. This approach was contrary to that followed in the Bank's National Maize Project approved in 1974, which focused first on improving husbandry through an emphasis on extension, to be followed by making increased amounts of inputs available to farmers.[28]

The report supported the pragmatic recommendation of a 1969 (Krisel) expert committee not to overwhelm cooperatives with increased funding. It also argued against their rapid expansion.

Although Tanzania had abundant land, recognizing that areas of land pressure existed the report recommended promotion of voluntary resettlement through investment in infrastructure in less populated, high potential areas as the way to relieve land pressure. It also stressed the adverse effects of villagization on producer incentives and soil fertility.

Adoption of the Bank's 1974 ASR recommendations by the government would have entailed a complete reorientation of the Tanzanian development strategy. When presenting the report to the government, the Bank was cautious not to raise basic questions of a change in strategy out of concern for Tanzania's national sovereignty.

Indeed, in compliance with the tenor of the 1973 McNamara speech and contrary to the findings of the Agricultural Sector Report, as well as that of the study referred to earlier on the design of 20 agricultural and rural development projects, the Bank had at this time already begun to help in the preparation of the Kigoma Integrated Rural Development Project. This project had been first mentioned in the Economic Report of 1972 as a way of tackling rural poverty through a multisectoral area-based approach.

The ASR, it should be recalled, explicitly criticized the government's lack of focus on productivity gains and high potential areas. To capitalize on such productivity gains, the ASR had recommended a National Maize Project in areas of high potential to be followed by the National Agricultural Development Program (NADP). The National Maize Project approved by the Bank in 1975, however, did not give priority to high potential areas as, for political reasons, the government wished to spread coverage throughout the country. The government's policy of decentralization of the administration had greatly undermined the ability of the Ministry of Agriculture to implement "national" projects in the regions because its technical staff reported to the prime minister's office. The NADP concept was subsequently abandoned by the Bank as a consequence of this decentralization approach. Instead preparation was begun on rural development projects in Mwanza/Shinyanga and Tabora. The Bank's tendency to give in to Tanzania's political wishes was by then well established.

The 1977 Basic Economic Report

The 1977 Basic Economic Report (BER) did not continue the tale of woes found in earlier reports. Indeed, despite agriculture's importance, the report did not contain any major new analysis of the agricultural sector. An annex did, however, contain a very good synthesis of the existing knowledge on Tanzanian agriculture.

Given the small amount of attention to the agricultural sector in the BER, it is no wonder that the main body of the report lacked any treatment of the strategic interaction between agriculture and macroeconomic development. For instance, the report considered the government's commitment to the idea of villagization a *fait accompli* and attempted to focus on how to make it work in practice. In the main report villagization was described as an important instrument to redress rural poverty in light of Tanzanian policymakers' views on the unwelcome trends of socioeconomic differentiation and neglect of broad-based rural development. Recognizing the problems of poor siting and overcrowding of villages, it recommended "satellite villages" but did not give an indication of what mechanisms might be used to establish them. Finally, the report cited Tanzania's demonstrated structural commitment to rural development as an indication of its bright future, while at the same time pointing out the great risks involved in a villagization program that was to depend for its success on undefined modern methods of cultivation rather than proven traditional ones.

Critical Issues of the 1970s

Equity versus growth. It is evident from the above discussion that the Bank's economic reports in the 1970s were cautious not to challenge the means by which the government's equity objectives were being pursued or the extent to which equity objectives should be pursued at the cost of growth. For instance, the 1974 Agricultural Sector Report had included a detailed discussion of the negative effects on

efficiency of the "pan-territorial pricing" policy of the government whereas the 1977 Basic Economic Report simply observed that existing price policy was considered important by the government to alleviate rural poverty and suggested that considerations of increasing agricultural output were secondary. Similarly, while the 1974 report supported the "model farmer" approach, the 1977 Basic Economic Report accepted the government's stance that differential access to extension in the 1960s had fostered inequity.

Public versus private sector. On the role of the private and public sector, except for the case of private transport referred to earlier, the generally critical 1974 Agricultural Sector Report did not suggest any scaling down of parastatal activities; this in contrast to the more critical stance taken by the Bank in Kenya, where it recommended liberalization of the grain trade as early as the 1973 Agricultural Sector Report, with repeated calls for this in subsequent economic reports. While the 1977 BER pointed out the need to increase competition and noted the government's 1976 policy of closing down private shops under "Operation Maduka," it did not make any negative comments about this policy. Also it noted that the government had abolished cooperative societies and unions as a way of holding down costs and that this had not been efficient; it observed that if greater efficiency was not achieved, either a devaluation or subsidization of parastatals would perhaps be necessary. Only in 1981 did a CEM for the first time suggest the need to improve the efficiency of parastatals through management contracts and cutting down the range of parastatal operations. The 1983 Agricultural Sector Report then explored this issue more explicitly.

Large-scale agriculture. There was relatively little questioning in the Bank's reports of the government's treatment of large-scale estates even though private estates were being nationalized and public ones had begun to proliferate in the 1970s. The Bank did, however, observe that state farms would be highly dependent on trained manpower, which Tanzania did not have, and that expatriate management would be needed.

There was no treatment of the differential productivity of the private and public sector estates (e.g., in sisal and coffee). The 1983 Agricultural Report highlighted the greater productivity of the private sector despite the discriminatory treatment it had received in the 1970s. It stressed that export crop production was stagnating, as opposed to declining, largely because private estates had maintained or increased their production even as smallholders and public sector farms retrenched into subsistence.

Weather. Weather had been a major cause of fluctuations in food supplies and food insecurity but was given little attention in the Bank's analysis of the maize issue (as was also true for Kenya). The Bank placed great reliance on rainfed agriculture and clearly came out against large-scale irrigation, though the government had attached priority to the latter in order to achieve food security. The 1974 ASR had identified the need for exploitation of high potential areas of assured rainfall. The 1983 ASR articulated this need even more strongly by identifying the Southern Highlands as an important potential area in which to stabilize production. The Bank generally did not take up long-term strategic questions concerning how the government might meet its concern about food security at lower costs than were implicit in the government's irrigation proposals.

World commodity markets. Most economic reports in the 1970s took the view that Tanzania could live with commodity price fluctuations and could compete provided it paid attention to the quality of its produce (the latter had already begun to surface as a major problem by the mid-1970s, especially with respect to exports). Toward this end, the Bank's tobacco processing and handling projects were directed at improving tobacco quality.[29]

The 1972 Economic Report took a highly pessimistic view of the world market.[30] Sisal and coffee were particularly singled out as commodities with poor prospects. The Bank recommended a program of diversification of sisal estates. Roughly 25 percent of the investments by the Tanzania Sisal Authority (a public sector parastatal) in the 1970s went into dairy farming, an activity that the Bank also financed (with disastrous effects). By the end of the 1970s the public sector sisal estates had been run down and a single multinational private company had become a major source of sisal exports from Tanzania.

The Bank was similarly highly pessimistic about the prospects for coffee, Tanzania's most important crop. Although nonquota markets had already become an increasingly important source of sales for Tanzanian coffee, the Bank did not explore their potential. The Bank also refused to finance investments in coffee due to its 1972 policy referred to earlier. (The EEC did finance the establishment of coffee in southern Tanzania through a coffee improvement program.) Tanzania has, however, mostly neglected its coffee export potential by adoption of a number of discriminatory policies discussed in Part I. As a result of its lack of involvement in the coffee sector, the Bank had relatively little knowledge of this most important sector until 1982, when investigations for the 1983 Agricultural Sector Report were undertaken.

Market prospects for cashews were also considered by the Bank to be poor. India had earlier been Tanzania's major buyer of raw cashews and Tanzania experienced considerable difficulty when the cashew trade was taken over by the State Trading Corporation of India in the late 1960s. The Bank argued that Tanzania's prospects would improve if further processing was undertaken. This led to the financing of two cashew processing projects. However, both suffered negative rates of return due to lack of adequate throughput caused by, among other things, laborers' increased walking distance to cashew groves as a result of villagization. The decline in Tanzania's cashew exports was so sharp that in the early 1980s India was offering Tanzania higher prices for raw cashews than those it received for processed cashews.

Industrial policy. As documented in Part I, the government's Basic Industrial Policy was in strong competition with agriculture for budgetary resources and policy attention. However, the 1977 Basic Economic Report's recommendations were couched mainly in terms of the need for a *gradual* transition to the Basic Industrial Policy. The Bank's lack of opposition to this policy is surprising but seems once again to have been a result of the Bank's concern with respecting "Tanzanian sovereignty." Indeed, it will be shown later that Tanzania is the only country in the sample of MADIA countries in which the Bank's lending for industry represented the highest proportion of total lending compared to other sectors. The Bank thus reinforced rather than counteracted Tanzania's premature pursuit of industrialization.

New Policy Emphases of the 1980s

The sharp deterioration in Tanzania's macroeconomic situation following the coffee boom and the decline in

Tanzania's basic infrastructure resulting from a balance of payments crisis—Tanzania's second economic crisis of the 1970s—combined with the difficulties of project implementation in the late 1970s, led the Bank to approve a balance of payments export rehabilitation credit in 1981. Providing foreign exchange was, however, clearly not enough to address Tanzania's fundamental economic problems. In March 1982 the Bank recommended that the government develop a major program of structural adjustment and financed an advisory group to help government produce such a program. It also proceeded to prepare an agricultural sector report as a possible input to the government's structural adjustment program. This effort drew on the experience of the Bank's projects and other in-house staff.

The 1983 Sector Report argued that Tanzanian policy needed to be reoriented away from an excessive focus on equity and government control toward a focus on growth to be achieved through increased private initiatives and institutional pluralism. The ASR made 39 specific recommendations for the short and long term. The short-term recommendations fell into three broad categories: (1) the need for adjustments in Tanzania's exchange rate and in producer and consumer prices; (2) the need to improve the institutional framework for agriculture by reducing the role of the public sector; and (3) the need to increase the share of foreign exchange resources going to agriculture by correcting the imbalance between agriculture and industry, as well as correcting the imbalance in the allocation of budgetary resources between productive and social services in the rural sector.

A problem with Bank reports has been the lack of consistency in strategies from year to year, this being determined to a large extent by the predilections of the staff involved in preparing individual reports. In keeping with the pattern of the 1970s and contrary to the 1983 Agricultural Sector Economic Report's focus, the Bank's 1984 Economic Report diluted the messages of the 1983 Agricultural Sector Report by focusing more on external shocks, the decapitalization of agriculture, and Tanzania's lack of resources rather than on the need for a major restructuring of the economy that could benefit agriculture.

The greatest bottleneck to reform has been the government's lack of willingness to adjust an excessively overvalued exchange rate. The government, however, did begin in the mid-1980s to allocate more foreign exchange to agriculture, expanded the foreign exchange retention scheme that had been introduced under the Bank's export rehabilitation credit, and, as an incentive to exporters, raised a number of producer and consumer prices. It liberalized the grain market in 1984-85 to some extent by increasing the amount of maize that could be moved on private account across administrative boundaries to 450 kilograms (5 bags), and began to bring the budget more under control (although this was made difficult by the lack of adequate adjustment in the exchange rate). Almost all donors had by this time shifted their assistance away from projects in favor of import support. However, the Bank did not approve any agricultural projects after 1982 because it considered these reforms inadequate in the absence of an exchange rate adjustment.

In June 1986, the government made a relatively major adjustment in the exchange rate by devaluing the shilling to 40 to the U.S. dollar and agreeing to eliminate overvaluation by 1988. This action by the government has been perceived in the donor community as a major new commitment to reform. The Bank approved a multisector Rehabilitation Credit in November 1986 involving a commitment of US$ 50 million from IDA and US$ 46.2 million from the Special African Facility.

Earlier balance of payments support by the Bank is now to be followed up by a series of Bank project loans in much the same way that Malawi has received fertilizer supply and agricultural research loans in conjunction with its SALs. However, the road to agricultural reform is likely to be more difficult in Tanzania than in Malawi. For instance, unlike in Malawi, the recent attempt by the Bank to appraise an input supply project (undertaken jointly with IFAD) stalled because of government disagreement with proposals concerning responsibility for importing inputs as well as for their internal distribution (currently restricted to a few parastatals). It is therefore not clear at this stage to what extent the government is willing to make the changes needed to bring about the resuscitation of a greatly rundown economy.

Policy Advice to Malawi

The 1960s

The Bank's initial rhetoric on Malawi indicated that the smallholder sector was the key to the development of the rest of the economy. Yet this view was not reflected in economic analysis and sector reports until 1978. Malawi's low savings rate and balance of payments deficit appear to have led the Bank in its early analysis to focus mainly on these two macroeconomic indicators in judging Malawi's performance. Reports in the 1960s gave Malawi high marks for its GDP growth, investments and savings, and its effort at reducing its dependence on U.K. budgetary support. A shortage of skilled manpower was observed to be a constraint to development in the reports of 1967 and 1973[31] and the Bank's 1973 Economic Report argued for the need for increased investment in education and training. However, from the earlier discussion of Malawi's policies and performance in Part I, it is evident that this advice did not influence Malawi's overall allocation to education (although the Bank provided greater support to this sector than in other countries).

The 1970s

The Bank's economic and sector reports of the 1970s clearly indicate that the Bank was aware of the dualistic nature of Malawi's agricultural sector and the extent to which there was competition rather than complementarity in resource use among the two sectors. However, as in the case of Tanzania, the Bank confined itself to reporting on government policies. Based on its exchange rate and trade regime, Malawi was characterized as a capitalist, private enterprise economy. Government was viewed as generally noninterventionist and as providing a domestic framework conducive to growth.

The 1973 Agricultural Sector Review recognized that the smallholder sector represented an important source of financial capital for the estate sector as a result of the government's pricing and investment policies. The report noted that the marketing board, ADMARC, and its predecessor (FMB) had made substantial profits on crop trading in the early seventies (a total of MK14.7 million between the years 1969-70 and 1972-73). It was also noted that the corporation had made a number of investments unrelated to smallholder production. Some of these investments were not profitable and the report indicated that these had been

written off. These observations notwithstanding, the constraints to smallholder agricultural development were characterized almost exclusively in terms of lack of credit, trained manpower, and marketing outlets. Integrated projects were seen as a way of removing these constraints.

The conflict between estate and smallholder development was most clearly articulated in the 1975 Country Economic Memorandum:

> Two lines of agricultural development are being encouraged by Government—for smallholders and for estates—and a difficult balance will have to be struck in the next few years. Competition for land in the more densely populated areas is the most apparent constraint, which can only be resolved by the development of new land or by substantial increases in productivity among smallholders to release land for estate development. Competition between the two types of producers is not restricted to land, but also extends to land and medium-term credit, scarce inputs and managerial skills. Institutional constraints in offering credit for both estates and smallholders has involved competition for those funds available. The advantage in mobilizing credit has probably been with the estates due to their greater familiarity with modern business methods. Competition for credit can be seen, in particular, in the use of ADMARC surpluses to finance estate development. When inputs have been scarce, as in the case of fertilizer in the past year, the allocation of these inputs also presents a case where the two types of producers have differing interests. If the degree of competition between estates and smallholders increases in the future, it may be difficult to reconcile expansionary policies for both, and eventually may prove necessary to reappraise the extent to which the interests of either group should be traded-off against those of the other (World Bank 1975, para 61).

By 1978 the Bank's project work had produced abundant evidence that producer pricing was a major constraint to production increases.[32] However, at this point the idea of the Bank's direct involvement in urging major policy reforms on basic issues such as producer pricing had not yet taken hold. Instead the Bank introduced a clause in the 1978 NRDP agreement requiring consultation with IDA, and setting forth both marketing and pricing criteria and policies that government was to adopt (agreements that the government did not keep).

Because of its lack of involvement in the estate sector, the Bank's understanding of the factors influencing the efficiency of the sector was limited. This situation did not change until the preparation of an estate sector report in 1979.

The 1980s

It was only in the context of the 1981 Structural Adjustment Loan that the Bank became actively involved in examining the interaction of the smallholder sector with the rest of the economy. As a consequence, the quality of its analysis improved substantially. The 1981 Agricultural Sector Report observed, for instance, that "the single most important factor in the phenomenal success of estate agriculture has been the Government's [low] wage policy...which allowed the estates to lower the unit costs of production for each of the crops" (World Bank 1981, 2.02). As indicated in Part I, while low wage costs have made Malawian estate tobacco production competitive on world markets, the success of the estate sector has also depended on continuation in the smallholder sector of policies towards pricing, marketing, land access, and rights to grow certain crops, all of which have together reduced the returns to smallholder labor and increased the supply of labor to the estate sector (at a low minimum wage).

Pricing, which had become a concern well before the first SAL, was taken up in the 1981 First Structural Adjustment Loan but largely at the methodological level. As was the case in Kenya, the Bank was not well enough prepared to make major project recommendations because it had undertaken relatively little economic work in this area. Thus in 1981 government and the Bank agreed only on a pricing methodology.

At around the time of the first SAL the government decided to raise the price of maize sharply so as to avoid the problem of severe drought and subsequent food imports experienced in 1979-80. The Bank strongly criticized this decision, a concern that proved to be valid in view of the maize surpluses that stemmed from this action. As a result, the Bank delayed releasing the second tranche of the first SAL.

The government raised prices for export crops in March 1983, several months before the second SAL was approved. While the issue of incentive pricing has therefore been addressed, the prohibitions on smallholder cultivation do not appear to have been a major issue in the Bank's policy dialogue, despite the Bank's support for increased smallholder tobacco production. For instance, the 1973 Agricultural Sector Review had recommended greater smallholder participation in production through the promotion of smallholder flue-cured tobacco production schemes. Yet little progress appears to have been made in this area.[33]

The 1981 Agricultural Sector Report similarly observed that there are "no technical reasons why burley should not be grown on customary land provided sufficient supervision is given in the initial stages" (World Bank 1981, 6.06). Proposals for the lifting of legal restrictions on smallholder burley production were, however, made contingent on analysis of the world market prospects for burley. A tobacco study was carried out to examine this issue. The Bank did not push the issue during negotiations, on the grounds that restrictions on burley production were being relaxed and that the government needed to strictly enforce regulations on production levels as increases in burley production had already led to a sharp drop in price, given Malawi's 26 percent share in the world market.

The world market prospect, however, is not the only factor that has constrained expansion of burley production. Malawian policymakers have argued that scale economies are more favorable for largeholder production. Evidence from Kenya on tea, coffee, and sugar indicates that this is certainly the case with respect to the financial and organizational costs of servicing the smallholder agricultural sector. Also yields in the smallholder sector have tended to be lower due to labor constraints. Yet in Tanzania a technological change in the curing barns reduced the cost of curing flue-cured tobacco by small farmers and production expanded rapidly in the smallholder sector in the 1960s (when government services for tobacco were then well organized, as they currently are for smallholder tea in Kenya). Indeed, as a result of their success, the Tanzanian smallholder tobacco schemes were the focus of considerable study in the early 1970s (Lele 1975; Wahid 1987).

In the Kenyan case, even with the relatively impressive organization of smallholder services, increasing yields per hectare can be more difficult in the smallholder sector than in estates as a result of the labor intensity of crops such as tobacco and tea as well as the labor constraints faced in the smallholder sector (due to the competing demands of food crop production, the lack of simple labor saving technologies, and the lack of cash for payment of laborers). Yet relatively little primary analysis has been done to identify the precise factors that could improve smallholder yields, thereby reducing growth/equity trade-offs.

The duality issue is, however, not only of interest from the viewpoint of income or factor productivity differences among the small and largeholder sectors, but also because of the disparities in asset distribution that it generates over time, and the consequences of this maldistribution for the pattern of long-term growth. From this viewpoint the Malawian government's practice of licensing new estates in the face of considerable underutilization of estate land is a particularly serious issue. The Bank's 1985 Land Policy Study reinforced the finding of the earlier tobacco study on this matter, i.e., less than 20 percent of the land on established flue-cured estates is utilized. Also, licensing of new estates appears to be progressing rapidly even though there is substantial land pressure in the smallholder sector. There is considerable cause for concern that the traditional system of the rights of chiefs to distribute land in a relatively equitable manner may be breaking down because there are financial incentives for chiefs to declare land as surplus.

The greatest long-term effects of duality are therefore likely to occur in the pattern of overall economic growth. In this context the contrasts between Kenya and Malawi are already striking. Kenya shows signs of much more rapid and broad-based growth in effective demand for goods and services, in the growth of a small-scale entrepreneurial class, and in a pattern of development in which employment effects can become self-sustaining (Mellor 1976). Malawi, on the other hand, shows all the signs of pursuing the bimodal strategy that Johnston has so decried (Johnston and Kilby 1975).

As in the case of the right to grow estate crops, however, the Bank has been hesitant to emphasize the land distribution issue despite the findings of the Land Policy Study. In contrast the Bank has been considerably more vocal on the land issue in Kenya for some time.[34]

Despite the above shortcomings, through the SAL process the Bank has focused on improving its understanding of some of the most important structural constraints to Malawi's agricultural and overall growth, including:

1. The slow growth of smallholder exports. Apart from the policy constraints discussed above, this has resulted from the narrow geographical coverage of Bank (and other donor) financed agricultural projects, despite their repeated attempt to "spread" services.
2. The need for diversification of both smallholder and estate production. The Bank has over time become more keenly aware of the nonprice (technological and government expenditure pattern) factors that influence this issue.
3. Distortions in welfare benefits caused by the government's resource mobilization process and expenditure patterns. This has led to attention being directed to the question of subsidies as well as expenditures. In the case of fertilizer subsidy removal, a more careful analysis of fertilizer price/output price ratios in Malawi combined with other factors would have led the Bank to go slower on fertilizer subsidy removal.
4. Deterioration of the financial position of the parastatals as a result of the government's *ad hoc* pricing policies.
5. Inefficiencies in ADMARC's operations. The Bank was too favorably disposed toward ADMARC for too long, despite the fact that ADMARC's policies and operations (including its increased monopsony role through abolition of the Asian trade) were not very different than those of its counterparts in Kenya and Tanzania.
6. Failure to vigorously push for privatization of domestic trade, especially with respect to the participation of Asians in this process.

The Bank's handling of these issues is taken up later in connection with the discussion of the Bank's lending program.

Bank Lending to Kenya, Malawi, and Tanzania

Overall Lending Patterns

As of the end of fiscal year 1986 the Bank had approved 74 operations in support of agriculture (67 agricultural projects and 7 nonproject loans or credits) in the three MADIA countries in East Africa involving a total commitment of $1,435 million. Kenya received commitments for 29 operations (of $721 million), Tanzania for 25 operations ($371 million), and Malawi for 20 operations ($342.7 million).

Table 20 shows the number of agricultural projects approved and the amounts committed by five-year periods for individual MADIA countries. Kenya showed a sharp rise in the volumes committed after Mr. McNamara's Nairobi speech in 1973. The number of agricultural projects increased from 4 to 9 and the amounts increased even more sharply from $40.5 million to $257 million. In Tanzania, the number increased from 5 to 11 from 1970-74 to 1975-79, and amounts doubled from $76 million to $140.7 million. In Malawi the buildup, both in amounts and the number of projects, was more gradual. The number of projects approved increased to 4 in the 1975-79 period from 3 in 1970-74 with the amounts only doubling to $50 million from $24.5 million. In the 1980-86 period the number of projects approved declined in Kenya and Tanzania to 7 and 6, respectively, but increased in Malawi to 8. Malawi and Kenya received 3 nonproject lending commitments each of $220.9 million and $170 million, respectively, while Tanzania received only one of $50 million.[35]

Table 21 shows the intersectoral breakdown of the *cumulative* IBRD and IDA lending operations to the three MADIA countries in relation to total commitments to the East and West Africa regions.[36] The share in total commitments for the three East African countries that went to agriculture and rural development was similar to the average for the East Africa region and met the McNamara guideline of 25 percent to agriculture almost to the last decimal (25 percent in Kenya, Tanzania, and Malawi compared to 24.4 percent in all of East Africa).[37] These percentages are noteworthy since such high shares were reached despite poor domestic absorptive capacity, as is documented later in this section.

The proportion spent on basic infrastructure in the East African MADIA countries was slightly lower than the regional average for eastern Africa (34.5 percent compared to 39.7 percent for the entire East Africa region). Kenya stands out in terms of the share of total Bank commitments going to basic infrastructure (38.7 percent) (see Table 23). Transport received 20.4 percent compared to 13 percent in Tanzania. It is important to recall that Kenya's better performance in the smallholder sector compared to Tanzania's and Malawi's is partly the result of a better developed network of physical infrastructure to service smallholder agriculture, especially in the high potential tea and coffee areas.

The Bank's commitments to the industrial sector, on the other hand, stand out in Tanzania (as high as 20 percent of the total, compared to 8 percent in Nigeria and 9 percent in Senegal) (see Table 23). This funding obviously helped reinforce the government's Basic Industrial Policy. It is noteworthy that both Kenya and Malawi, which experienced

Table 20
Lending to agriculture (millions of US$)

	1965-69	1970-74	1975-79		1980-86			Totals Projects	M or S[a]	TA	Grand Total
Kenya											
Number of Operations	4	4	9	1	7	2	2	24	3	2	29
Type of Operation	Projects	Projects	Projects	M or S[a]	Projects	M or S[a]	TA				
Amount Approved	13.50	40.50	257.00	30.00	172.00	190.90	17.50	483.00	220.90	17.50	721.40
Malawi											
Number of Operations	2	3	4		8	3		17	3	0	20
Type of Operation	Projects	Projects	Projects		Projects	M or S[a]					
Amount Approved	11.47	24.52	50.40		86.30	170.00		172.69	170.00	0.00	342.69
Tanzania											
Number of Operations	2	5	11		6	1		24	1	0	25
Type of Operation	Projects	Projects	Projects		Projects	M or S[a]					
Amount Approved	7.54	76.91	140.70		95.80	50.00		320.95	50.00	0.00	320.95
Cameroon											
Number of Operations	2	2	9		9		1	22	0	1	23
Type of Operation	Projects	Projects	Projects		Projects		TA				
Amount Approved	28.16	17.00	124.00		206.10		4.50	375.26	0.00	4.50	379.76
Nigeria											
Number of Operations		2	15		8		1	25	0	1	26
Type of Operation		Projects	Projects		Projects		TA				
Amount Approved		27.20	355.00		1015.50		47.00	1397.70	0.00	47.00	1444.70
Senegal											
Number of Operations	1	5	6		4	2	1	16	2	1	19
Type of Operation	Projects	Projects	Projects		Projects	M or S[a]	TA				
Amount Approved	10.43	20.79	47.5		55.9	124	4.9	134.62	124	4.9	263.52

[a] Macro or sectoral

Table 21
Combined IBRD and IDA cumulative lending operations by sector and region as of June 30, 1986 (millions of US$)

	East Africa			West Africa			Overall		
Sector	MADIA	All	MADIA's Share	MADIA	All	MADIA's Share	MADIA	All	MADIA's Share
Agriculture and rural development	976.6	2885.4	33.0%	1954.6	3112.0	62.8%	2931.2	5997.4	48.9%
Percentage of Total	25.0%	24.4%		42.9%	29.5%		34.7%	26.8%	
Basic infrastructure	1343.7	4699.2	28.6%	1306.3	3595.7	36.3%	2650.0	8294.9	31.9%
Percentage of Total	34.5%	39.7%		28.7%	34.1%		31.4%	37.1%	
Industry	344.0	1291.5	26.6%	312.4	902.6	34.6%	656.4	2194.1	29.9%
Percentage of Total	8.8%	10.9%		6.9%	8.6%		7.8%	9.8%	
Other infrastructure	282.3	674.6	41.8%	460.3	865.0	53.2%	742.6	1539.6	48.2%
Percentage of Total	7.2%	5.7%		10.1%	8.2%		8.8%	6.9%	
Human resource development	342.4	1004.5	34.1%	254.1	677.4	37.5%	596.5	1681.9	35.5%
Percentage of Total	8.8%	8.5%		5.6%	6.4%		7.1%	7.5%	
Nonproject lending	540.9	1070.4	50.5%	204.0	1136.9	17.9%	744.9	2207.3	33.7%
Percentage of Total	13.9%	9.0%		4.5%	10.8%		8.8%	9.9%	
Technical assistance	69.5	211.4	32.9%	60.0	251.3	23.9%	129.5	462.7	28.0%
Percentage of Total	1.8%	1.8%		1.3%	2.4%		1.5%	2.1%	
Grand Total	3899.5	11837.0	32.9%	4551.7	10540.9	43.2%	8451.1	22377.9	37.8%
	100.0%	100.0%		100.0%	100.0%		100.0%	100.0%	

Sources: World Bank Annual Report 1986; and Jones 1985.

high agricultural growth, received little Bank financing for industrial development (4.6 percent of total financing in Kenya and only .8 percent in Malawi).

It is also worth recalling that prior to the Nairobi speech the Bank was largely an infrastructure oriented institution. Commitments to infrastructure in all MADIA countries constituted 54 percent of the total in the 1965-69 period and remained at about that level in the 1970-74 period but took a sharp downturn coincident with the rise of the agricultural and development emphasis (see Table 24). The former's share declined to 23 percent in 1975-79 and then increased again to slightly less than 30 percent in the 1980-86 period.

The share devoted to human resource development also declined from 15.6 percent in 1965-69 to a low of 5.78 percent in 1975-79 (see Table 24). Thus, basic "public goods," which have important externalities in the development of agriculture, received less support from the Bank.[38]

The proportion allocated to nonproject lending was higher in the East Africa MADIA countries compared to the regional average for all of East Africa (13.9 percent in the three MADIA countries compared to 9 percent in the East Africa region) (see Table 22). Nonproject lending was very heavily weighted by the amounts going to Malawi and Kenya. As noted earlier, Tanzania received no project or nonproject loans or credits in support of agriculture between 1982 and 1986.

The share of nonproject lending was lowest at 7.7 percent ($95 million) in Tanzania compared to 25.8 percent in Malawi ($170 million) and 13.7 percent in Kenya ($276 million) (see Table 23). Tanzania continued to receive commitments for other nonagricultural sectors of its economy—most of these were for basic infrastructure (port, power, and highway rehabilitation, petroleum exploration, and education, as well as supplementary loans for the Mufindi pulp and paper mill and urban water supply).

An ironic effect of conditionality in the Bank's agriculture and macroeconomic lending in Tanzania has therefore been to further reinforce the bias of the Bank's lending against

Table 22
World Bank categorization of African countries by region

Eastern	Western
Botswana	Benin
Burundi	Burkina Faso
Comoros	Cameroon
Djibouti	Cape Verde
Ethiopia	Central African Republic
Kenya	Chad
Lesotho	Cote d'Ivoire
Madagascar	Equatorial Guinea
Malawi	Gambia, The
Mauritius	Ghana
Mozambique	Guinea
Rwanda	Guinea-Bissau
Seychelles	Liberia
Somalia	Mali
Sudan	Mauritania
Swaziland	Niger
Tanzania	Nigeria
Uganda	Sao Tome and Principe
Zaire	Senegal
Zambia	Sierra Leone
Zimbabwe	Togo

Table 23
Combined IBRD and IDA cumulative lending operations by sector as of June 30, 1986 (millions of US$)

Sector	Kenya	Malawi	Tanzania	Cameroon	Nigeria	Senegal	Total
Agriculture and rural development	483.00	172.69	320.95	375.26	1444.70	134.62	2931.22
Percentage of Total	24.0%	26.2%	26.1%	37.3%	50.0%	20.6%	34.7%
Basic infrastructure	778.45	167.89	397.40	483.13	611.96	211.21	2650.04
Percentage of Total	38.7%	25.5%	32.4%	48.1%	21.2%	32.3%	31.4%
Industry	92.00	5.00	247.00	18.00	237.00	57.40	656.40
Percentage of Total	4.6%	0.8%	20.1%	1.8%	8.2%	8.8%	7.8%
Other infrastructure	194.30	26.00	62.00	46.00	373.80	40.50	742.60
Percentage of Total	9.7%	3.9%	5.0%	4.6%	12.9%	6.2%	8.8%
Human resource development	160.17	115.33	66.90	67.87	126.69	59.51	596.47
Percentage of Total	8.0%	17.5%	5.4%	6.8%	4.4%	9.1%	7.1%
Nonproject lending	275.90	170.00	95.00	0.00	80.00	124.00	744.90
Percentage of Total	13.7%	25.8%	7.7%	0.0%	2.8%	18.9%	8.8%
Technical assistance	28.00	2.50	39.00	14.50	18.00	27.50	129.50
Percentage of Total	1.4%	0.4%	3.2%	1.4%	0.6%	4.2%	1.5%
Grand Total	2011.82	659.41	1228.25	1004.76	2892.15	654.74	8451.13
1984 population (million)	19.54	6.83	21.35	9.87	96.49	6.38	160.45
Per capita lending ($/person)	102.96	96.52	57.54	101.76	29.98	102.69	52.67

Source: Jones 1985; IBRD's "Statement of Loans" (9/86); IDA's "Statement of Development Credits" (10/86); World Bank Annual Report 1986.

Table 24
MADIA: World Bank lending operations by sector (millions of US$)

Sector	Fiscal years 65-69 Commitments			Fiscal years 70-74 Commitments			Fiscal years 75-79 Commitments			Fiscal years 80-86 Commitments			Totals (FY 1965-86)		
	IBRD	IDA	Combined	IBRD	IDA	Combined	IBRD	IDA	Combined	IBRD	IDA	Combined	IBRD	IDA	Combined
Agriculture and rural development	18.40	52.70	71.10	74.50	132.42	206.92	613.70	360.90	974.60	1285.80	392.80	1678.60	1992.40	930.02	2931.22
Percentage of Total	19.98%	29.16%	26.06%	11.32%	42.33%	21.31%	38.59%	46.05%	41.05%	42.14%	22.04%	34.73%	36.95%	30.69%	34.68%
Basic infrastructure	62.70	85.49	148.19	405.25	111.00	516.25	403.00	140.70	543.70	959.90	482.00	1441.90	1830.85	819.19	2650.04
Percentage of Total	68.08%	47.30%	54.31%	61.59%	35.48%	53.18%	25.34%	17.95%	22.90%	31.46%	27.05%	29.83%	33.96%	26.78%	31.36%
Industry	6.00	0.00	6.00	18.60	8.00	26.60	261.80	77.00	338.80	256.80	28.20	285.00	543.20	113.20	656.40
Percentage of Total	6.51%	0.00%	2.20%	2.83%	2.56%	2.74%	16.46%	9.83%	14.27%	8.42%	1.58%	5.90%	10.07%	3.70%	7.77%
Other infrastructure	5.00	0.00	5.00	8.30	8.00	16.30	225.00	63.00	288.00	329.80	103.50	433.30	568.10	174.50	742.60
Percentage of Total	5.43%	0.00%	1.83%	1.26%	2.56%	1.68%	14.15%	8.04%	12.13%	10.81%	5.81%	8.96%	10.54%	5.70%	8.79%
Human resource development	0.00	42.56	42.56	71.30	53.41	124.71	27.00	110.30	137.30	64.10	227.80	291.90	162.40	434.07	596.47
Percentage of Total	0.00%	23.55%	15.60%	10.84%	17.07%	12.85%	1.70%	14.07%	5.78%	2.10%	12.78%	6.04%	3.01%	14.19%	7.06%
Nonproject Lending	0.00	0.00	0.00	80.00	0.00	80.00	60.00	15.00	75.00	135.90	454.00	589.90	275.90	469.00	744.90
Percentage of Total	0.00%	0.00%	0.00%	12.16%	0.00%	8.24%	3.77%	1.91%	3.16%	4.45%	25.48%	12.20%	5.12%	15.33%	8.81%
Technical Assistance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.80	16.80	19.00	93.70	112.70	19.00	110.50	129.50
Percentage of Total	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.14%	0.71%	0.62%	5.26%	2.33%	0.35%	3.61%	1.53%
Totals	92.10	180.75	272.85	657.95	312.83	970.78	1590.50	783.70	2374.20	3051.30	1782.00	4833.30	5391.85	3059.28	8451.13
Percentages	33.75%	66.25%		67.78%	32.22%		66.99%	33.01%		63.13%	36.87%		63.80%	36.20%	

Source: Adapted from Jones 1985; and IDA's "Statement of Development Credits" (10/86); IBRD's "Statement of Loans" (9/86).

agriculture. Had the lending strategy been carefully related to the soundness of the recipient's *overall* development strategy, then all aspects of the lending program rather than only that going to the agricultural sector would have been affected.[39] In the Tanzanian case such an approach would have included rehabilitation of basic infrastructure but not lending for large-scale industry that competes with agriculture.

Table 25 shows the intersectoral breakdown of IBRD *versus* IDA lending to MADIA countries and to the East Africa regions by sectors. Table 26 provides the same information for East Africa countries over time. IBRD commitments declined in East Africa MADIA countries in the 1980s over the previous two five-year periods due to increased debt service problems (see Table 26). A smaller proportion of IBRD resources was committed to agriculture in MADIA East Africa countries (17.4 percent) than of IDA resources (30.5 percent),[40] although the proportion of IBRD commitments to agriculture in the three East Africa MADIA countries was higher than the East Africa regional average (17.4 percent compared to 10.6 percent) and that of IDA lower (30.5 percent compared to 32.9 percent) (see Table 25).

The higher proportion of "hard" IBRD loans in MADIA East Africa countries resulted from loans that went to a number of commercially oriented agroprocessing projects in both Kenya and Tanzania as well as an irrigation and credit scheme in Kenya. Projects in direct support of smallholder production, i.e., integrated rural development

Table 25
IBRD and IDA cumulative lending operations by sector and region as of June 30, 1986 (millions of US$)

	East Africa						West Africa					
	IBRD			IDA			IBRD			IDA		
Sector	**MADIA**	**All**	**MADIA's Share**	**MADIA**	**All**	**MADIA's Share**	**MADIA**	**All**	**MADIA's Share**	**MADIA**	**All**	**MADIA's Share**
Agriculture and rural development	283.4	479.0	59.2%	693.2	2406.4	28.8%	1709.0	1979.5	86.3%	245.6	1132.5	21.7%
Percentage of Total	17.4%	10.6%		30.5%	32.9%		45.4%	30.2%		31.2%	28.4%	
Basic infrastructure	775.7	2353.9	33.0%	568.0	2345.3	24.2%	1055.2	2162.7	48.8%	251.2	1433.0	17.5%
Percentage of Total	47.6%	52.2%		25.0%	32.0%		28.0%	33.0%		31.9%	39.9%	
Industry	244.0	771.6	31.6%	100.0	519.9	19.2%	299.2	691.1	43.3%	13.2	211.5	6.2%
Percentage of Total	15.0%	17.1%		4.4%	7.1%		7.9%	10.5%		1.7%	5.3%	
Other infrastructure	148.3	287.2	51.6%	134.0	387.4	34.6%	419.8	625.3	67.1%	40.5	239.7	16.9%
Percentage of Total	9.1%	6.4%		5.9%	5.3%		11.2%	9.5%		5.1%	6.0%	
Human resource development	10.0	194.1	5.2%	332.4	810.4	41.0%	152.4	241.9	63.0%	101.7	435.5	23.3%
Percentage of Total	0.6%	4.3%		14.6%	11.1%		4.0%	3.7%		12.9%	10.9%	
Nonproject lending	165.9	412.9	40.2%	375.0	657.5	57.0%	110.0	760.7	14.5%	94.0	376.2	25.0%
Percentage of Total	10.2%	9.2%		16.5%	9.0%		2.9%	11.6%		11.9%	9.4%	
Technical assistance	1.0	13.6	7.4%	68.5	197.8	34.6%	18.0	92.0	19.6%	42.0	159.3	26.4%
Percentage of Total	0.1%	0.3%		3.0%	2.7%		0.5%	1.4%		5.3%	4.0%	
Total	1620.3	4512.3	36.1%	2271.2	7324.7	31.0%	3763.5	6553.2	57.4%	788.2	3987.7	19.8%

Sources: World Bank Annual Report 1986; Jones 1985.

Table 26
East African MADIA countries: World Bank lending operations by sector (millions of US$)

	Fiscal years 65-69			Fiscal years 70-74			Fiscal years 75-79			Fiscal years 80-86			Totals		
Sector	Commitments			Commitments			Commitments			Commitments			(FY 1965-86)		
	IBRD	**IDA**	**Combined**	**IBRD**	**IDA**	**Combined**	**IBRD**	**IDA**	**Combined**	**IBRD**	**IDA**	**Combined**	**IBRD**	**IDA**	**Combined**
Agriculture and rural development	0.00	32.51	32.51	34.00	107.93	141.93	188.70	259.40	448.10	60.70	293.40	354.10	283.40	693.24	976.64
Percentage of Total	0.00%	29.73%	26.75%	18.20%	50.97%	35.61%	22.77%	45.90%	32.15%	10.11%	21.19%	17.83%	17.40%	30.52%	25.05%
Basic infrastructure	12.20	55.66	67.86	139.50	63.98	203.48	253.00	78.20	331.20	371.00	370.20	741.20	775.70	568.04	1343.74
Percentage of Total	100.00%	50.91%	55.83%	74.68%	30.22%	51.06%	30.53%	13.84%	23.76%	61.77%	26.73%	37.33%	47.64%	25.01%	34.46%
Industry	0.00	0.00	0.00	5.00	8.00	13.00	184.00	74.00	258.00	55.00	18.00	73.00	244.00	100.00	344.00
Percentage of Total	0.00%	0.00%	0.00%	2.68%	3.78%	3.26%	22.20%	13.09%	18.51%	9.16%	1.30%	3.68%	14.98%	4.40%	8.82%
Other infrastructure	0.00	0.00	0.00	8.30	0.00	8.30	133.00	60.50	193.50	7.00	73.50	80.50	148.30	134.00	282.30
Percentage of Total	0.00%	0.00%	0.00%	4.44%	0.00%	2.08%	16.05%	10.70%	13.88%	1.17%	5.31%	4.05%	9.11%	5.90%	7.24%
Human resource development	0.00	21.17	21.17	0.00	31.83	31.83	10.00	72.10	82.10	0.00	207.30	207.30	10.00	332.40	342.40
Percentage of Total	0.00%	19.36%	17.42%	0.00%	15.03%	7.99%	1.21%	12.76%	5.89%	0.00%	14.97%	10.44%	0.61%	14.64%	8.78%
Nonproject lending	0.00	0.00	0.00	0.00	0.00	0.00	60.00	15.00	75.00	105.90	360.00	465.90	165.90	375.00	540.90
Percentage of Total	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	7.24%	2.65%	5.38%	17.63%	25.99%	23.47%	10.19%	16.51%	13.87%
Technical assistance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	6.00	1.00	62.50	63.50	1.00	68.50	69.50
Percentage of Total	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.06%	0.43%	0.17%	4.51%	3.20%	0.06%	3.02%	1.78%
Totals	12.20	109.34	121.54	186.80	211.74	398.54	828.70	565.20	1393.90	600.60	1384.90	1985.50	1628.30	2271.18	3899.48
Percentages	10.04%	89.96%		46.87%	53.13%		59.45%	40.55%		30.25%	69.75%		41.76%	58.24%	

Source: Adapted from Jones 1985; IDA's "Statement of Development Credits" (10/86); IBRD's "Statement of Loans" (9/86).

projects, were funded with IDA resources.

IBRD loans in agriculture helped to meet the Bank's overall lending targets for IBRD in each of the countries, while simultaneously meeting the McNamara guideline of allocating 25 percent of all resources to agriculture and rural development. Thus, the selection of parastatal agroprocessing projects in Kenya and Tanzania and capital intensive irrigation, or credit projects, such as those financed in Kenya, helped to create the impression that poverty was being alleviated because funds were being directed to the agricultural sector. In reality, however, the Bura irrigation project at a realized cost of $25,000 per hectare (or even at its originally estimated cost of $13,500 per hectare) was very capital intensive but created relatively few jobs. The same applied to the South Nyanza sugar project. The AFC agricultural credit projects provided little benefit to the poor because AFC's credit guidelines in the mid-1970s meant that those farmers whose holdings were less than 15 hectares were ineligible for seasonal credit. The Bank was able to get this limit reduced to 5 hectares by the beginning of the 1980s, but this still excluded the vast majority of small farmers. The Group Farms Project in Kenya similarly did not benefit many small farmers and much of the credit was cancelled due to faulty project design.

It is noteworthy that as a result of human capital development having been given low priority in the 1970s, nonproject lending in the 1980s entailed significantly increased amounts of technical assistance. The share of self-standing technical assistance projects increased from zero in the 1970-74 period to 2.3 percent for all MADIA countries from 1980-86 (see Table 24) and 3.2 percent for East African MADIA countries (see Table 26). In this regard, although the recent policy focus of the Bank is a welcome one, the Bank's demonstrated willingness to address the problems of basic institutional and human capacity—which likely require fewer financial resources but greater nurturing—appears to be still quite low. The Bank continues to opt in favor of measures such as technical assistance, which serve secondarily to prime the pump of lending. More flexible policies concerning the levels and composition of assistance to countries are essential if the current problem of neglect of institutional and human capital development is to be adequately addressed.

Lending to Kenya

The types of projects the Bank financed in Kenya and Tanzania in the 1970s were fairly similar.[41] They fell into two basic categories: (1) smallholder integrated area development projects and (2) parastatal operated projects directed mainly towards agroprocessing of export (or import substitution) crops—tea, coffee, sugar, tobacco, pyrethrum, and cashews. In addition, the Bank also financed a number of miscellaneous other projects in Kenya—a large-scale irrigation project, a series of four agricultural credit projects, a group farms project, and projects in semiarid areas.

These projects did not evidence a clear sense of priorities derived from an analytical perspective with respect to the types of investments needed to modernize smallholder agriculture in the early stages of development. They therefore did not reflect the concern for appropriate sequencing and phasing of activities that such a framework necessarily implies. Such a view would likely have stressed development of national capacity for agricultural research and extension and improvement of the policy, planning, budgetary, monitoring, and evaluation capacity in the agriculture ministries (including substantial investment in the training of nationals as well as in improving incentive systems in the governments in order to retain qualified staff). These emphases were to become priorities of the Bank in Kenya in the early 1980s, but only after the generally poor implementation experience of an overextended 1970s project portfolio.

Agroprocessing Projects

The number of agroprocessing projects was greater in Tanzania (8) than in Kenya (4).[42] Bank projects took the role of the public sector as given, especially in Tanzania, and reinforced its role through substantial investments in parastatals. The growing number of parastatals served as vehicles for channeling relatively large-scale, centralized investments in a reasonably short period of time. Indeed, it would have been much more difficult to provide this magnitude of resources to a decentralized, small-scale agroprocessing sector.

There were, however, other reasons for supporting public sector agroprocessing. Due to scale economies dictated by the lack of alternative technologies, large investments are required for processing some crops.[43] In the absence of a well-developed indigenous private sector, the development of public sector agroprocessing was deemed necessary.

The tea and coffee projects in Kenya represent probably the best example of Bank agroprocessing projects in Africa. The first two tea projects, funded in collaboration with CDC, helped establish smallholder production.[44] In addition, the provision of tea processing facilities through a third loan in the 1970s alleviated a major constraint to the otherwise well organized tea sector. The Bank also made a very important contribution to the analysis and resolution of KTDA's financial problems that resulted from the exchange rate losses that followed unanticipated devaluations.

The Smallholder Coffee Project financed by the Bank in 1980 also alleviated an important constraint to the development of smallholder coffee production by providing assistance for the rehabilitation or construction of cooperative factories. Coffee cooperatives in Kenya have on the whole been impressive in providing effective services to smallholders. The Bank contributed to this excellent performance by addressing the important problem of delays in coffee payments to producers.

The experience with the remaining agroprocessing projects has been less positive. Sugar processing projects in Kenya have had many problems. The South Nyanza sugar project was located in a drought prone area and inadequate production services were provided to the outgrowers by the sugar factory. The factory also experienced substantial cost overruns due to unanticipated exchange rate adjustments at the same time that world sugar prices collapsed, thus making imports more competitive.

The South Nyanza project stresses the particular vulnerability of projects that at the outset are only marginally profitable and are affected when world market prices move in the opposite direction to that predicted. The South Nyanza project was funded—as were several other projects in Kenya—partly in response to the government's concerns about regional income distribution. When shortages in cane throughput were encountered by the factory, the Bank recommended that the Government of Kenya raise its entire sugar price structure in order to improve producer incentives. However, this occurred in a situation where producer prices were already above import parity. Other sugar factories in Kenya had much lower cost structures and therefore could potentially earn considerable rents from increased prices (Lele and Meyers 1986, Chapter IV). Efforts by the Bank to also assist in the rehabilitation of the sugar sector in Kenya were undermined by the government's reluctance to engage in subsidiary financing agreements with the private sector and thus this project did not achieve its objectives.

Other "marginal" projects. The Bank's agricultural portfolio in Kenya in the 1970s had the effect of contributing to a level of expenditures in agriculture beyond the government's financial and administrative capability as well as increasing the marginality of the overall investment portfolio. It can be argued that the Bank ought to undertake high risk projects that are difficult to implement, while leaving those investments with higher and more certain returns to the government. Accepting this argument, the question then is one of whether in undertaking such risky investments the Bank's involvement helps reduce future risks for similar investments, and also whether its investments represent the most cost effective approaches. On both these grounds, the Bura Irrigation Settlement Project receives low marks.

When begun, the Bura project was by the Bank's own

admission quite costly, but this cost was justified on the basis of the government's keenness to invest in irrigation in order to relieve land pressure and create employment opportunities. A project of this magnitude should, however, never have been financed as Kenya had little experience in irrigation. There were many problems with soils and with the design of the irrigation system as well as with settling the target population in an inhospitable area.

Certainly once it became clear that cost escalations would be very high (total base costs in 1982 were 187 percent of appraisal estimates), the economics of the project should have appeared questionable and the government should have been persuaded to stop the project before the construction of the dams began. However, this did not happen. Several other projects in Kenya were similarly of questionable value when approved, e.g., the Group Farms Project, the second Integrated Agricultural Development Project, and at least two phases of the AFC credit projects. All performed poorly. For instance, considerable skepticism was voiced by technical staff in the Bank about the viability of the Group Farms Project and yet it was approved. As a consequence, much of the credit had to be cancelled because of farmers' lack of interest in group farming.

The first AFC agricultural credit project was quite successful in increasing the production of smallholder dairying, though this result was not one that had been anticipated in the project's design. Subsequent credit operations, however, expanded credit provision well beyond the institutional capacity of AFC and, although AFC's institutional weaknesses were quite obvious, continued to be approved. By 1986 the Bank was forced to consider alternative mechanisms to AFC for provision of credit.

The Cotton Processing and Marketing project was also a failure because of a host of problems not adequately anticipated in project appraisal. These included the lack of adequate research findings on cotton, institutional weakness of the cotton marketing board, the volatility of climate, and gloomy world market prospects.

The Integrated Agricultural Development Projects (IADPs) were found to be too complex. In the first IADP, 13 institutions and 5 ministries were involved and project coverage extended over four provinces, two of which suffered from problems of weak cooperatives, inadequate extension services, and questionable technical packages. Once again the Bank agreed to finance the first IADP, partly to oblige the government in meeting its politically important regional income distribution objectives. What is puzzling, however, is that a large follow-on second phase of IADP was financed even though the first phase was encountering major difficulties.[45]

The generally poor performance of the Bank's portfolio is shown in Table 27, which categorizes projects by reestimated economic rates of return. Since a number of projects would have very low ERRs but are still on-going (Bura, Baringo), or are ones for which PCRs either were not done (AFC III) or have not yet been officially issued (Sugar Rehabilitation), the overall picture is even less positive.

Issues Raised By The Bank's Project Lending Experience

The problems encountered in the Bank's project portfolio in Kenya suggest several general observations about the factors that have limited its success as well as factors that might contribute to increased success in the future.

Comparative advantage and world market prospects. The first issue arises from the Bank's tea and coffee projects. It has to do with the type of advice and financing the Bank should provide for crops with limited world market prospects in situations where countries producing these crops have a strong comparative advantage in their production. In the case of manufactured goods the Bank has consistently supported the principle of dynamic comparative advantage. In the case of tea or coffee, however, due to perceived conflicts among its various borrowers (e.g., Sri Lanka and India vis-a-vis East African countries) and the likely decline in their individual incomes from aggregate expansion of production, the Bank has stressed intensification of existing production and processing rather than area expansion.[46] Fungibility, of course, means that it does not particularly matter which investments the Bank finances. It is the marginal investments made possible by such financing that are of interest. In the Kenyan case the financing provided by the Bank for processing facilities for tea and coffee provided a strong incentive for smallholders to expand the area under cultivation, especially given Kenya's positive incentive price policies and effective services to smallholders. However, intensification of production (i.e., increased yields per hectare) that the Bank *did* seek to promote has not materialized in either tea or coffee (Lele and Agarwal Forthcoming).

Factors influencing decisionmaking at the farm level. The factors influencing intensification and the ways the government might assist in this process from the perspective of fostering both short and long-term growth are areas that require detailed analysis. Indeed, the lack of farmer uptake in a number of the Bank's projects (the Narok, AFC, and Group Farms projects) suggests a more general point, namely, that despite the Bank's substantial investments in smallholder agriculture in Kenya, relatively little is known concerning the factors that influence small farmer decisionmaking. Similarly, despite the Bank's substantial investments in tea, relatively little systematic knowledge exists about the factors affecting resource allocation in tea production.[47]

Influence on allocation of capital. The third issue relates to the Bank's influence on resource allocation decisions made by the government. Bank-supported projects in the 1970s, though undertaken to assist the government in achieving regional equity objectives, nonetheless absorbed disproportionately large shares of scarce Kenyan public sector financial and administrative resources for activities that achieved low rates of return. This diversion of resources has had both a human capital and a financial dimension. The former is hard to quantify, but is reflected on the one hand in the demands made on scarce administrative and manpower resources and, on the other, in the postponement of necessary investments in agricultural research, rural physical infrastructure, and human capital.

The problem of misallocation of resources can be succinctly and graphically illustrated in numerical terms. Bank-sponsored activities in just four subsectors—Bura, Sugar, IADP, and AFC, all of which were marginal projects—accounted for at least half of the MOA's development expenditure budget during the 1977-78 to 1982-83 period. Total gross budgetary expenditures by MOA increased by 46 percent in these five years or at an annual rate of 9.2 percent in nominal terms. Irrigation expenditures, of which Bura represented the major portion, reached a peak of KSH

Table 27
Projects' Economic Rates of Return (ERR)[a] (millions of US$)

0% > ERR		10% > ERR > 0%		20% > ERR > 10%		ERR > 20%	
Projects	Amount (millions of US$)	Projects	Amount (millions of US$)	Projects	Amount (millions of US$)	Projects	Amount (millions of US$)
Kenya							
IADP	20.0	—		Smallholder Credit I	4.19	Tea Development I	3.29
Group Farms	15.00					Tea Development II	2.12
South Nyanza	25.00					Smallholder Credit II	6.00
Malawi							
—		Lilongwe II	7.41	Shire II	10.50	Shire I	4.30
		Karonga I	6.61	Karonga II	9.20	Lilongwe III	8.50
		Shire III	10.70				
Tanzania							
Kigoma Rural Development	10.00	Kilombero Sugar	18.00	Flue-cured Tobacco	9.07	—	
National Maize	18.00			Smallholder Tea Development	10.84		
Tabora Rural Development	7.20						
Geita Cotton	17.50						
Cashewnut Development	21.00						
Tobacco Processing	8.00						
Tobacco Handling	14.00						
Total	**155.70**		**42.72**		**43.80**		**24.21**
Cameroon							
Cocoa	6.50	CAMDEV II	15.00	CAMDEV I	20.26	SEMRY Rice I	3.70
				SOCAPALM I	7.90	SEMRY Rice II	29.00
				Niete Rubber Estate	16.00		
				SOCAPALM II	25.00		
				HEVECAM II	31.5		
Nigeria							
Ondo Oil Palm	17.00	Lafia ADP	27.00	Gusau ADP	19.00	Western Cocoa	7.20
Bendel Oil Palm	29.50	Ayangba ADP	35.00	Gombe ADP	21.00		
Rice	17.50			Funtua ADP	29.00		
				Cocoa II	20.00		
Senegal							
Sine Saloum	14.00	River Polders	4.50	Agriculture Credit II	8.20	Terres Neuves I	1.37
		Sedhiou II	6.30	Terres Neuves II	2.00	Casamance Rice	3.72
Total	**84.50**		**87.80**		**199.86**		**44.99**
Grand Total	**240.20**		**130.52**		**243.66**		**69.20**

[a] Projects that have not been completed, or for which ERR's were not established, are not included.
Source: Jones 1985; various PCR's and PPAR's.

9 million or 28.4 percent of the development budget in 1981-82, and sugar accounted for KSH 7.5 million (18.6 percent) in 1982-83. Together these two activities alone accounted for just over 40 percent of the development budget in 1981-82 and 1982-83.

Riskbearing. A related issue concerns risk-taking behavior by the Bank. The relatively poor record of the Bank's agricultural portfolio in Kenya in comparison to Kenya's overall agricultural performance can be explained only to a limited extent by the Bank's willingness to be innovative and take risks. The poor performance of the portfolio in the 1970s stemmed more from a tendency to acquiesce to the government's political objectives and to undertake quite risky marginal projects. Moreover, subsequent phases of these projects (IADP and AFC) were approved even though the earlier phases had not demonstrated effective results.

Undue risks were undertaken when evidence indicated that projects were unlikely to be feasible, yet strong actions were not taken to stop such projects. For example, when major cost escalations for the Bura irrigation dam became evident, the Bank took a far more optimistic posture toward the expected internal rate of return than the evidence from the project appraisal or subsequent supervision experience would appear to have warranted. Thus the government ended up having to provide financing for a substantially greater investment than was originally envisaged.

As a result of the above problems, the overall quality of the Bank's portfolio suffered. Moreover, the anticipated long-term gains in country relations that were to have resulted from maintaining or increasing lending levels did not materialize.

The Bank's shift to a tougher posture after the late 1970s, at a time when Kenya was facing serious macroeconomic difficulties, was, of course, justified on grounds of Kenya's overcommitments. But the contribution of the Bank's poor project portfolio to this situation tends to be overlooked—as does the possibility that this factor affected Kenya's receptivity to Bank overtures during and following the SAL process.

Despite the above problems, it is important to point out that there has been a significant change in the Bank's approach to the agricultural sector in the last four years—much of it in the very desirable direction of improving agricultural research, extension, credit, and marketing capacity on a subsectoral basis. In this connection, it is necessary for the Bank to use its considerable influence in its policy dialogue with the government to press for development of Kenya's own planning and analytical capacity. This will involve getting the best Kenyan manpower to work on the problems of agriculture, as well as engineering a larger supply of such manpower—as opposed to a continuing reliance on the short-term palliative of external technical assistance.[48]

Any comprehensive effort to address the above analytical and management constraints will obviously require a dialogue between the Bank and the government about setting up mechanisms by which the best Kenyan minds can be deployed (and retained) to work on Kenya's policy problems on a long-term basis. It will also mean the Bank will need to seek help from other donors, e.g., the United States, in achieving this objective, as the Bank does not have a comparative advantage in providing long-term financial support to Kenya's university and research institutions that are engaged in agricultural and socioeconomic research. It will require investment in increasing the supply of Kenyans with postgraduate training in disciplines that are important for formulating and implementing effective agricultural policies.

Structural Adjustment Lending

Increasing economic difficulties in the second half of the 1970s led Kenya to seek support from IDA and the IMF. This resulted in the financing of the first Structural Adjustment Loan (SAL). The first SAL did not involve an agricultural component. Instead the Bank began an increased program of sector work on agriculture in the early 1980s. The second SAL (US$ 130.9 million) included components designed to address "key" constraints in the agricultural sector. Specifically, the program was to support: (1) reforms of pricing and marketing policies, (2) regularization of land subdivision, and (3) removal of budgetary and management bottlenecks.

Relatively little policy action was forthcoming from the government in the above three areas, suggesting that the Bank and the government were not equally committed to the set of reforms specified in SAL II. It is also likely that commitment to these objectives varied within the government. The one exception to this has been the progress made in the area of planning and budgeting in the Ministry of Agriculture, which has in turn led to similar reforms in other government ministries.

The Bank has recently moved toward a broader approach to agricultural development in Kenya. In support of general economic and agricultural reforms, in 1986 it approved two operations that demonstrate a more comprehensive vision of future agricultural development in Kenya, namely, the Agricultural Sector Adjustment Operation (US$ 20 million) and an Agricultural Sector Management Project (US$ 11.1 million), both using IDA funds. The latter involves a technical assistance project designed to support the strengthening of major agricultural institutions in the public sector while also providing support for reforms promoted by the Agricultural Sector Operation.

The Agricultural Sector Operation involves an import support component to fund fertilizers, pesticides and chemicals, agricultural machinery and spare parts, veterinary services, seeds, petroleum, and transport equipment for the sector. In addition to the inputs component, the Sector Operation contains a further set of ambitious objectives for its short (two year) time frame. It seeks to (1) improve production and investment incentives with a focus on prices, marketing, and private sector development; (2) implement programs of parastatal reform including divestiture and rehabilitation; (3) support futher restructuring of the public investment and expenditure program; and (4) increase the flow of credit to smallholders.

The initiatives contained in these two new efforts are clearly steps in the right direction. In light of the problems noted earlier in the Bank's past lending program, the question needs to be raised whether they involve too many initiatives spanning too many institutions within too short a time period. They also convey great optimism about the extent to which, and the pace at which, the government will be willing to significantly alter past policies. The experience of the past twenty years demonstrates that the Bank has been consistently overoptimistic about proposed policy changes.

Finally, after 26 years of involvement in Kenya, the Bank is now considering financing an agricultural research project. While supporting an effort to improve Kenya's agricultural research capacity, one must recognize that this is a

formidable task in which success will only be realized over the long term (Lele and Goldsmith 1989).

Lending to Tanzania

Although the Bank provided some assistance to the Tanzania Rural Development Bank for onlending of agricultural credit, lending to Tanzania has been mainly concentrated in two areas: (1) support for crop parastatals and (2) support for regional integrated rural development projects.[49]

Support for Crop Parastatals

IBRD and IDA have provided loans and credits of $261 million in support of various crop parastatals handling tea, cotton, cashews, sugar, tobacco, pyrethrum, and grains. The total costs of these investments were, however, even larger because the government and other donors also provided funding for these projects (see Annex).

The objective of the first tea project (in 1972) was to improve tea processing, handling, marketing, extension, and cooperative services. As in the case of the tea factory project in Kenya (financed in 1974), the project in Tanzania focused on intensification of smallholder tea. However, as was also true in Kenya, the result was largely an increase in the area under cultivation rather than increased intensification. This was followed by the financing of a smallholder tea consolidation project in 1980. As Part I indicated, smallholder tea is one of the few crops that has shown positive growth—13.7 percent annually—in production in Tanzania. The tobacco processing (1976) and handling (1978) projects were aimed at improving these functions in the tobacco subsector. The Kilombero Sugar Project in 1974 (like the South Nyanza project in Kenya) financed the construction of a sugar factory and the establishment of a nucleus sugar estate as well as services for outgrowers.

The two cashew processing projects in 1974 and 1978 financed the mechanical processing of cashews. The 1980 Pyrethrum Project financed improvements in smallholder production of pyrethrum. Finally, the Grain Storage and Milling Project was, despite its name, undertaken primarily to address the problem of inefficiency in the grain marketing board (NMC), which had accumulated financial losses of TSh 3 billion by the end of the 1970s.

The above agroprocessing projects in Tanzania generally did poorly because of crop production failures. Project appraisals in the 1970s did not fully anticipate the effects of the government's policies towards the smallholder sector (outlined in Part I of this paper), which led to either stagnation or decline in the production of most export crops.

The Bank, moreover, did not question the monopsony functions of the parastatals involved in agroprocessing. In fact, by channeling nearly half of its total commitments to the agricultural sector directly to the parastatals, it inadvertently reinforced their already dominant position. By 1983, however, the Bank's Agricultural Sector Report concluded that "due to overwhelming institutional and national problems this assistance [to parastatals] has had little positive effect" (World Bank 1983, p. 70).

Tanzania has the highest number of projects with zero or negative rates of return among all MADIA countries (see Table 27). Of the ten Tanzanian projects audited by OED only two (Flue-Cured Tobacco and Smallholder Tea Development) had economic rates of return over 10 percent, one (Kilombero Sugar) had a rate of return of 4 percent, and 7 (Kigoma, National Maize, Tabora, Geita, Cashew nut, Tobacco Handling, Tobacco Processing) had negative rates of return. The audits were done soon after completion of these projects and the situation in these crops has deteriorated further since then. It is doubtful if the Kilombero Sugar or the Tobacco Projects would now show a positive rate of return. In view of the fact that 22 percent of the total $133.6 million borrowed for these projects was on IBRD terms, it is clear that Tanzania would have been better-off if it had not borrowed for these projects.

Support for Regional Development Projects

The projects that received the most attention in Tanzania in the mid-1970s were the rural or regional integrated development projects (RIDEPs). While the RIDEPs in Kigoma (1974), Tabora (1977), and Mwanza/Shinyanga (1978) varied in emphasis, they had in common a multisectoral approach to the development of a geographical area.

Government actively pursued donor financing for RIDEPs. As in Kenya, it viewed these projects as a vehicle for spreading development assistance throughout the countryside, especially to the traditionally poorer, neglected regions. The idea was appealing to the Bank (and to other donors) for both developmental and pragmatic reasons. Given the decentralized governmental system in Tanzania, donors were able to channel resources to several sectors at once, rather than having to deal with different central ministries. Also the number of beneficiaries reached through these agricultural and rural development projects increased, giving the impression that the donor poverty alleviation mandates of the 1970s were being met. By the end of the 1970s most regions were covered with RIDEPs funded by various donors (i.e., France, United Kingdom, EEC, USAID).

Most of these projects were prepared and implemented through the provision of technical assistance. Given their complexity, the government had insufficient capacity to plan and implement such projects. The government was less willing to accept technical assistance for World Bank RIDEPs than for those of other donors, e.g., France and USAID, on grounds that IDA resources were expensive compared to those acquired with grant money. The bilaterals recruited their own technical assistance, whereas the Bank policy was to minimize its involvement in administering this assistance.

The RIDEPs often included social welfare components that only marginally contributed to economic productivity, i.e., water supply, schools, and health clinics. The projects were also frequently not located in the areas of agricultural potential, e.g., Kigoma, Mwanza, and Tabora. They were often justified on grounds of improving interregional equity, but the crops they frequently focused on (usually food crops) were not the ones with the greatest income earning possibilities. For instance, few resources were devoted to the development of tobacco in Tabora or to cotton in Mwanza/Shinyanga in much the same way that donor funded projects in Africa in the 1960s had completely overlooked concern for food crops and had concentrated solely on export crops.

Performance in these projects was so far below expectations that the Mara RIDEP, a project the Bank had already appraised and negotiated in the early 1980s, was not presented to the Bank's Board for approval. Due to the macropolicy and sectoral policy environment in Tanzania, the RIDEPs also suffered from lack of trained Tanzanian

manpower, frequent institutional changes, and shortages of recurrent financing, fuel, and spare parts. Officials also frequently commandeered vehicles and equipment provided by the Bank for Party or personal use.

The difficulties of implementing complex multisectoral projects, even in the absence of macro and structural constraints, had already become evident by 1974. A World Bank-initiated study of African rural development designed to suggest lessons for Bank operations documented this evidence (Lele 1975). The findings of the study were endorsed by the Bank and were reiterated in an agricultural and rural development sector study on Tanzania at approximately the same time.

The interesting question is why these integrated projects were financed in light of the evidence of the study. It is evident in retrospect that the spirit of Mr. McNamara's Nairobi speech was congruent with the spirit of Mr. Nyerere's Arusha Declaration. Both contributed to the Bank's decision in 1973 to go ahead with the Kigoma project. Once begun the momentum developed by these projects was difficult to curtail. Also, as pointed out in the section on policy analysis, the Bank was slow to confront the consequences of the policy failures that were increasingly becoming obvious in Tanzania.

Structural Adjustment Lending

By the end of the 1970s Tanzania's domestic economic crisis had been accentuated by the breakup of the East Africa Community, the Ugandan war, the second oil shock, and the drop in commodity prices following the coffee boom. Project implementation was hampered by a shortage of foreign exchange for recurrent costs, spare parts, and fuel. The government therefore approached the Bank in 1981 for balance of payments support.

As in the case of Malawi and Kenya, little systematic macroeconomic or sectoral analysis existed in the Bank on constraints to growth. Thus there was insufficient knowledge that could be used to stipulate the conditions necessary for government reform, although the project lending experience in all sectors had certainly provided abundant evidence of the existence of various constraints to growth. The Bank's broad mandate to use structural adjustment lending to obtain macroeconomic and sectoral policy reform had not yet been agreed to by the Bank's major shareholders. Thus the 1981 Export Rehabilitation Credit of $50 million was from the Bank's perspective fairly conservative in terms of the conditions on which it sought government agreement. It appeared quite radical to the government, however, which was not ready to consider such drastic reforms.

The major objectives of the credit were to increase the allocation of scarce resources to the agricultural sector, to improve incentives for export production through a foreign exchange retention scheme for exporters, as well as increase producer prices. These reforms were, however, too small in relation to the extent of overvaluation of the currency and greatly overexpanded government expenditures. The Bank's export rehabilitation credit therefore had relatively little positive impact, although it perhaps avoided to some minor extent a further decline in Tanzania's export agriculture.

In 1984-85 the government adopted a number of reform measures, including the devaluation of the shilling from TSM12 to TSM17. However, the shilling still remained hopelessly out of line with the market rate, which was 5 to 10 times the official rate. Official producer and consumer prices and prices of inputs were also raised sharply to reduce budgetary subsidies. The National Milling Corporation was declared to be the buyer and seller of last resort. Cooperatives were reintroduced as the primary agents for procurement, storage, and delivery of export crops. Marketing boards were created to undertake the remaining responsibilities of crop authorities. Several public enterprises in the agricultural and the industrial sector were dissolved and the number of ministries was reduced from 22 to 15. The foreign exchange retention scheme introduced under the Bank's export rehabilitation audit was expanded. Discrimination against the agricultural sector continued in the foreign exchange retention scheme as only 10 to 15 percent of the foreign exchange could be retained by traditional mostly agricultural exporters, whereas 50 percent to 100 percent could be retained by nontraditional mostly manufacturing exporters.

The effect of the above reforms was rather short-lived. In 1985-86 the lack of adjustment in the exchange rate and only small adjustments in producer prices (20 percent) weakened the effectiveness of these measures, given the domestic inflation rate of 30 percent.

Aid coordination meetings had come to a halt in Tanzania after 1977. The government did not want to provide a forum in which the donors could "gang-up" against it to press for policy reforms. The so-called "friendly donors," i.e., Sweden, Denmark, Norway, and the Netherlands, shared the government's concern on this matter.

In November 1986, after a hiatus of five years in Bank funding to the agricultural sector, the Bank approved an IDA loan of US$50 million and a special African Facility loan (US$46.2 million) for a multisector rehabilitation effort.

In June 1986, however, the first Consultative Group meeting in nine years was held for Tanzania based on a number of measures the government had already undertaken or proposed to undertake. For example, the government announced the devaluation of the shilling to US$40 and stated its intention to eliminate overvaluation by 1988 by devaluing at a rate equal to or greater than 1 percent per annum in real terms. It proposed to dismantle quantitative restrictions and to switch to tariffs. It indicated its intention to reconsider foreign exchange retention rates so as to eliminate discrimination against agriculture, to impose limits on borrowing by the six major crop marketing boards and NMC, to reduce budgetary deficits, to restructure the public investment program, and to undertake a study of parastatal efficiency. Price controls were also to be reduced from a total of 400 to 47 (over 1,000 prices were controlled in 1981). The practice of confining imports of goods to specific parastatals was to be dismantled. Lastly, in agriculture, producer price levels were to be 60 to 70 percent of f.o.b. prices (or to result in at least a 5 percent increase in real terms, whichever was higher).

Grain trade from farm gate to consumer was liberalized. NMC as well as individuals were permitted to move up to 450 kilograms (five bags) across regional borders without a permit. Permits would still be needed for interregional trade, although even these were to be abolished by March 1987.[50] The quality of produce was to be improved by giving premiums for higher grades.

Private estates were to be allowed to undertake their own exports. Cooperative unions and other producers were also going to be encouraged to undertake exports, as well as to import and distribute seeds and fertilizers. Studies

were to be undertaken of seed, fertilizer, and crop marketing.

There is once again much excitement in the donor community (similar to that noted after Mr. Nyerere's famous speech 10 years after the Arusha Declaration) about the potential change that will result from the above announced intentions. Aid commitments have already begun to increase in response to these statements. However, the history of policymaking in Tanzania is one where a strongly entrenched and highly ideological political party has wielded a great deal of influence over policymaking (much more than in Kenya and Malawi where technocrats play a greater role). Also, Tanzania has in the past shown greater willingness to introduce controls than to implement new policy reforms. Thus, before large aid commitments are once again flowing, it will be important to have clear agreements with the government on specific reforms that will be implemented, to carefully monitor this implementation, and to stand ready to stop lending if reforms are not implemented in good faith.

Lending to Malawi

Integrated Rural Development

In Malawi the Bank focused almost exclusively on the problems of smallholder production by funding integrated area development projects. The Lilongwe Development Project was the showpiece. Started in 1967, the Lilongwe project was the forerunner of a series of integrated rural development projects (IRDPs) in Malawi and elsewhere in Africa (Lele 1975; Lele, Oyejide, et al. 1989). Eleven integrated area development projects (see Annex) were approved in Malawi. These included Shire in 1968, a second Lilongwe in 1971, the Karonga and Shire projects in 1972, a third phase of Lilongwe in 1975, followed by a second phase of Karonga in 1976, and a third phase of Shire in 1978. IDA, IBRD, and government commitments to these eight projects totaled US$70.8 million. It is noteworthy that US$62.5 million or over 88 percent of these resources came from the Bank.

Three additional projects were financed when the Bank began to shift away from an intensive area development approach in 1978 and the first National Rural Development Program (NRDP) was begun. The NRDP involved a modification of the IRDP approach with greater emphasis on provision of agricultural inputs and farm services and less emphasis on intensive staffing and on infrastructure. The cost of NRDP I, US$66.0 million, was similar to that of earlier area development projects (US$56 million of which was financed by a number of donors—IDA, CDA, CDF, United Kingdom, Germany). Subsequent phases of NRDP were financed by the Bank in 1981 and 1983.

The above IRDP projects sought to increase the productivity of both livestock and smallholder crops such as maize, groundnuts, tobacco, cotton, rice, beans, and potatoes. Their emphasis was on group credit, input supply, and extension. The initial Lilongwe projects involved a much heavier emphasis on improvement of physical infrastructure (i.e., roads and soil conservation) than did the subsequent area or national projects.

The most important weakness of these projects concerned the lack of attention to sequencing and phasing of investments. Large investments in physical infrastructure, office buildings, and expansion of the agricultural service staff were undertaken without first developing profitable technical packages for crop production.[51] This occurred despite the fact that project implementation experience repeatedly demonstrated the poor performance of technical packages.

One consequence of these expenditures on infrastructure was a substantial growth in government capital and recurrent budgetary commitments in the agricultural sector once Bank funding was phased out. However, without an increase in productivity or in production growth, it was difficult to sustain these expenditures. It is also important to recall that, as indicated in Part I of this paper, much of the benefits from these expenditures were being captured by the government through a producer pricing policy and were being invested in the rapid expansion of the estate sector.

The Bank was relatively slow to recognize in the 1970s that technological and price constraints were inhibiting the growth of smallholder production, although IRDP project evidence had pointed in this direction since 1972. The Audit Reports for selected projects make this abundantly clear—Shire Valley Phase I: "The maize component was just 'thrown in' at the last minute...no varieties of maize existed that were suitable for the project area" (p. 3); Shire Valley Phase III: "...there was no proven technology available to be extended to farmers" (PCR, 4.5.5). Yield targets for maize and sorghum were not achieved due to unavailability of drought resistant seeds (PCR, 4.6.5.); Lilongwe Phase I: "Maize yields showed no sustained increase and groundnut yields decreased. Poor weather may have been partially responsible. There is no discussion of the viability of the technical packages" (PPAR, pp. ii and 10); Second Karonga Rural Development Project: "Survey evidence shows that the percentage of farmers following extension advice declined for most part in the second phase of the project. Data suggest that the second phase project failed to introduce new technology to additional farmers" (PPAR, 10-11).

While the Bank was obviously aware of the problem of poor adoption of technical packages, later phases of preparation for Lilongwe and NRDP continued to emphasize improving infrastructure, extension, and marketing services. When it became evident that investments in area development projects were too expensive in terms of the manpower and finances required for reproducing this approach on a country-wide basis, NRDP consolidated its coverage and the projects provided services on a less intensive basis. The emphasis nevertheless still continued to be on extension, which along with credit was to take up 40 percent of the costs; other costs were road construction (26 percent), credit (12 percent), health (6 percent), and forestry (5 percent).

The problem of slow adoption of improved maize is to date still a significant one. Thus, in spite of 11 separate Bank-funded rural development projects with commitments of close to US$104.3 million, only 8 percent of acreage in Malawi is currently under improved maize compared to 60 percent in Kenya.

A willingness to ask searching questions about underlying technical problems occurred only in the 1980s. The lack of growth of smallholder agricultural production from investments in the area development projects in Malawi in the 1970s led to two new types of financing. On the one hand a number of functional projects were financed in support of agricultural research, fertilizer distribution, and extension, all designed to alleviate the constraints that had been identified by the area development projects. On the other

hand, the SAL's addressed the issues of agricultural prices, subsidies, and public expenditure patterns.

One of these new initiatives, the Bank's 1985 Agricultural Research Project, resulted from high quality work undertaken by Bank staff in Malawi on analysis of local technological requirements. It would appear that the issue of technological constraints is at last receiving the attention it deserves.

Overall Project Impact

Smallholder agriculture in Malawi has not suffered from rapid changes in institutions serving agriculture nor from macropolicy distortions to the same degree as in Tanzania. However, as in the other two countries, area development projects suffered from technological optimism conceived without socioeconomic review and were dependent upon planning and implementing resources on a scale well beyond what Malawi had available. There has therefore been an even longer period of heavy reliance on expatriate manpower for planning and implementation than in Kenya and Tanzania. Malawi's institutions have generally been well run and a surprisingly large number of well trained Malawians have taken over agricultural management and, increasingly, policymaking, despite the extent and length of the expatriate presence.

The above relatively favorable macro and administrative environment has meant that project implementation has generally been carried out satisfactorily. This may partly explain the fact that of the seven agricultural projects audited by OED in Malawi, not a single project was estimated to have had negative rates of return; two (Lilongwe II and Karonga I) had ERRs of 8 percent and 6 percent, respectively, three (Shire II, Shire III, and Karonga II) were estimated to have ERRs of 13 percent, 15 percent, and 14 percent, and two (Shire I and Lilongwe III) had ERRs of 25 percent (see Table 27). One must qualify these estimates somewhat, given that in most cases the data were not adequate to precisely calculate benefits, especially in light of the subsistence nature of food crops and the weather fluctuations involved. Also ERRs were calculated immediately upon completion of these projects and sometimes reflected a degree of optimism concerning their achievements based on marketed food production that has not been borne out in other data on Malawi's agricultural performance. Recall also the earlier observation that Malawi's nutritional levels are still some of the lowest in Africa.

In spite of the above qualifications, the quantifiable impact of the Bank's project involvement has undoubtedly been greater in Malawi than in Tanzania. One of the main causes of the relatively limited impact has been the Bank's excessive focus on investments while not devoting adequate attention to matters of implicit and explicit agricultural taxation, technological constraints, land access, and smallholder participation in export crop production. The Bank has taken measures to address at least two of these, namely, agricultural taxation and technologies (although it is not clear that major technical breakthroughs will occur relatively quickly in rainfed crops like cotton and groundnuts). A major lesson of the Malawian experience is the need to take a holistic view of agricultural development. Otherwise critical issues such as land access and rights to grow export crops are not addressed.

Structural Adjustment Lending

There have been three SALs; a fourth is under negotiation. The first SAL in 1981 did not contain many policy conditions as the Bank had not undertaken sufficient background sector work when it was approved. The second (1984) and third (1985) SALs have had substantial agricultural components. Important emphases of these SALs affecting agriculture include the following: improved producer prices for smallholders, estate diversification, restructured Pr[illegible] Holdings, ADMARC's asset rationalization, [illegible] recovery, improved operational efficiency of parastatals, abolition of fertilizer subsidies, increased allocations to agriculture, health, and education, and reduced expenditures on government buildings.

Progress achieved by the SALs in four major areas critical to long-term growth are summarized below. Also indicated are several areas in which additional progress would be desirable.

Slow growth of smallholder exports. The SAL process has resulted in a significant restructuring of producer incentives for export crops, especially with respect to their relationship with the price of maize (the latter was raised by 61 percent in 1981 leading to substantial accumulation of stocks at the cost of decreased export crop production). SALs II and III have progressively aimed at bringing smallholder producer prices for cotton, groundnuts, and tobacco closer to export parity.

The above correction of price incentives has, however, not resulted in as significant a price response as had been expected. This has prompted a recognition that the factors underlying the slow adoption of improved practices are not well understood (somewhat belatedly, given the project experience of the 1970s and the emphasis in the early 1980s on the need for improvement in the fertilizer import and distribution system, and the agricultural extension and research systems). The Bank's current agricultural diversification study is expected to lead to an increased understanding of these factors. It should be stressed again, however, that the Bank has been slow (in all three countries) in recognizing the need for long-term, systematic collection and analysis of farm management data in order to acquire an understanding of basic micro-level constraints.

Diversification of the export base. The Bank has emphasized the importance of diversification of the estate sector. However, investments will have to be made in the smallholder sector to encourage diversification of production of export crops. Smallholder export crop development cannot occur without public investments in rural infrastructure marketing and processing such as occurred in Kenya. While there has been some growth in smallholder tea and coffee production in Malawi (only 12 percent of tea is produced by smallholders in Malawi), on the whole the Bank has not addressed the issue of diversification of smallholder export crop production. Also, the issue of licensing of smallholder production of tea, coffee, burley, and flue-cured tobacco will need to be addressed in order for there to be future expansion of export crops in the smallholder sector. The current emphasis on increasing the efficiency of estates (medium and long-term credit, management training, and extension) may be diverting attention away from this basic issue, which will have a profound effect on the nature of future project investments in Malawi.

Budgetary considerations. It was pointed out earlier that the Bank's agricultural project investments contributed to

the expansion of Malawi's recurrent budgetary expenditures. While the Bank became aware of the budgetary implications of its own investments through an excellent analysis completed in the context of the NRDP Review in 1982, this did not result in a reduction of project financing until the emphasis in the Bank's dialogue shifted from project lending to SALs.

Budgetary concerns in the SALs have focused on the issue of intersectoral resource allocation, e.g., pleas for increased budgetary resources for agriculture, education, and water supply, as well as for reducing the government's share of expenditures on the construction of government office buildings. One result of the focus on improved resource mobilization through increased cost recovery has been the removal of fertilizer subsidies. This is understandable on budgetary grounds, especially in view of increased producer prices for smallholder crops, but it is nevertheless somewhat ironic in view of the fact that the Bank had in the course of its project lending persuaded a reluctant Malawian government to introduce subsidies, based on the rationale that the process of fertilizer use was still in the early stages in Malawi. (Also, as noted above, slow adoption has been a persistent problem to date.)

While cost recovery considerations are indeed important, they must be balanced against other considerations such as incentives for technology adoption. Nearly 80 percent of fertilizer use in the smallholder sector in Malawi is on relatively low value maize compared to Kenya where the majority of the fertilizer use is on high value export crops. Yet only 8 percent of the area under maize in Malawi is planted with improved varieties compared to 60 percent in Kenya. Provided the Bank continues to stress the need to develop a solid understanding of farming systems constraints, the removal of fertilizer subsidies may not be a serious problem. Nevertheless, it is important to view this issue, and technology adoption in Malawi in general, from a comparative perspective in order to fully appreciate the extent of Malawi's less advanced technological progress.

Parastatal financing. The Bank's concern with ADMARC's efficiency in the course of SALs has led it to focus on three aspects: (1) day-to-day operations, (2) those resulting from ADMARC's investments in Press Holdings, and (3) those arising from government pricing policies.

The lack of earlier Bank attention to the issue of ADMARC's efficiency appears in restrospect to have been partly a result of the fact that, unlike its counterparts in Kenya and Tanzania, ADMARC has had ample surpluses with which to operate without needing to be strictly cost effective—a fact the Bank overlooked. Indeed, until quite recently, the Bank regarded ADMARC as a relatively efficient organization. The Bank's new position on ADMARC's efficiency seems to result partly from the losses stemming from its having to finance accumulated maize stocks, which resulted from a government policy decision to raise maize prices by 61 percent in 1981—a decision over which ADMARC had no control.

An additional concern arises from ADMARC's loans and equity in Press, an issue the Bank also overlooked in the 1970s. The Bank's 1975 Economic Report described estates as privately owned and benefiting from favorable tobacco prices, liberal trade and payment arrangements, and relatively modest taxation. Competition between use of ADMARC's resources for the estate versus smallholder sector, especially for credit, were noted in the same report, but this was not pursued further. The restructuring of ADMARC's finances in the course of the SALs has involved efforts to reduce ADMARC's financial role in Press. This has proven to be a lengthy process although much progress has been achieved.

ADMARC's need for strengthened financial management and increased efficiency stem in part from the serious liquidity problems it has faced due to the sharp fall in the export price of tobacco in 1985 and fewer maize exports than expected. The restructuring of ADMARC has also involved efforts to enable its management to concentrate on its primary marketing function, selling off entities that have no direct bearing on its agricultural marketing operations (including swapping of assets with the Malawi Development Corporation), and assessment of its monopsony position in marketing to determine the potential for involvement of private traders in smallholder marketing. Government efforts were also expected to improve smallholder producer and output pricing, taking into account the effect of these on ADMARC's financial health.

Land policy. Lastly, in light of the analysis in Part I of the effects of policies toward land allocation in the smallholder and estate sectors, this paper will once again call attention to the critical importance of land distribution in Malawi for future growth. Despite the very useful Land Policy Study carried out by the Bank, to date structural adjustment lending has not exerted a major influence in this essential policy area. There are recent proposals, suggested as part of the preparation for SAL IV, that call for three studies of land issues. These are a nationwide land use and soils capabilities study, a study of pilot efforts to register land titles under the Customary Land Act (security of tenure, effect on productivity and conservation), and a study to measure the comparative efficiency of the smallholder and estate sectors in their utilization of the factors of production and adoption of technologies. Given the continuing expansion of land under estates, few policy issues are more urgent and more important to the structure of future agricultural growth in Malawi than that of land policy.

Conclusion

This paper has examined the extent and patterns of agricultural growth in Kenya, Malawi, and Tanzania since the mid-1960s. Part I described the contributions of macroeconomic and sectoral policies to agricultural growth in each country. Using the analysis of performance and policies presented in Part I as the background, Part II has reviewed the World Bank's economic and sectoral analysis and advice in each country, as well as its experience with project and structural adjustment lending. In short, this paper has examined two basic questions: (1) where has agricultural growth occurred in the three countries and what factors serve to explain this growth? and (2) what has been the particular role of the World Bank in contributing to this growth?

Country Policies and Performance

Part I, briefly summarized, indicates that Kenya and Malawi have done quite well in terms of growth of export crop production but Kenya's performance has been far superior in reconciling growth with equity. Tanzania has done least well on growth of export crops, including those grown by smallholders. Tanzania's efforts to sustain policies to promote equity have been severely hampered by lack of economic growth. Malawi's strong export growth has diverted attention from an examination of the basic structural constraints to increased smallholder production as well as attention to technological constraints that have adversely affected smallholder performance.

Kenya's and Malawi's macroeconomic policies have been far more conducive to growth than those of Tanzania. These two countries have also provided a more stable institutional environment for development than Tanzania. Kenya built on its admittedly superior institutional base inherited at independence to broaden smallholder access to institutional services. Malawi maintained a narrow base in favor of the estate sector at the cost of incentives and investment opportunities for the smallholder sector. Tanzania's experiments with different institutional arrangements destabilized the environment for smallholder production resulting in substantially reduced production of most cash crops, including critical export crops.

The Role of the World Bank

Descriptions of specific Bank contributions in individual countries have been set forth in Part II in some detail. This brief conclusion abstracts from that discussion a number of observations about the Bank's operations that are more general and cross-cutting.

The Bank's consistent focus on the importance of the smallholder sector for overall economic growth has been noteworthy in all three countries. In spite of this, the achievements, with the exception of those in smallholder tea and coffee in Kenya, have been relatively limited. The Bank's greatly expanded lending for agricultural and rural development in the 1970s resulted from broad policy initiatives at the top management level as well as from external factors, such as the general international economic environment of the 1970s. These factors had a significant influence on the character of the Bank's development assistance for agricultural development—even more so than did country specific constraints, the Bank's rich operational experience, and the substantial expertise of its staff. In light of these considerations, it is not surprising that the Bank's assistance was not particularly effective in achieving equitable growth, especially where the policy and institutional environments were not favorable.

A further consequence of this "investment approach" stems from the fact that agriculture is a poor direct absorber of capital at the early stages of development. Its ability to use capital efficiently is highly dependent on the complementary development of other sectors, especially the infrastructure and education sectors. Lack of attention to complementary investments in these sectors also helps explain the limited success achieved in smallholder agriculture in East Africa.

In light of the Bank's concern with smallholder agriculture, and given the somewhat similar natural resource and political/institutional endowments of the three countries, as well as considerable commonality in the crops they grow, one would have expected that the Bank's treatment of each country would have been fairly similar. Yet the analysis in Part II indicates that the Bank's treatment of each was quite different. In some sense each country dealt with a different Bank because there was not a consistent approach to fundamental agricultural development questions (it is in this respect that the point made early in Part II about the influence of individual Bank staff perspectives has particular relevance). There was a kind of accommodation between the Bank and each individual country in which to some extent the policy advice, and especially the composition of the lending portfolio (at least in the 1970s), was strongly influenced by the policy predispositions of policymakers in recipient countries. In particular there was a mutuality of interest between the Bank's objectives concerning resource transfers and recipient governments' sociopolitical objectives, such as regional income distribution and food security. While the reasons for this mutuality of interest are understandable, the paper argues that, when operationalized in projects, it frequently did not result in increased agricultural growth (Kenya and Tanzania), or it led to a pattern of growth that, despite the Bank's best intentions, was not broadly based (Malawi).

The Bank's focus on policy reform in the 1980s has gone a long way toward confronting the problem of country policies that discourage growth or that have led to patterns of growth that have an insufficiently broad base. Nonetheless, two caveats must be made about the achievements of this recent policy-based emphasis. First, the Bank's ability to encourage countries to do things that they have been particularly reluctant to do has been fairly limited, e.g., grain market liberalization in Kenya, exchange rate adjustment in Tanzania (until very recently), and the limitation of the licensing of land for estates in Malawi. This is particularly the case with respect to the difficult political question of land policy. Yet the analysis in Part I suggests that in both Kenya and Malawi this policy issue is of fundamental importance to long-term agricultural growth. While this is an extremely sensitive and difficult political area, its importance argues that the Bank should attempt: (1) to search for creative and more effective ways to insinuate this issue into its policy dialogue with the two countries, and (2) to make available the highest quality analytical support to do the analysis that can serve as a basis for implementing potential reforms.

A second area that has received and continues to receive insufficient attention in the Bank's policy reform thrust of

the 1980s is that of building the capacities of recipient countries for agricultural policy formulation and implementation. The analysis in this paper has repeatedly called attention to the fact that a major contributing factor to the poor performance of the Bank's agricultural portfolio in the 1970s was the lack of analytical and administrative/management capability in each of the three countries. This will continue to be a major bottleneck to significantly improved agricultural performance. The Bank has not been particularly sensitive to this problem to date, nor is it clear that the Bank has a comparative advantage in developing this capability. At a minimum the Bank needs to exert its considerable influence as a coordinator of donor assistance to encourage those bilaterals with demonstrated comparative advantage in this area to capitalize on these strengths.

The lessons from the analysis of the Bank's portfolio in East Africa suggest that the essential fine-tuning of policies and programs necessary to promote agricultural growth will require action in three major areas. These are: (1) investing substantially in human capital that can create a much larger reservoir of trained manpower to undertake critical analytical and implementation functions, (2) building and/or strengthening institutions that can provide the full range of agricultural services necessary for a thriving agricultural sector, and (3) creating considerably more capacity for data collection and analysis efforts that can provide essential indigenous knowledge on which to base more informed and effective agricultural policies and programs.

Since the mid-1980s the Bank has moved toward a more judicious blend of policy reform and investments than earlier, when one was emphasized to the exclusion of the other. The detailed analysis of the Bank's lending experience over two decades suggests that to meet the requirements for modernizing smallholder agriculture the Bank will need to do more to:

—understand the social, political, and ethnic factors that motivate government policies and that in turn have a significant influence on the Bank's ability to realize Bank-funded project objectives;

—understand and assess the relative importance of microeconomic factors that influence producer decisionmaking in the context of Bank-funded projects;

—address the problem of the risks and uncertainties of international markets—risks and uncertainties that, as have been documented, have not been adequately reflected in the Bank's policy advice and investments;

—better determine how to advise countries with strong comparative advantage in primary commodities that have poor prospects in the global market;

—adopt a longer-term perspective (15 to 20 years) for articulating with the recipient government the requisite components and the necessary sequencing of an agricultural development strategy for a given country.

Finally, in the last several years in both Kenya and Malawi the Bank has begun to move in the direction of addressing a number of fundamental constraints that have limited its success in the period reviewed in this paper. Efforts to improve the quality of agricultural research systems and extension, credit, and marketing services all focus on problem areas that have plagued the effectiveness of Bank programs in the past in East Africa. This renewed focus on some old problems, coupled with an emphasis on the importance of appropriate policies and a new (and sustained) emphasis on a strengthened human resource and institutional base, will hopefully allow the Bank to, over the long run, make a significantly increased contribution to future agricultural development in East Africa.

Annex*

Description of World Bank Agricultural Crop Projects

Kenya

Project (Date of approval)	Financing (US$ millions)		Crop focus	Target group	Executing agency functions
1. African Agriculture and Roads (5-24-60)	IBRD Govt.	5.6 16.9 22.5	Cash crops, food crops, livestock	Smallholders, (primarily Central province and Nyanza	The agricultural component of the project would be executed by the Ministry of Agriculture and African Affairs. 1. Land consideration would be the responsibility of the Ministry of African Affairs. 2. The Ministry of Agriculture would provide extension services and would appraise loan applications and provide credit.
2. Land Settlement and Development (11-28-61)	IBRD U.K. Col. Dev. & Welf. Fund CDC Govt.	8.40 6.50 3.95 4.20 .50 23.55	Cash crops, food crops, livestock	Assisted owners (50 acres each) and smallholders (15 acres each) in high potential areas	The Land Development and Settlement Board would have principal responsibility for coordinating and executing the project. The Department of Agriculture, acting as agent of the Settlement Board, would be responsible for farm development. 1. The Settlement Board would extend credit and grants to settlers for purchase of land and its development and for purchase of livestock. 2. On-farm would initially be provided by Settlement Officers and then by the Extension Service of the Department of Agriculture.
3. Kenya Tea (7-21-64)	IDA CDC KTDA Govt.	2.8 2.7 1.3 .7 7.5	Tea	Smallholders	The project would be implemented by the Kenya Tea Development Authority (KTDA) established in 1960. KTDA establishes and finances tea nurseries for the production of planting material sold to smallholders for cash or on credit and it supervises smallholders' planting and cultivation. It collects the green leaf and makes arrangements with the factories for the processing of smallholders' green leaf. The project would finance the construction of additional factories to be owned and operated by KTDA. KTDA is a monopsony buyer of tea leaf.
4. Agricultural Credit (5-09-67)	IDA Govt. & AFC Benef.	3.6 1.4 1.0 6.0	Cash crops, food crops, livestock	Smallholders (farms in the high potential areas where holdings have been consolidated and registered)	The Agricultural Finance Corporation (AFC) would have primary responsibility for adminsitration of the credit program with the assistance of the Ministry of Agriculture. The agricultural extension services would be responsible for drawing up of farm plans, technical appraisal of loan applications, and supervision of farmers during the loan period.
5. Second Kenya Tea Development (6-11-68)	IDA CDC Benef.	2.1 1.0 5.1 8.2	Tea	Smallholders	KTDA (see above)
6. Second Smallholders Agricultural Credit (11-14-72)	IDA Govt. Farmers	5.88 1.82 1.54 9.24	Cash crops, food crops, maize	Smallholders	AFC (see above)
7. Kenya Tea Factory (5-14-74)	IBRD CDC Govt.	10.4 6.3 6.0 22.7	Tea	(tea processing)	KTDA (see above)
8. Group Farms Rehabilitation (3-11-75)	IBRD IDA Govt. Govt. EAA or other Coffee Mgt. Cos.	7.5 7.5 3.7 4.5 23.2	Coffee, mixed farming (maize, wheat, livestock)	Large-scale farms (3 districts in Rift Valley province and 2 districts in Central province)	AFC would have specific responsibility for project implementation under the direction of a steering committee. 1. AFC would establish a Large Farm Management Section with overall responsibility for project implementation and management. It would be responsible for approval and supervision of individual farm managers, ensuring that the development plan prepared for each farm is implemented, and for the provision of credit to the large farms. 2. The Ministry of Agriculture would provide general extension services to the large farms. (Mixed farm component: US$6.8 million; coffee estate component: US$12.6 million.)

*The material in the Annex is taken from Table 9 in Jones 1985.

Description of World Bank Agricultural Crop Projects (continued)

Kenya

Project (Date of approval)	Financing (US$ millions)		Crop focus	Target group	Executing agency functions
9. Integrated Agricultural Development (7-09-76)	IDA IBRD BADEA Govt. Farmers	10.0 10.0 5.0 6.0 4.7 35.7	Cash crops, food crops, livestock	Smallholders (14 districts in Eastern, Central, Nyanza, and Western provinces)	The Ministry of Agriculture would have overall responsibility for the project. Aspects of the project involving the Cooperative Bank, the Kenya National Federation of Cooperatives, and Cooperatives Unions and Societies to be carried out by the Ministry of Cooperative Development. 1. The supply of inputs would be organized by the Program Unit. Most inputs would be procured by the Kenya National Federation of Cooperatives (KNFC) which would distribute the inputs to cooperative unions. 2. Credit for farm inputs would be channeled through either the Cooperative Bank and unions or to a lesser extent through AFC. The project will strengthen these credit institutions. 3. Extension services would be provided by MOA. 4. The project would improve the marketing and storage capacity of the Maize and Produce Board (MPB), the national monopsony buyer of most food crops.
10. Third Agricultural Credit (3-29-77)	IDA Bank Govt. Farmers	20.0 5.0 7.3 7.7 40.0	Cash crops, food crops, livestock	Small-scale and medium-scale farmers (20-400 ha. farms) and input suppliers (28 districts)	The project would be implemented by AFC. Extension staff of the Land and Farm Management Division of the Ministry of Agriculture will prepare farm budgets and provide extension services to project farmers.
11. South Nyanza Sugar (3-29-77)	IBRD Supp.Cr: Germany India EIB EADB Eximbank ADB Govt. Mehta Gp. Co. self-gen.fund Taxes/Duties	25.0 6.8 6.2 13.2 2.4 2.6 5.5 23.7 1.2 8.7 95.3 10.0 105.3	Sugar	Estate/smallholder outgrowers (Nyanza district)	This project would be executed by South Nyanza Sugar Company Ltd. The sugar company would furnish all production inputs to outgrowers and recover its costs upon delivery of farmers' cane to the factory, which would be financed under the project. The Company would also provide extension services to outgrowers. (The project would develop 2,650 ha. nucleus estate sugarcane and 7,050 ha. outgrower sugarcane.)
12. Bura Irrigation (6-07-77)	IBRD IDA EDF Neth. UK(ODA) CDC Govt.	34.0 6.0 12.0 8.8 8.5 8.5 20.6 77.8	Cotton, Groundnuts, maize, cowpeas	Smallholders contract farmers (Tana River district)	The National Irrigation Board (NIB) would have overall responsibility for carrying out the project. 1. The NIB would purchase inputs required by farmers. Cost of the inputs and the operative and maintenance costs of the irrigation system would be repaid by the farmer from cotton sale proceeds. 2. Extension services would be provided by NIB. 3. NIB would have monopsony purchasing rights to tenants' seed cotton, which would be processed in the ginnery owned and operated by NIB, and financed under the project.
13. Marok Agricultural Development (12-05-78)	IDA CIDA Govt. Farmers Taxes	13.0 1.4 3.4 1.0 18.8 0.1 18.9	Wheat, rapeseed, livestock	Medium-scale farmers (more than 20 ha.) (Marok district)	The project would be implemented through the district level services normally responsible for the various activities concerned under the Director of the District Agricultural Office, would would be designated as project coordinator. 1. The project would provide improved extension services. 2. Seasonal and medium-term credit would be provided through the district office of AFC, which would be strengthened under the project.
14. Sugar Rehabilitation (12-05-78)	IBRD ADB GOK Sugar Cos. Taxes	72.0 6.0 3.5 46.9 128.4 9.6 138.0	Sugar	Nucleus estates/ smallholder outgrowers (Nyanza sugar belt and Ramisi sugar zone)	The project would rehabilitate and expand four sugar companies which would execute the crop development and processing components of the project. 1. The sugar companies would finance outgrower operations through outgrower loans and would deduct loan repayments from the farmers' cane sale proceeds. 2. The sugar companies would process the cane in their factories, which would be rehabilitated and expanded under the project.

Description of World Bank Agricultural Crop Projects (continued)

Kenya

Project (Date of approval)	Financing (US$ millions)		Crop focus	Target group	Executing agency functions
15. Smallholder Coffee (5-22-79)	IDA CDC Co-op Soc. Govt.	27.0 15.0 11.5 8.7 62.2	Coffee	Smallholders (all coffee growing areas)	The project will be managed and implemented by the existing IADP Management Unit within the Ministry of Agriculture. Those aspects of the project which involve the Cooperative Bank of Kenya (CBK), unions, and societies would be carried out by the Department of Cooperative Development. 1. The project would strengthen the coffee extension services of the MOA. 2. The project would provide medium-term credit through the CBK to farmers to rehabilitate their holdings. 3. The project would construct 14 new factories and rehabilitate 400 more. The factories are owned by local cooperative societies, membership in which is compulsory for all coffee growers. The Coffee Board of Kenya has monopsony purchasing rights to all coffee produced.
16. IADP II (12-06-79)	IDA IFAD Govt. Farmers Taxes	46.0 17.0 16.4 5.0 84.4 7.3 91.7	Cash crops, food crops, livestock	Smallholders (15 districts in 6 provinces)	Overall responsibility for IADP implementation would rest with the newly created Project Management and Evaluation Division of MOA. 1. The KNFC would be the principal supplier of inputs to its members. It would be strengthened under the project. 2. The operations of the CBK and the AFC would be strengthened to enable them to on-lend the additional funds provided by the project. 3. The extension services of the MOA would be strengthened. 4. The storage and transport facilities of many of the cooperative unions and societies are expected to be insufficient to market the increased production projected to occur under the project. The project would provide additional storage and transport facilities. It would also increase the storage and marketing facilities of the Maize and Produce Board (MPB). 5. The project would consolidate the Cotton Lint and Seed Marketing Board (CLSMB) postharvest activities.
17. Baringo Pilot Semiarid (12-11-79)	IDA Govt. Taxes	6.5 2.1 8.6 0.2 8.8	Livestock, drought staples	Smallholders (Baringo district)	The Project would be organized and managed within the framework of the existing institutions of the Baringo District Administration. A Project Coordinating Committee would be established to supervise and coordinate the project. Project is a pilot effort designed to test a number of different packages as the basis for designing a development program for the area. Little investment is aimed at immediate increases in agricultural production.
18. Fourth Agricultural Credit (5-19-81)	IBRD IDA Govt. Taxes	25.0 10.0 12.0 47.0 3.0 50.0	Cash crops, food crops, livestock	Not specified (national)	The project would finance technical services to improve AFC's operating capacity and a line of credit to assist in financing AFC's lending program.
19. Cotton Processing and Marketing (4-27-82)	IDA Govt. Taxes	22.0 7.3 29.3 4.1 33.4	Cotton	(Improvement of postharvest handling of cotton)	A Project Coordinating/Steering Committee would be established. CLSMB would continue to be the main institution responsible for implementing government policies in the cotton sector. 1. CLSMB buying teams for seed cotton operate in areas where cooperative movement is judged too weak to undertake marketing functions. Project would support activities of CLSMB buying teams. 2. "In the short-term, however, the present disorganization of the ginneries coupled with poor backward linkages to the buying and transport system would make transport of seed cotton to the ginneries prohibitively expensive, as waiting time at buying centers and ginneries would discourage private truckers from carrying out their tasks at affordable prices. Therefore, CLSMB would during the project period be responsible for organizing and coordinating transport of seed cotton from buying centers to ginneries either in its own trucks or in those owned by cooperatives or by private truckers" (SAR, para 3.08). 3. The project would improve CLSMB's storage facilities for seed cotton and cotton lint. 4. The project would rehabilitate and expand cooperatives and CLSMB ginning facilities.

Description of World Bank Agricultural Crop Projects (continued)

Kenya

Project (Date of approval)	Financing (US$ millions)	Crop focus	Target group	Executing agency functions
20. National Extension (6-14-83)	IDA 15.0 IFAD 6.0 Govt. 2.5 23.5 Taxes 5.1 28.6	Maize, beans, cotton, coffee, sugarcane, potatoes	Smallholders (national)	Overall responsibility for project implementation would be with the Ministry of Agriculture. Under the project, Kenya's agricultural (crop) extension services would be reorganized and intensified following the training and visit system approach.

Tanzania

Project (Date of approval)	Financing (US$ millions)	Crop focus	Target group	Executing agency functions
1. Agricultural Credit (11-23-65)	IDA 5.0 Co-ops, NDCA, NDC & private technical partners 2.1 7.1	All major agricultural products	Smallholders (national in scope)	National Development Credit Agency (NDCA) is the implementing agency. The project will provide short-term credit in the form of fertilizers and pesticides, medium-term credit for farming, dairying, and fishing equipment, and long-term credit for tea and sisal smallholder development and light agricultural processing facilities. The project would lend to and through farmers' cooperatives.
2. Flue-Cured Tobacco Project (10-06-70)	IDA 9.00 Tobacco Board .88 Govt. 4.85 14.73	Tobacco	Smallholders (Tabors and Mbeya regions)	National tobacco development is the responsibility of the Ministry of Agriculture, Food, and Cooperatives in which a Tobacco Section is to be established to coordinate activities. A Tobacco Project Group would be set up in Tabora to oversee all flue-cured tobacco development in the project area. 1. Credit provided under the project to farmers, cooperatives, Tanganyika Tobacco Board (TTB), and Tanzania Tobacco Processing Company (TTPC) would be channeled through the NDCA. NDCA would be responsible for procuring farm inputs. 2. Extension services provided by the Tobacco Project Group. 3. TTB has monopsony purchasing rights to tobacco crop. 4. Project will construct central storage, processing, and auctioning facilities. Processing is carried out by the TTPC under the control of the TTB, which is responsible for tobacco marketing.
3. Smallholder Tea (3-03-72)	IDA 10.50 NORAD 1.86 Govt. 3.72 16.08	Tea	Smallholders (areas of Bukoba, West Usambara, Rungwe, and Lupenbe)	The project would be executed by Tanzania Tea Authority (TTA). 1. TRDB is the credit channel for loans to TTA and the cooperatives. To TTA it will make available credit for the processing equipment, leaf collection services, office equipment, and the establishment of nurseries. To the cooperatives it would make available for on-lending to project growers the funds required for financing tea stumps and fertilizer. A fixed sum would be deducted by TTA factory for repayment of TRDB loans to cooperatives for purchase of planting material and material land fertilizer. TTA would remit the proceeds of cess directly to TRDB. 2. Extension services provided by TTA. 3. TTA's leaf collection and processing capacity would be increased under the project. (The National Development Credit Agency was renamed Tanzanian Rural Development Bank (TRDB).)
4. Geita Cotton (1-08-74)	IDA 17.5 Govt. 6.5 23.8	Cotton, maize	Smallholders (Geita district in Muanza region)	Project Unit with headquarters at Geita would be set up as a semi-autonomous division of the Tanzanian Cotton Authority (TCA). Cotton and maize marketing are handled by statutory marketing agencies. 1. Project would provide for a procurement officer to be attached to TRDB to handle procurement in this and other IDA projects. 2. Project will provide credit in kind for the purchase of seasonal inputs for cotton and maize, the hire of tractor services, and the purchase of tractors. Credit would be channeled through the TRDB. Project will provide cooperative credit supervisors. Cooperatives would deduct credit repayments from farmers' cotton sale proceeds. All cotton growers would be required to register with the cooperative to which they would sell their cotton. Only cotton growers would receive credit for maize inputs.

Description of World Bank Agricultural Crop Projects (continued)

Tanzania

Project (Date of approval)	Financing (US$ millions)		Crop focus	Target group	Executing agency functions
5. Cashewnut Development (5-21-74)	IBRD CATA Govt.	21.0 4.7 4.6 30.3	Cashewnuts	Smallholders (Lindi and Mtwara regions and the Tunduru district of Ruvuma region)	The project would be implemented by the Cashewnut Authority of Tanzania (CATA), an independent statutory body set up in 1973, designated to coordinate all aspects of production, processing, and marketing of cashewnuts. 1. An extension and grading service would be set up within CATA. 2. CATA has monopsony rights to purchases of raw cashewnuts. 3. Project would finance CATA processing and storage facilities for Cashewnut Shell Liquid.
6. Kigoma Rural Development (8-06-74)	IDA UNCDF Govt.	10.0 1.5 1.8 13.3	Maize, beans, cotton, groundnuts	Smallholders (Kigoma region)	The Regional Development Director would be responsible for overall project planning and implementation. 1. The Regional Cooperative Union (Union) would submit a loan request to TRDB to cover the requests for seasonal inputs by villages approved by the Union. The Union would also borrow medium-term credit from TRDB for its own transport needs and for on-lending to villages for production infrastructure. TRDB would procure the inputs for approved loans and arrange for their shipment to Kigoma. The Union would arrange for distribution to the villages. 2. Union would buy and collect village crops from which seasonal credit charges are deducted. 3. The cooperatives act as marketing agents for the parastatals. The marketing of maize, beans, cotton, and groundnuts is controlled by parastatals with monopsony purchasing rights.
7. Kilombero Sugar (9-05-74)	IBRD IDA Dutch Govt. Danish Govt. Govt.	9.0 9.0 11.0 17.3 9.5 55.8	Sugar	Nucleus Estate/ smallholder outgrowers (Kilosa district in Morogoro region)	Kilombero Sugar Company Ltd. (KSC) would have overall responsibility for managing the project. (Development of 7,300 acre sugar estate. Development of 2,400 acres for outgrowers. Expansion of 2,200 acres of existing outgrower land.) 1. Cost of land development and extension services provided by KSC would be recovered from outgrowers by deductions from cane sales (Estate and outgrowers program: US$23.0 million). 2. Project would finance the construction of a sugar factory (factory component: US$32.80 million).
8. National Maize Project (12-23-75)	IDA ABEDIA Govt. Farmers	18.0 5.0 11.1 4.0 38.1	Maize	Smallholders (national)	A Project Servicing Unit (PSU) would be established in the Crop Production Division of the Ministry of Agriculture. 1. The PSU would be responsible for procuring and distributing maize production inputs sold for cash at subsidized prices. 2. PSU would provide technical support to regional agricultural staff. 3. In most regions the primary cooperative societies would purchase maize at the village level, acting as agents of the regional cooperative union, which in turn would act as agent for the National Milling Corporation (NMC). In regions where the cooperative system is unable to market maize efficiently, the NMC would purchase directly from project villages.
9. Tobacco Processing (9-07-76)	IDA TAT TTPC	8.0 0.8 2.5 11.3	Tobacco	Tanzania Tobacco Processing Company Ltd. (TTPC)	Tobacco Authority of Tanzania (TAT)* would have overall responsibility for project implementation. TTPC would have specific responsibility for the expansion of processing facilities' capacity and for the construction of storage and infrastructure at the plant. TTPC is a wholly owned subsidiary of TAT. *TAT is directly responsible for tobacco industry, including: supervision of growers; research on cultivation, processing, and marketing; control over transport and processing; and the regulation of marketing.

Description of World Bank Agricultural Crop Projects (continued)

Tanzania

Project (Date of approval)	Financing (US$ millions)		Crop focus	Target group	Executing agency functions
10. Tabora Rural Development (4-26-77)	IDA Canada ODM (UK) Govt. Benef.	7.20 4.80 5.60 5.26 0.64 23.50	Cotton, groundnuts, sorghum, paddy	Smallholders (Nzega and Igunga districts in Tabora region)	The Regional Administration would have overall responsibility for the project. The project would be executed through the Regional and District functional units or parastatals as appropriate under the direction of the Regional Planning Officer assisted by a project coordinator. 1. The crop component would be administered by the Regional Agricultural Development Office (RADO). 2. For the cotton villages, TCA would continue to be responsible for the distribution of improved seed and inputs for cotton, sorghum, and groundnuts. The Ministry of Agriculture and Cooperatives would arrange to provide improved seed for paddy, sorghum, and groundnuts to the paddy-cultivating villages. Other inputs for paddy villages would be provided by TCA.
11. Second Cashewnut Development (5-16-78)	IDA Govt. NBC	27.5 6.6 2.2 36.3	Cashewnuts	Cashewnut Authority of Tanzania	The project would be implemented and managed by the Cashewnut Authority of Tanzania. The project would finance the establishment and related infrastructure of three cashewnut processing facilities and the extension of port storage facilities for CNSL.
12. Tobacco Handling (5-16-78)	IDA Govt.	14.0 6.5 20.5	Tobacco	Smallholders	Tobacco Authority of Tanzania (TAT) would have overall responsibility for project implementation. 1. TRDB would provide seasonal credit to smallholders for the purchase of polythene bulking bags and medium-term credit to villages for the construction of baling and grading centers. 2. The project would also include some ancillary investments in existing TAT processing storage facilities and services.
13. Mwanza/Shinyanga Rural Development (5-23-78)	IDA IFAD Govt. Benef.	12.0 12.0 4.8 1.7 30.5	Maize, sorghum, cassava, livestock, cotton	Smallholders (Mwanza and Shinyanga regions)	Implementation of the agricultural component would be under the overall responsibility of the respective Regional Agricultural Development Officers. 1. The Tanzania Cotton Authority or other relevant agencies would be responsible for transporting to the villages the improved seeds and dressing provided by the project; these inputs would be sold in cooperatives. 2. Extension services would be the responsibility of the District Agricultural Development Officers.
14. Tanzania Rural Development Bank (3-04-80)	IDA Govt. TRDB	10.00 1.98 .80 12.78	All crops	Smallholders	The project would strengthen TRDB as an institution and provide US$6.0 million in credit for on-lending, primarily to villages for rural development activities. Credit is generally recovered through crop parastatals, which are authorized to deduct a certain percentage out of the proceeds of village accounts at the time of crop purchase.
15. Pyrethrum Project (4-20-80)	IDA Govt.	10.0 2.7 12.7	Pyrethrum	Smallholders (Mbeya and Iringa regions)	The Tanganyika Pyrethrum Board (TPB) would have responsibility for implementation of the smallholder production component of the project. 1. TPB would produce and distribute improved planting material free of charge and provide extension services. 2. TPB has monopsony on purchase of dried pyrethrum flowers, which it purchases through licensed buyers.
16. Grain Storage and Milling (5-06-80)	IDA Govt.	43.0 14.4 57.4	Grain	National Milling Corporation	The project would improve management practices and strengthen the institutional capacity of NMC to procure, transport, store, and mill food crops.
17. Smallholder Tea Consolidation (6-03-80)	IDA NORAD Govt.	14.0 1.6 4.2 19.8	Tea	Smallholders (Rungwe, Njombe, Bakoba, and Lushoto districts)	The project would be implemented by Tanzania Tea Authority (TTA). 1. See First Smallholder Tea Project for a description of TTA's activities. 2. The second phase would finance only a marginal area planting program of about 200 ha. and would focus on increasing TTA's collection, processing, and storage capacity.
18. Coconut Pilot (10-07-80)	IDA Govt.	6.8 1.7 8.5	Coconuts	Primarily an agricultural research project	The Ministry of Agriculture would be responsible for the project. The German Agency for Technical Cooperation, which is financing the pilot phase of the National Coconut Development Project, would be contracted to implement the project. The project would assist in the formulation of a technical package for improved production of coconuts and train local staff to carry out projects related to the rehabilitation of the coconut industry. It has no direct smallholder production component.

Description of World Bank Agricultural Crop Projects (continued)

Malawi

Project (Date of approval)	Financing (US$ millions)		Crop focus	Target group	Executing agency functions
1. Lilongwe (2-01-68)	IDA Local	6.0 1.0 7.0	Maize, groundnuts, tobacco	Smallholders	This project, and the other area development projects, would be executed by Program Organizations set up under the Agricultural Development Branch. The Agricultural Development Branch was established within the Department of Agriculture to assume responsibility for major agricultural development schemes (the Department of Agriculture was later upgraded to the Ministry of Agriculture and Natural Resources). 1. The Farmer's Marketing Board (renamed ADMARC in 1970) would purchase all inputs and distribute them through its markets. 2. Program staff will issue purchase orders for goods; credit repayment is collected by FMB through deductions from crop sales to FMB. 3. Extension would be provided by Program Staff. 4. FMB has monopsony purchasing rights to cotton, groundnuts, and tobacco; it is the buyer of last resort for maize.
2. Shire (2-01-68)	IDA Local	3.70 .94 4.64	Cotton, maize	Smallholders	
3. Lilongwe-II (5-04-71)	IDA Govt. Farmers	7.25 .94 .40 8.59	Maize, groundnuts, livestock, tobacco	Smallholders	
4. Karonga (1-18-72)	IDA Govt. Farmers	6.6 0.8 0.4 7.8	Rice, maize, cotton, groundnuts, livestock		
5. Shire-II (3-20-72)	IDA ADMARC Govt.	10.5 1.3 1.7 13.5	Cotton, maize, sorghum, groundnuts, rice, cocoa	Smallholders	
6. Lilongwe-III (3-20-75)	IDA UNCDF Govt. Farmers Dzalanyama Ranch ADMARC	8.5 1.6 1.0 0.2 0.2 0.6 12.1	Maize, groundnuts, tobacco, livestock	Smallholders	
7. Karonga-II (6-15-76)	IBRD ADMARC Govt.	9.2 0.8 2.1 12.1	Rice, maize, cotton, groundnuts, livestock	Smallholders	
8. Shire-III (6-06-78)	IDA Govt.	10.7 1.9 12.6	Cotton, maize, sorghum, millet, rice, groundnuts	Smallholders	
9. WRDP-I (Consolidation of Lilongwe) (11-18-78)	IDA CIDA CDF UK Germany ADMARC Govt.	22.0 2.6 13.1 11.7 6.6 1.5 8.5 66.0	Maize, groundnuts, tobacco, livestock	Smallholders	The Ministry of Agriculture and Natural Resources would have the responsibility for implementing the NRDP program. The country is divided into eight Management Units (MU) which will administer one Agricultural Development Division (ADD). On average, each ADD will be divided into five Development Areas (DA). The MANR and ADMARC would continue to execute the same functions as under previous development programs.

Description of World Bank Agricultural Crop Projects (continued)

Malawi

Project (Date of approval)	Financing (US$ millions)		Crop focus	Target group	Executing agency functions
10. NRDP-III (Karonga-Chitipa) (10-31-81)	IDA Govt.	7.3 1.3 8.6	Rice, maize, cotton, beans, livestock, burley tobacco	Smallholders	
11. NRDP-IV (Dedza Hills and Lilongwe East Development Areas) (4-5-83)	IDA Govt.	10.6 1.9 12.5	Maize, groundnuts, wheat, beans, tobacco, potatoes	Smallholders	
12. Smallholder Fertilizer (4-26-83)	IDA IFAD Govt. ADMARC	5.0 10.28 2.76 11.93 29.97	Cash, food crops	Smallholders (national in scope)	ADMARC would be responsible for the physical implementation of the fertilizer procurement program: "Sole institution involved in funding procurement and distribution of fertilizer to smallholders. For the medium term it is considered unlikely that any other institutional arrangement would be able to provide a comparatively effective distribution service."
13. NTL Agricultural Research (2-19-85)	IDA USAID Govt.	23.8 9.2 16.9 49.9	—	—	Project helps the Department of Agricultural Research improve its planning, management, and technical efficiency and to prioritize the research program.
14. Agricultural Extension (9-19-85)	IDA USAID Govt.	11.6 6.2 2.4 20.2	—	—	The project supports an institutional development process aimed at (a) improving the Ministry of Agriculture's analytical and long-term planning capability; (b) strengthening the national extension system; and (c) upgrading the managerial, administrative, and technical skills of the Department of Agriculture and Planning Division staff.
15. Industrial and Agricultural Credit (12-19-85)	IBRD Local Other	7.8 2.2 4.3 14.3	—	—	The project consists of three components: (a) US$3.0 million for financing commercial and industrial investments through INDEBANK; (b) US$4.5 million for providing credit to agricultural estates through INDEBANK, NBM, and CBM; and (c) US$0.3 million in technical assistance funds for helping INDEBANK strengthen its institutional capabilities.

Notes

1. $440.90 million were provided for the three countries ($220.9 in Kenya, $170.0 in Malawi and $50.0 in Tanzania) in support of macroeconomic and sectoral reform.

2. For instance, more than 500 Ph.D. theses on MADIA countries have been written in the U.S. A number are on agriculture—43 deal with Kenya, 20 are on Tanzania, and 4 are on Malawi. These have been drawn upon extensively as they often contain valuable detailed information on specific problems. The MADIA study has also drawn on the publications of FAO, ILO, IFPRI, and the Institutes for Development Studies in Sussex and Nairobi as well as those of scholars in MADIA countries.

3. See Mellor 1976; Johnston and Kilby 1975; Lele and Mellor 1981.

4. Development assistance considered includes both World Bank loans and more concessional funding provided by IDA credits.

5. Also, the greater year-to-year fluctuations in Tanzania are reflected in a higher year-to-year growth rate average than for the other two countries.

6. Needless to say, Kenya's food import capacity was greater than that of Tanzania or Malawi. Its food imports ranged from 6.5–22 percent of exports, Malawi's between 9.8 and 23.8 percent, and Tanzania's fluctuated from a low of 6.8 percent to a high of 42 percent of export earnings in 1975.

7. Reliable estimates of urbanization have not been available. However, there appears to be no significant difference in the rate of urbanization in the three countries.

8. The results do not change much if a current 1982 base is used.

9. The decline in agriculture's share may be explained partly by the tripling share of public debt in recurrent expenditures by the late 1970s from the 1970 base, going from 6 percent to 17.8 percent.

10. Tanzania has a total road network of about 50,000 kilometers. This means it has about 2.9 kilometers of road per 1,000 inhabitants, one of the lowest ratios in Africa. Thirty-five percent of the agricultural traffic goes by rail. This is high by other countries' standards, again reflecting lack of investment in roads.

11. Tanzania also ranks among the lowest in Africa with respect to the share of public capital resources (13 percent) allocated to transport (compared to 22 percent to 25 percent for Kenya and 31 percent for Malawi). The private trucking fleet in Tanzania has been shrinking in size. Before 1974 private truckers provided all the commercial freight haulage services. By 1977 this share had declined to about half of the total market. Truckers left the agricultural industry and concentrated their operations in urban areas, leaving rural areas to parastatal trucking (40 percent of the total vehicle fleet was in Dar es Salaam in the late 1970s).

12. See Radetzki 1986; Hanak and Loft 1987; and Johnston et al. 1987.

13. Support for these arguments is provided in Part II of the paper which focuses on the Bank's policy assessment, advice, and lending in the agricultural sectors of these countries.

14. The limited amount of good quality land is reflected in the size of holdings. Thus, the average size of Kenya's 1.7 million smallholdings is 2.3 hectares; over three-quarters of these holdings are under 2 hectares. By the year 2000, Kenya is projected to have only half a hectare of high potential land per person.

15. The situation is less clear in absolute terms. Tanzania may have almost as many total hectares of high quality land as Kenya with only a slightly larger population to support.

16. See Ranade 1986. Quality differences in the types of tobacco require that these comparisons of the extent of discrimination be tempered to some extent. However, the general point holds.

17. These were accompanied by investments in the crucial agricultural processing sector for which the government borrowed from the World Bank. See Lele and Meyers 1986.

18. The Amboni Sisal estate and the Tanzania Sisal Authority reportedly had to make do with an aging labor force in 1981 of persons ranging from 40 to 60 years old. The Bank-funded smallholder tea development project similarly suffered greatly in the Bukoboa area where the hiring of migrant labor was discouraged by government.

19. This now includes all producers. While this approach is more participatory, it is also more inefficient.

20. Thus, maize smallholders in Malawi have needed to sell 9–10 bags of maize in order to buy one bag of nutrient. Their counterparts in Kenya and Tanzania (or for that matter in the Indian states) have needed to sell only 4–5 bags of maize.

21. Note that since the fertilizers used on maize vary by country—CAN in Malawi, DAP in Kenya, and urea plus TSP in Tanzania—the prices are expressed in nutrient terms to facilitate comparison.

22. The relevant question according to the report was not "Is a high rate of agricultural development possible," but rather "What needs to be done to attain a high rate of development" (World Bank 1974, para 5.03 and footnote 1, p. 40).

23. The Report singled out other key elements of a resource mobilization strategy, as follows: (1) domestic savings should be encouraged by raising deposit rates of interest and reforming the structure and operations of financial intermediaries; (2) although management of public finances had been good, there was scope for obtaining more revenue through direct taxation: wealth and land taxes were proposed; (3) the report cautioned against reliance on foreign commercial loans: "... only a remarkably productive use of loans, combined with a package of really sound domestic policies, could justify such a course of action"; (4) government should play an active role in identifying new opportunities for overseas investment and in seeking out potential investors; (5) it would be essential "to increase both the volume and effectiveness of official aid." Better coordination was needed, between technical assistance flows and capital aid, between different donors, and between competing domestic users. Greater attention was also to be given to identification, packaging, and presentation of projects for external assistance; (6) there was a need for *donors* to be "... much more flexible in their aid programs, and more willing to initiate and experiment and join with Kenya in risky ventures when the stakes are high enough." In addition, donors had to learn to cooperate.

24. Thus, while the completion report of the IADP concluded that lack of adequate technologies was one major reason for the project's failure, the subsequent T and V project was premised on existence of profitable technologies (Lele and Meyers 1986).

25. In spite of the impressive growth of smallholder tea and coffee, smallholder yields range from half to two-thirds of those on estates— a phenomenon also found in Malawi that appears to result from the difficulty faced by small farmers in mobilizing additional labor. This constraint could have profound significance for Kenya's long-term policy towards access to high potential land.

26. Remittances from family members, earnings in urban employment, or wages earned working for other agricultural enterprises together constituted three-fourths as large a source of income for the average smallholder as farm operating surplus and constituted 40 percent of household income.

27. If the average poor smallholder were to increase his purchased farm inputs to the level of the mean for all smallholders out of direct income, the financial burden would require a reduction in household consumption of 25 percent (World Bank 1982, pp. 46-47).

28. This philosophy of emphasizing improvements in husbandry underlies T and V projects. Important untested hypotheses in the case of Africa concern the extent to which improved husbandry will by itself increase yields without major technological change and whether the returns to labor use provide adequate incentives for farmers to improve husbandry relative to the returns to labor in other pursuits.

29. However, they focused mainly on the marketing sector and overlooked the problems posed by poor handling of tobacco at the farm level.

30. Note that this was the period when the Bank adopted a policy of not promoting expansion of tea and coffee production, and world sisal prices had been unfavorable since 1969.

31. However, as in Kenya and Tanzania, subsequent Bank-funded integrated projects such as the Lilongwe Land Development Program were highly dependent on a great deal of trained manpower.

32. The audit report of the Karonga Rural Development Project (Phase I) issued in 1979 makes the following observation:

> Supervision missions raised the issue of unsatisfactory producer prices on numerous occasions, not only for the Karonga but also for the other Malawian rural development projects (Shire, Lilongwe).... In their discussion with Government officials the missions found that due to the highly political nature of the official pricing policy a high level dialogue between the Government of Malawi and the Bank would be required. RMEA informed Bank headquarters accordingly, but no action was taken by the Bank until recently (para 28).

A similar criticism was made in the audit report of the Lilongwe Land Development Program (Phase III), issued in 1981:

> Despite the efforts of RMEA staff, the Bank made very slow progress in convincing Government to link operationally its production programs and targets to its price policy. In fact since price policy continues to be an issue in other development projects in Malawi (on-going or being prepared), it appears questionable whether Government is fully convinced of the seriousness of the negative effects on development programs of unfavorable price policies, and whether the Bank, despite the continuous dialogue with the country, has done all it could to assist Government in operationally shifting towards a more production-oriented price policy (para 22).

33. CDC-funded Kasungu Flue-Cured Tobacco Authority efforts had demonstrated some success but were curtailed in 1979-81 due to unprofitability.

34. The analysis of the process by which land alienation is taking place has been perhaps less systematic than in Malawi, thus prompting few recommendations on how government might intervene.

35. These figures for Kenya exclude SAL I which had only minimal emphasis on agriculture.

36. Countries are listed by their respective regions in Table 22.

37. In the West Africa region the commitments to the MADIA countries for agriculture and rural development were a far higher 42.9 percent of the total compared to 29.5 percent for the region.

38. Part of this reduction, however, resulted from a shift in the composition of lending for infrastructure with more funding going to construction of rural feeder roads than to (more expensive) highway construction.

39. In such a situation lending strategies might have two components, namely, "baseload" lending and "variable" lending. Countries that do not have policy environments conducive to development would be eligible only for "baseload" lending for investments essential to long-term growth.

40. In the West Africa region, however, the proportion of IBRD resources was greater (45.4 percent of the total IBRD commitments went for agriculture). Of the IBRD commitments to agriculture and rural development made in West Africa, 86.3 percent were to MADIA countries. This is because Nigeria and Cameroon, both oil exporting countries, ceased to receive IDA loans in the early 1970s and 1982, respectively, as a result of having achieved too high per capita income levels. Not being able to qualify for the softer IDA loans in the agriculture and rural sector continues to be an issue between the Bank and Cameroon. This in turn influences the types of projects the Cameroonian government is willing to accept funding for from the Bank. Thus, for instance, it was very reluctant to accept a research project that involved a long gestation lag and was particularly concerned about the level of technical assistance that it would have to borrow for on hard terms.

41. The Annex provides brief descriptions of World Bank agricultural crop projects in each country—sources of finance, crop focus, and project purpose.

42. Of the 29 agricultural operations financed in Kenya with total funding commitments of $721.4 million (see Annex for more complete project descriptions), three were for the development of smallholder tea (two for establishing smallholder production in the 1960s and one for establishing tea factories in 1974), one for improvement of already established smallholder coffee production including processing (in 1979), two sugar projects (one involving a new factory in 1977 and another rehabilitation of existing sugar factories in 1978), a cotton processing project in 1982, a fisheries project, two livestock projects (involving the development of ranches in 1969 and 1974), three forestry projects, four agricultural credit projects, one group farm project, one irrigation project, two integrated agricultural projects, one extension project, two semiarid areas projects, two technical assistance projects, and three structural/sectoral adjustment operations.

43. This appears to be more true for coffee and tea than for flue-cured tobacco, although in Malawi the government has promoted large-scale estate production of flue-cured tobacco because of the belief that smallholders cannot afford the costs of investments in processing.

44. CDC deserves much of the credit for creating KTDA's impressive institutional capacity. See Lele and Meyers 1986.

45. The above review has contained only very brief highlights from the Bank's project experience. A detailed project-by-project treatment is found in Lele and Meyers 1986.

46. The policy has, however, allowed for considerable flexibility in its implementation based on the consideration that countries with no alternative crop opportunities should be allowed to receive support from the Bank. The Bank therefore undertook a tea project in Tanzania that established 15,000 hectares of tea, whereas in Kenya it restricted its financing to the establishment of factories.

48. Success in achieving these objectives will obviously depend on the government's willingness to adopt measures to strengthen governmental capacity. This might be prompted by providing assistance with which to give long-term (five year) contracts to Kenyan foreign trained university and research personnel with advanced degrees in economics and sociology, who are now in relatively abundant supply in Kenya and who swell the ranks of consulting firms that serve foreign donors. However, this would require a considerable change in the government's current stance toward the use of highly trained non-civil servants.

49. In Tanzania there were 25 operations including two tea projects: three tobacco projects, one involving (smallholder) production and two involving processing and handling of tobacco; two cashew nut processing projects involving the establishment of cashew factories; one smallholder cotton production project; one sugar project involving financing of a sugar factory and nucleus estate production; one smallholder maize production project and one project in support of the national milling corporation that handled the marketing, storage, milling, and sale of maize on a monopsony basis; one smallholder pyrethrum production and processing project; one coconut production project; two livestock ranching and one dairy development projects; one fisheries project; two forestry projects; two credit projects; three integrated area development projects; and one Export Rehabilitation Credit in support of macro and sectoral policy reform.

50. It is noteworthy that the Government of Tanzania had gone further in liberalizing grain trade by 1985-86 than had Kenya.

51. Jones' analysis of World Bank project cost data shows that Malawi had the highest allocations to physical infrastructure (13 percent) of all project component costs compared to any other MADIA country—9.8 percent in Nigeria, 8.2 percent in Cameroon, 6 percent in Tanzania, 3.9 percent in Kenya, and 3.8 percent in Senegal. See Jones 1985.

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THE MADIA STUDY

Although many generalizations have been made about the agricultural crisis in Africa, relatively few detailed country and cross-country studies of African agriculture based on systematic data analysis have been conducted. Similarly, although foreign aid has constituted a large part of total government expenditures in Africa for close to fifteen years, there has been little analysis of the role of external assistance in African countries that goes beyond political criticism of official assistance or the alleged self-serving objectives of donors. The impetus for the study "Managing Agricultural Development in Africa" (MADIA) was to begin the process of filling this gap and to explain the nature and sources of the agricultural crisis, particularly the extent to which it originated in resource endowments, historical and contemporary events, external and internal policies, and the economic and political environment.

The MADIA study involved detailed analysis of six African countries—Kenya, Malawi, Tanzania, Cameroon, Nigeria, and Senegal. In addition to the World Bank, seven donors, USAID, UKODA, DANIDA, SIDA, the French and German governments, and the EEC participated in the study. The analysis of country policies and performance during the last 20-25 years was carried out with the benefit of substantial input from the governments and nationals of each of the countries represented. The study had three main areas of focus: (1) the relationship between domestic macroeconomic and agricultural policy and agricultural performance, (2) donors' role in the development of agriculture, and (3) the politics of agricultural policy.

The MADIA study was the result of encouragement and support from many people. Anne Krueger, former Vice President for Economic Research Staff in the World Bank, encouraged the establishment of these studies on aid and development in 1984. Gregory Ingram, former Director of the Development Research Department, provided unstinting support for the study. During the reorganization of the World Bank in 1986, the strong support from Benjamin King, then acting Vice President for Economic Research Staff, proved invaluable. Barber Conable, President of the World Bank, and Mr. Edward V. K. Jaycox, Vice President for the Africa Region, have played a key role by ensuring support for the study's completion, as did Stanley Fischer, the Vice President for Development Economics. Yves Rovani, Director General of the Operations Evaluation Department, was particularly helpful as the MADIA study drew heavily on the works of OED.

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The World Bank

Headquarters

1818 H Street, N.W.
Washington, D.C. 20433, U.S.A.

Telephone: (202) 477-1234
Facsimile: (202) 477-6391
Telex: WUI 64145 WORLDBANK
RCA 248423 WORLDBK
Cable Address: INTBAFRAD
WASHINGTONDC

European Office

66, avenue d'Iéna
75116 Paris, France

Telephone: (1) 40.69.30.00
Facsimile: (1) 47.20.19.66
Telex: 842-620628

Tokyo Office

Kokusai Building
1-1, Marunouchi 3-chome
Chiyoda-ku, Tokyo 100, Japan

Telephone: (3) 214-5001
Facsimile: (3) 214-3657
Telex: 781-26838

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