



# U-Turns and Full Circles: Two Decades of Agricultural Reform in Malawi 1981–2000

JANE HARRIGAN \*

*University of Manchester, UK*

**Summary.** — This paper traces the evolution of Malawi's agricultural policy over the past two decades. During this period the World Bank has played a key role in shaping policy reform through its Adjustment Loans. Three distinct reform phases can be identified: 1981–87 when policy was dominated by the dogmatism of the World Bank's "pricist and state minimalist" policies; 1988–94 when a more flexible position was taken by both the Bank and the Malawi Government both of whom acknowledged the structuralist critique of earlier policies; and 1994 to the present when the reform process in agriculture became more politicized and a schism developed between the Bank and the Government. This latter period is used to illustrate some of the unresolved policy issues pertaining to similar low-income agrarian economies.

© 2003 Elsevier Science Ltd. All rights reserved.

*Key words* — Africa, Malawi, agricultural policy, food security

## 1. INTRODUCTION

The agricultural sector plays a dominant role in the Malawian economy accounting for just over a third of GDP, generating over 90% of the country's export earnings and providing wage and self-employment to the bulk of the country's population, 92% of which is rural. The sector can be subdivided into smallholder producers who farm customary land and produce about 70% of agricultural output and larger scale estate producers who use freehold and leasehold land to produce cash crops mainly destined for the export market.

As a result of the centrality of agriculture, Malawi's development strategies and policy reforms have concentrated heavily on this sector. This paper traces the evolution of agricultural policy over the past two decades. During this period the World Bank has played a key role in shaping policy reform through the medium of its Structural and Sectoral Adjustment Loans.<sup>1</sup> Three distinct reform phases can be identified: 1981–87 when policy was dominated by the dogmatism of the World Bank's "pricist and state minimalist" policies (Lipton, 1987); 1988–94 when a more flexible position was taken by both the Bank and the Malawi Government both of whom acknowledged the structuralist critique of earlier policies; and 1994 to the present when the reform process in agriculture became more politicized and a

schism developed between the Bank and the Government. Politicization took the form of Malawi's ruling political party explicitly using elements of agricultural policy to promote its own populist attempt to retain power without regard for longer term economic impact.

The former two periods have been extensively analyzed (Cromwell, 1992; Harrigan, 1988, 1997; Kydd & Hewitt, 1986a, 1986b; Pryor, 1990; Sahn & Arulpragasam, 1991). This paper summarizes the earlier analysis and then focuses on the 1994–2000 period. This later period coincided with the transition to democracy in Malawi, which politicized and consequently derailed the agricultural reform process. This had two effects. First, it exacerbated the policy inconsistencies and U-turns,<sup>2</sup> which characterized the entire period under analysis. Second, it resulted in a widening gulf between the Malawi Government and her principal donors, particularly the World Bank, regarding views on what constituted the most appropriate reform path for agriculture. Both donor and recipient have been turning full circle, the Bank retreating back toward its state minimalism of the early 1980s and the

\* I would like to thank the Wincott Foundation and the Nuffield Foundation for financial support enabling me to undertake fieldwork in Malawi. Final revision accepted: 12 December 2002.

Government edging toward its interventionism of the 1970s. This is not to deny that significant and sustained reforms have taken place, but the events of the second half of the 1990s are worrying. They reflect a more general lack of consensus regarding the relative role of the state and the market in the agricultural sector of Eastern and Southern Africa (Jayne & Jones, 1997; Smith, 1995) which is currently playing havoc with policy formulation. The key unresolved issues are the relative role of food imports and food self-sufficiency in achieving food security and the contribution of the state to the later, and more generally the role to be played by state marketing boards and input subsidies in semi-liberalized input and output markets.

The analysis of the vicissitudes of World Bank and government policy formulation in Malawi's agricultural sector throws light on factors that influence the policy formulation process in aid dependant economies in transition to democracy. These lessons are relevant to similar countries in the region and further afield. It is hypothesized, based on the Malawi experience, that the policy formulation process is influenced by the interplay of two distinct factors: shifts in development paradigms within the international aid community (led by the World Bank) and the effects of domestic political pressures within the aid recipient.

The concept of paradigm shifts provides us with a series of analytic frameworks to help analyze the policy formulation process. Throughout much of the 1980s the dominant development paradigm, promoted through International Monetary Fund (IMF) stabilization programs and World Bank structural adjustment programs, was one of pricism and state minimalism. Based on the Swan-Salter excess absorption model (Salter, 1959; Swan, 1960) economic reform in developing countries consisted of reducing domestic absorption, especially via cut backs in public sector expenditure, while adjusting price incentives to stimulate the production of tradable goods. This somewhat dogmatic approach to policy reform became known as the "Washington Consensus." The "Post-Washington Consensus" of the late 1980s and 1990s represented a paradigm shift toward a type of Structuralism that Tarp (1993) has referred to as "Neo-classical or Micro-Structuralism."—The Bank's revisionism accepted the neoclassical model of resource allocation and the importance of markets but acknowledged that supply responses and substitution possibilities are limited in less-devel-

oped countries (LDCs) due to imperfect markets and nonprice constraints. From the late 1990s onward, although MicroStructuralism persists, the dominant donor concern with poverty alleviation has resulted in the development of a more holistic approach to policy, especially in the agricultural sector of developing countries, which revolves around the "livelihoods and entitlements" paradigm (Ellis, 2000; Francis, 2000).

This paper illustrates the manner in which the above paradigm shifts influenced the World Bank's approach to agricultural policy in Malawi and how actual policy implementation was mediated by domestic political pressures. The most recent interplay between the two sets of factors has resulted in a disagreement between the Bank and the Malawi Government which centers around the issue of food security: is the Government right to emphasize food availability through increasing production, or is the Bank right to focus on access and entitlements? This paper argues that these unresolved differences are preventing a consistent strategy for the agricultural sector in a manner that threatens future development.

## 2. PRICISM AND STATE MINIMALISM OF THE EARLY 1980S

From independence in 1964 through to the end of the 1970s Malawi, unlike many other subSaharan countries, pursued an outward-orientated, agriculturally-based development strategy (Government of Malawi, 1971). But, although the country avoided the anti-agricultural bias seen in much of the region (World Bank, 1981a), there was a severe bias *within* the agricultural sector. A healthy annual average GDP growth rate of 5.5% during 1964–77 was driven by the estate sector which grew at an annual average of 17% while smallholder agriculture became progressively marginalized, growing at less than 3% per annum.

The bias in favor of estates at the expense of smallholders took many forms: customary land was annexed for the estate sector; smallholders were legally forbidden from growing certain high value crops reserved for estates such as burley tobacco, tea and sugar; finance was siphoned from the smallholder subsector by the monopolistic state marketing board ADMARC with most of the resulting profits channeled into estates; and smallholders were relied upon to provide a marketable surplus of the staple

food crop maize to feed estate and urban workers (Kydd & Christiansen, 1982).

A series of exogenous shocks at the end of the 1970s, namely a 35% collapse in the terms of trade,<sup>3</sup> drought in 1979–80 and civil war in Mozambique which disrupted external trade routes, exposed severe fundamental weaknesses in the economy and showed that the post-independence estate-led export strategy was no longer viable. The strategy had intensified the concentration of the country's export base in tobacco, making the country highly vulnerable to exogenous shocks, created a highly import dependent estate sector, and marginalized smallholders leading to food and foreign exchange shortages. In response to the ensuing economic crisis<sup>4</sup> the Malawi Government, like those of many developing countries (Mosley, Harrigan, & Toye, 1995), turned to the IMF and the World Bank for financial assistance in the form of Stabilization and Structural Adjustment Loans (SALs). During 1981–87 Malawi undertook a standard World Bank structural adjustment program in the form of three Structural Adjustment Loans. Much of the loan conditionality focused on the agricultural sector and can be characterized by what Lipton (1987) has referred to as the "pricism and state minimalism" of the Washington Consensus. The aim was to remove the incentive bias against smallholders. Key reforms focused on increasing the production of smallholder exportable cash crops, namely tobacco, groundnuts and cotton, by increasing the producer prices offered by ADMARC. At same time maize prices were held down to reduce the relative price of food crops so as to encourage more export crop production. To reduce public sector absorption the Government's budget deficit was cut. In terms of the agricultural sector, the most important policy here was the planned removal of fertilizer subsidies.

It is generally acknowledged (Cromwell, 1992; Harrigan, 1988, 1997; Kherallah & Govindan, 1999; Sahn & Arulpragasam, 1991; Sahn, Arulpragasam, & Merid, 1990) that the above policies were inappropriate and poorly sequenced. Until the mid-1980s there appeared to be a honeymoon period between certain sections of the Malawi Government, namely the Ministry of Finance and the Office of President and Cabinet, and the Bank. Despite strong opposition from the Ministry of Agriculture, the Bank's agricultural pricing policies were implemented and seemed to have succeeded with a dramatic increase in the sale of

smallholder export crops to ADMARC (Harrigan, 1988, Table 2). But, despite high individual crop price elasticities (Colman & Gorbett, 1975; Dean, 1966; Kirchner, Singh, & Squire, 1985; Mills, 1975, 1983; Minford & Ohs, 1976; World Bank, 1981b) aggregate price elasticity of supply was low in the smallholder sector i.e., total production was not that responsive to price increases due to the prevalence of nonprice constraints.<sup>5</sup> As a result the increased production of exportable cash crops took place by displacing the main food crop maize. The displacement of maize was made worse by the policy of fertilizer subsidy removal which reduced the profitability of maize production, particularly high-yielding improved maize varieties (Harrigan, 1995, Table 4.7). The ensuing clash between the Ministry of Agriculture and Bank staff was the beginning of a protracted, and as yet unresolved, debate on the most appropriate food security policies for Malawi. The Bank's policy prescriptions were influenced by the Washington Consensus's faith in the market mechanism, including international markets, and its antithesis to state interventionism, including subsidies and controlled prices. Hence, Bank staff argued that food security could best be achieved by allowing market determined production of exportable cash crops such as tobacco and using the resulting foreign exchange earnings to make good any food deficit through imports. The Ministry of Agriculture, on the other hand, equated food security with self-sufficiency and argued that government intervention was necessary to achieve this. The Ministry criticized the Bank's use of price policies to stimulate export crop production since it overlooked the fact that increased food crop productivity was a pre-requisite if land was to be released for export crop production without jeopardizing food self-sufficiency. In particular, there was a need to increase food crop productivity among Malawi's many subsistence producers who were by-passed by price policy reform. This required nonprice policies to help overcome structural constraints to food production so that aggregate smallholder output would increase.

By 1987 Malawi faced a food crisis. This took two forms, a decline in maize production per capita, particularly improved maize (Sahn *et al.*, 1990, Table 24) and a collapse in ADMARC's ability to purchase maize. The crisis was due to inappropriate and poor sequencing of price and market liberalization.<sup>6</sup> Fertilizer subsidy removal and liberalization of export crop

prices in advance of liberalization of maize producer prices and the absence of nonprice policies to support agriculture contributed to declining food crop production. At the same time general price liberalization had occurred in advance of marketing liberalization placing a financial strain on ADMARC. This created an unsustainable parastatal (Kaluwa, 1992) such that by 1987 ADMARC faced a severe financial crisis and the formal maize marketing system collapsed.

The marketing crisis resulted in a hasty and rushed attempt at market liberalization at the end of the 1980s (Government of Malawi, 1986). ADMARC markets in remote areas were closed and licenses issued to private traders to encourage private trade in produce and inputs. The market liberalization reforms were only partially implemented and were poorly timed as ADMARC did not possess adequate supplies of maize to defend ceiling consumer prices of the staple food crop. Consequently, food prices increased by over 50% between 1985–86 and 1987–88 (Sahn *et al.*, 1990, Table 27) making the reforms highly unpopular. In addition, the failure to liberalize simultaneously domestic finance markets meant that private traders were hampered by credit constraints and did not move into the remote markets abandoned by ADMARC (Chilowa, 1998; Lele, 1988; Mkwezalamba, 1989).

The food crisis of 1987 interacted with domestic political pressures resulting in a complete U-turn in the government's agricultural policy in direct violation of World Bank conditionality. Life President Banda had strongly identified his populist legitimacy with domestic maize availability, contrasting colonial famines with post-independence food security. The food crisis prompted the President, who was facing increasing criticism from exiled opposition groups, to announce unilaterally a new set of ADMARC smallholder prices which completely reversed those previously implemented under Bank conditionality. In mid-1987 maize producer prices were increased by 36% whilst fertilizer subsidies were re-introduced at 22%—a level above the pre-reform period.

### 3. STRUCTURALIST REORIENTATION OF AGRICULTURAL REFORM 1987–94

As a result of the 1987 policy reversals the planned SAL IV was abandoned and a reappraisal of the Bank's pricist and state mini-

malist agricultural policies took place. This reappraisal took place not just in the context of Malawi but coincided with a more fundamental reappraisal of the "Washington Consensus" resulting in the emergence of the "Post-Washington" paradigm of the 1990s.<sup>7</sup>

In the late 1980s work both within and outside the Bank began to acknowledge that structural constraints inhibited supply response to price and other incentives in agrarian sectors of low-income countries (Cleaver, 1985; Lele, 1989). Investment, especially public sector investment, was seen to have a major role in overcoming such constraints. This represented a move away from the old pricism and state minimalism and heralded a new era in which interactions between the state and the market were seen as central to the development process. This theme was echoed in World Bank's two internal assessments of adjustment programs in general conducted in 1988 and 1990 and in its 1989 study "subSaharan Africa: from crisis to sustainable growth" (World Bank, 1988, 1989a, 1990a). The Bank's structuralist revisionism toward the agricultural sector in subSaharan Africa contained several strands: investment intensive nonprice policies were acknowledged as necessary to raise agricultural productivity; food security was acknowledged as a complex country specific issue;<sup>8</sup> targeted consumption and production subsidies were accepted in accordance with the Theory of the Second Best to help elicit supply-side responses in the face of structural constraints and market distortions; there was a revision of state minimalist attitudes with the state now seen as complementary in supporting markets; a new focus on growth through poverty reduction entailed concentrating policies on resource poor farmers; and finally, although market liberalization remained firmly on the agenda, gradualism combined with efforts to overcome structural bottlenecks inhibiting the development of private trade became the order of the day.

Work conducted for the Bank on Malawi reflected the above paradigm shift:

The farmers' ability to increase productivity in response to changing prices hinges critically on timely access to inputs, the availability of appropriate technology and reliable output marketing arrangements. In Malawi these nonprice factors currently appear to be binding constraints. The same factors that impede a significant aggregate output response also affect food security (Christiansen & Southworth, 1988, p. 11).

Table 1. *GDP and agricultural growth rates 1990–99*

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Real GDP growth %	4.8	7.8	-4.0	4.9	-12.3	14.3	10.9	5.0	3.3	6.7
Agricultural growth %	-0.3	14.5	-16.1	31.3	-48.7	40.0	32.2	3.3	2.7	13.6
Smallholder growth %	-3.4	15.8	-25.3	51.8	-47.4	43.6	41.0	0.9	7.7	17.0
Estate growth %	9.2	11.0	9.0	1.0	-51.8	30.3	9.6	11.2	-12.3	-0.9

Source: Harrigan (2001).

In 1990 this new MicroStructuralist approach of the “Post-Washington Consensus” was operationalized in Malawi via the Bank’s Agricultural Sector Adjustment Program (ASAC) (World Bank, 1990b). ASAC acknowledged the pre-requisite of improving food crop productivity, especially among resource poor farmers, to release land for other cash crops without jeopardizing food production and that this required increased fertilizer use and adoption of high yielding maize varieties. The loan conditionality addressed Malawi’s agricultural dualism and the following key structural constraints: smallholder land shortage and underutilization of estate land; the crop growing restrictions placed on smallholders; lack of credit and extension services especially for smaller farmers; inadequate market and transport infrastructure; lack of research into improved maize varieties acceptable to farmers and a lack of fertilizer uptake by smaller farmers including subsistence producers.

The main reforms introduced by ASAC to address the above constraints included: revised legislation to permit smallholders to grow burley tobacco; halting of the transfer of customary land to estates; upward adjustment of estate land rents; continuation of Government fertilizer subsidies to boost food crop production; continued encouragement to private traders with constraints to private trade to be addressed through project aid; continuation of ADMARC’s divestiture program and in conjunction with IMF ESAF protection of key public sector investments in the agricultural sector. Despite the ADMARC divestiture program it was accepted by the Bank that ADMARC should retain its developmental role i.e., maintaining markets in remote areas and defending floor and ceiling prices with these functions to be funded by clear financial transfers from Government.

The acceptance of fertilizer subsidies represented a total policy U-turn on the part of the Bank in terms of both the specific policy of

allowing subsidies, in contrast to its earlier insistence on complete subsidy removal, and in terms of its more general approach to the food security issue. Input subsidies were now seen by the Bank as an efficient use of government resources and scarce foreign exchange compared to the alternative of food imports (World Bank, 1990b, pp. 25–26). The fertilizer subsidy was seen as a second-best solution until other constraints, e.g., lack of credit for fertilizer purchases and high cost of fertilizer due to import route disruption caused by civil war in Mozambique, were overcome. In addition, targeted subsidies on small bags of fertilizer were seen as a form of indirect transfer payment to the poor.

In 1991 there were signs of a strong smallholder response to the ASAC reforms—smallholder agriculture grew by 15.8% (Table 1) due to bumper maize harvest and increased tobacco production brought about through both acreage expansion and yield increases. The recovery however, was interrupted by three shocks: severe drought in 1992 and 1994; an increased influx of Mozambican refugees and a suspension of all Western nonhumanitarian aid in 1992–93 in protest against President Banda’s suppression of the pro-democracy movement.

#### 4. STRUCTURAL TRANSFORMATION AND UNRESOLVED ISSUES 1994–2000

##### (a) *Structural transformation of smallholder agriculture*

1994 brought major changes to Malawi in the form of the signing of Mozambican peace treaty and the successful election of the new democratic UDF government under president Muluzi which placed poverty alleviation at the center of its policy agenda (Government of Malawi, 1998). When the new Government came to power in 1994 it was generally acknowledged that the past adjustment reforms in the agricultural sector had failed (Sahn & Arulpragasam, 1991; World Bank, 1995, 1997).

During 1980–94 agricultural GDP grew at only 1.6% per year, about half the growth rate of the rural population, which made up 92% of the total population. During 1992–94 the growth rate had been negative due to severe droughts in 1992 and 1994.

There were signs however, that the sector was beginning to respond to the new policies introduced by the previous Government from the late 1980s onward namely, opening up burley tobacco to smallholders, promotion of hybrid maize technology and agricultural diversification, all of which were supported by input and output market and price liberalization. Excluding the two drought years, during 1987–94 agriculture grew by about 5% per year indicating that Malawi's agricultural sector stood at a potential turning point. This was partly due to: the increased adoption of hybrid maize<sup>10</sup> prompted by higher maize prices; fertilizer subsidies; and increased supplies of seed, fertilizer and credit following changes in the organization of input markets with the introduction of new suppliers. Progress in research and extension activities with the release of a semi-flint maize hybrid with the taste and storage characteristics favored by Malawian smallholders were another factor. The ability of some smallholders to grow burley tobacco also increased export production as well as providing income to purchase maize seed and fertilizer. Private trading had also developed, mainly in the Central and Southern Regions following the market liberalization moves initiated in 1987 (Chilowa, 1998).

The new government remained reliant on donors for foreign exchange and was therefore obligated to continue with the former regime's liberalizing reform program, including that in the agricultural sector. Indeed, in its first few years in office the UDF Government accel-

ated the agricultural liberalization process. The ban on the export of food crops was lifted and the system of fixed agricultural producer and consumer prices was liberalized. For maize there was a price band in which the market could fluctuate leaving ADMARC to intervene at the floor and ceiling prices. The remaining burley tobacco quotas were also removed, as was ADMARC's monopsony on smallholder tobacco purchases.<sup>11</sup>

Partly in response to these policies and partly reflecting favorable weather as agriculture bounced back from the 1992 and 1994 droughts, there was remarkable growth led by the smallholder sector. In 1995 and 1996 smallholder growth registered 43.6% and 41.0% respectively and the economy as a whole expanded by 14.3% and 10.9% respectively. Respectable although less spectacular growth persisted to the end of the decade with the exception of smallholder growth in 1997 (see Table 1). Tobacco was the driving force in this growth and the major cash injection brought multiplier linkages to the rest of the nonfarm rural economy. The pace of smallholder burley production and its quality exceeded expectations. Smallholder production increased from 3,000 ton in 1991–92 to 81,000 ton in 1997–98 (see Figure 1). By 1998 smallholders were responsible for 70% of the nation's total tobacco production compared to 12.8% in 1990 (see Figure 2). Most of the growers were middle-income smallholders although there was evidence of an increasing number of poor households with less than one hectare of land with small plantings of burley.

Another major structural change was the diversification of agriculture, as smallholders moved into nonmaize drought resistant secondary food crops such as millet, pulses, beans, potatoes and cassava. Between 1990–91 and

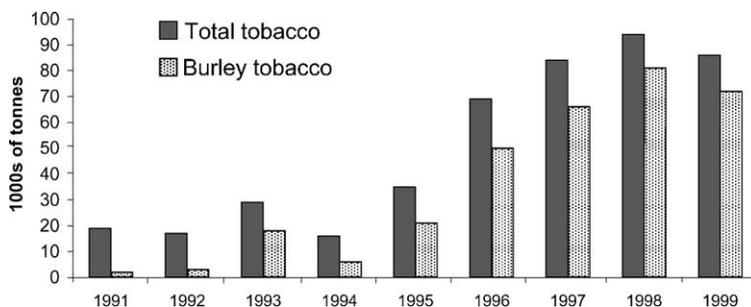


Figure 1. Smallholder tobacco production.

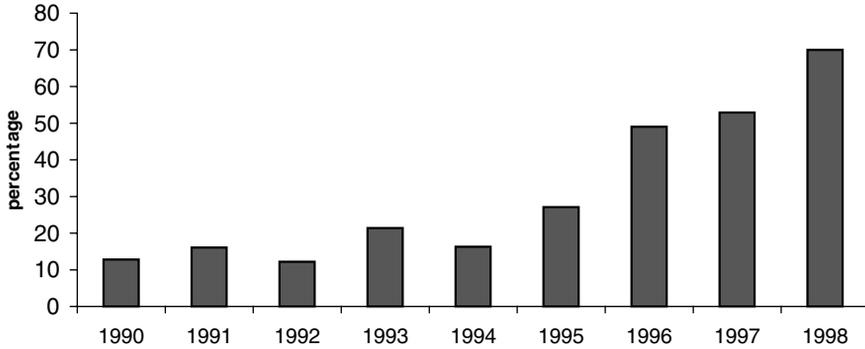


Figure 2. *Smallholder tobacco production as percentage of total.*

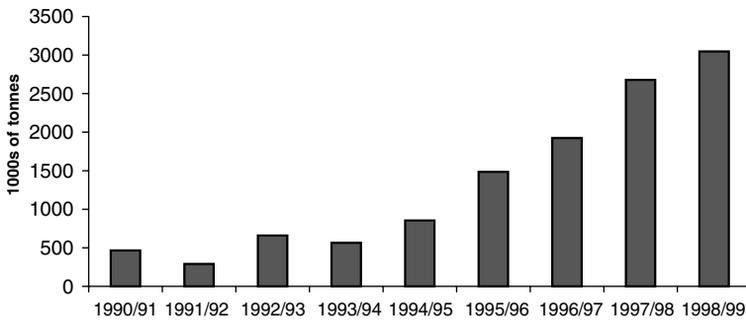


Figure 3. *Smallholder production of nonmaize food crops. Source: Government of Malawi Ministry of Agriculture Crop Estimates (various years).*

1998–99 production of these crops increased from 465,000 to 3,046,000 ton (see Figure 3). New food crops and tobacco meant that the share of maize in smallholder plantings declined from 72% at the beginning of the decade to only 50% in 1998–99 (see Figure 4).

At the same time as production patterns were dramatically changing, ADMARC’s marketing dominance declined due to the promotion of private trade, the opening up of export markets and ADMARC’s own financial problems. In 1997 75% of hybrid seed and 70% of fertilizer

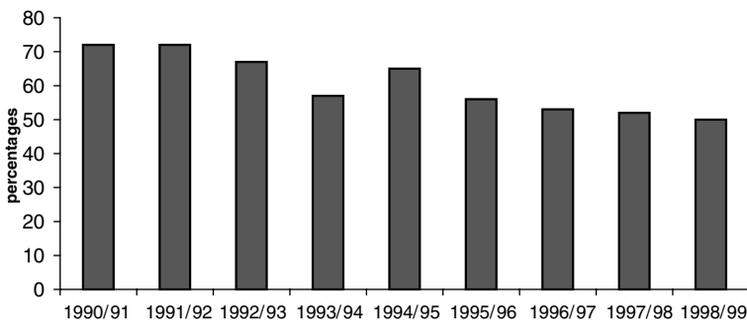


Figure 4. *Share of maize in smallholder plantings. Source: Government of Malawi Ministry of Agriculture Crop Estimates (various years).*

was sold through the growing number of commercial entities compared to 11% and 6% in 1991 (USAID, 1999, p. 5).

The smallholder-led growth in the 1990s represented a major shift in the structure of the Malawian economy. A smallholder growth dynamic replaced the previous estate dominance, whilst both production and marketing patterns in the smallholder sector changed significantly. This provides clear evidence that it is possible for the agricultural sector of low-income LDCs such as Malawi to respond to a combination of orthodox liberalization policies supported by more structuralist nonprice policies.

#### (b) *World Bank policy U-turns*

Despite the beginnings of a successful structural transformation of smallholder agriculture, by the late 1990s there were signs of growing division between the Bank and other donors such as USAID on one hand and the Malawi Government on the other regarding the future direction of agricultural policy which jeopardized continued success.

The Bank's position on the issues of food security and subsidies which emerged in the late 1990s represented a major U-turn which reversed the new approach of the late 1980s and early 1990s, outlined in the previous section, back toward the orthodoxy of the early 1980s, and led to increased tension with the Malawi Government. The shift was clearly evident in the Bank's 1997 Country Report (World Bank, 1997). Whereas earlier the Bank had placed great faith in hybrid maize production and increased maize productivity as the route to food security (World Bank, 1995, p. 26) by 1997 this faith had weakened. The marginal viability of hybrid maize without subsidies was stressed and instead greater emphasis was placed on nonmaize food crops, off-farm earnings and foreign exchange earnings to import food. Indeed, the Bank (1997, p. vi) charged the Government with "...the mistaken identification of maize production with food security."

The Bank saw burley, the most profitable crop, as the driving force in agriculture, with all farmers who could be encouraged to cultivate it. Earlier, in 1995, the Bank realized a potential clash between smallholder burley and food production:

This liberalization option may also lead to greater concentration of tobacco in the short term, until other

more profitable crops emerge, and may also result in national maize deficits, if yields do not increase significantly (World Bank, 1995, p. 15).

Although the 1995 Bank report argued against the full liberalization of the burley tobacco market citing the dangers of lower burley prices, declining maize output and increased reliance on tobacco, by 1997, these concerns were no longer voiced by the Bank despite the fact that there was evidence that among farmers, particularly in the lowest third of landholding size, tobacco was crowding out hybrid maize<sup>12</sup> (Mkandawire, 1999; Mkandawiri, 1999; Peters, 1996). Instead, the Bank adopted its old approach to the relationship between cash crops and food crops, arguing, as it had in the early 1980s, that food security could be achieved by using cash crop revenue, particularly tobacco revenue, to import food. This change in Bank thinking was reflected in the full liberalization of burley production and marketing implemented through the 1996 World Bank's Financial Restructuring and Decentralization Program (Chilowa, 1998). The Bank's new approach was also reflected in its stance toward the strategic grain reserve. Although both Government and donors agreed on the need for a strategic grain reserve by the late 1990s there was renewed debate on the role of food imports versus self-sufficiency. The Bank and the IMF were pushing for a greater role for imports and a financing facility arguing that the National Food Reserve Agency should assign an equal amount of resources to a physical and a financial reserve. The Government on the other hand was reluctant to allow the landlocked country to rely on a financial reserve for grain imports.

On fertilizer subsidies the Bank also reverted to its earlier anti-subsidy orthodoxy. The Bank argued that adoption rates for hybrid maize in the early 1990s were artificially high due to subsidies on fertilizer, seed and credit.<sup>13</sup> Hence, in 1996-97 under Bank pressure fertilizer subsidies were removed, as were free input programs. Combined with the sharp devaluation of the Kwacha this made input prices soar. As a result hybrid maize became less profitable than virtually all other marketed food and industrial crops. This declining profitability of maize production contributed to the collapse in the smallholder growth rate which fell to 0.9% in 1997 (see Table 1).

The Bank reversion to its old orthodoxy on input subsidy removal from 1996-97 onward

represented a significant policy U-turn from the position it had taken in the early 1990s. Malawi had one of the highest fertilizer-maize price ratios in the world, partly due to high internal and external transport costs, the latter due to problems in Mozambique. In 1995 the Bank acknowledged this problem and advocated targeted subsidies to resource poor smallholders (World Bank, 1995, p. 16). By the late 1990s, however, the Bank vigorously opposed input subsidies and argued that liberalizing the import and marketing of fertilizer would eliminate supply constraints. This was clearly articulated in the Bank's 1997 Country Report (World Bank, 1997):

*Do not* reintroduce credit or fertilizer subsidies: not only are they fiscally unsustainable but they encourage inefficient resource use and undermine other efforts to develop sustainable market-based institutions. It is better to provide grant or public works assistance than to mix welfare with credit or input provisions (World Bank, 1997, p. xii).

Clearly the lack of policy consistency caused by the Malawi "on/off" subsidy policy reduced policy credibility and most likely had a negative impact on production. Hence there is a pressing need for Government and donors to reach common ground on this issue.

In addition to the divisions over the role of input subsidies and the modalities of food security, Bank policy reversals were also evident regarding other aspects of the role of the state in the agricultural sector, especially the role of the state marketing board ADMARC. Again in 1995 the World Bank had adopted a sophisticated approach to market liberalization and the role of ADMARC reflecting the MicroStructuralist paradigm:

Agricultural market liberalization is not a simple matter for a number of reasons. It is not at all clear that liberalization efforts in a few markets will lead to economic gains for all smallholder groups as long as there are rigidities, imperfections and failures in other markets. This is the well-known theory of the second best... Furthermore, liberalized markets are not synonymous with competitive markets, and a mere removal of restrictions will not necessarily lead to optimal or efficient outcomes, let alone equity and poverty reduction (World Bank, 1995, p. 27).

Despite this initial caution, by 1997 the Bank had executed a U-turn and tensions rapidly emerged between the Bank and the Government on the pace of market liberalization and particularly the role of ADMARC. The Bank

pushed for a complete Government withdrawal from agricultural markets, advocating that ADMARC be commercialized and privatized and that food security be taken care of by a National Food Reserve Agency, a Trust formed to run the country's decentralized strategic grain reserve on a rule-based method of intervention. Formation of the Agency was eventually completed in 1999. Its mandate was to purchase maize for the silos, sell and export as well as taking over ADMARC's maize importation role. Despite this mandate, the exact functioning of the Agency, which is expected to run on commercial lines, remains hazy. For example, it is not clear whether the Agency will just promote food security in drought years or whether it will have an on-going price stabilization role. The Bank's view is that it should undertake the more limited former role and only provide relief in occasional years of serious drought rather than attempt intertemporal price smoothing which should be left to private traders. At present there is a maize price band, which has recently been widened to reduce the extent to which the Agency has to intervene to protect prices. The Bank's view, however, is that eventually private traders will completely take over the price stabilization role.

In 1999 divisions between the Bank and Government on the role of ADMARC in agricultural markets intensified. Under the new Government the Bank gave Malawi two program loans, namely two Fiscal Restructuring and Deregulation Program Loans (FRDP I and II). The Government's failure to fulfil the FRDP condition to commercialize and privatize ADMARC by March 1999 resulted in a holding up of the second tranche FRDP II disbursement of US\$30 million.

### (c) *Understanding the shift in Bank policy*

At first sight it is difficult to understand the reversals of Bank policy regarding smallholder agriculture in Malawi that took place in the late 1990s and seemed to represent a return to the hard-line neoclassical orthodoxy of the early 1980s. In line with the general theme of this paper the explanation seems to lie in two distinct influences on the policy process: paradigm shifts and the effects of domestic political pressures.

Toward the end of the 1990s increased currency was being given to the livelihoods and entitlements approach to rural development as reflected in work by Ellis (2000) and

Francis (2000). This approach stressed the diversity of rural income and livelihood sources and the complexity of factors determining individual entitlements to such rights as food security. Livelihood strategies employed by rural households became a major focus of research. Within this context, the introduction of smallholder burley production in Malawi was seen by many donors and analysts as a key livelihood opportunity offering a panacea for rural development, poverty and income inequality (for example, see Orr, 2000; World Bank, 1997 and more recently IMF, 2002). Burley production would provide individual households with income to ensure entitlements to marketed food such that food security need no longer be synonymous with self-sufficiency at both the individual and national level. It was in the context of this complex livelihood paradigm that the Bank moved back to its old advocacy of smallholder cash crop production and greater reliance on maize imports.

Although it helps account for the Bank's U-turn on food security issues, the paradigm shift does not help explain the Bank's policy reversals on the issue of fertilizer subsidies and the role of ADMARC. Explanations for this seem to lie with political forces in Malawi and the Bank's somewhat knee-jerk reaction to such forces. In short, the new UDF Government of President Muluzi, elected to power in the country's first ever multiparty elections in 1994, responded to legitimacy pressures by becoming increasingly interventionist. The Bank's response was to adopt a hard-line liberalization stance.

The new UDF government staked its claim to legitimacy by adopting populist interventionist policies in the agricultural sector. As a

result, agricultural policy became highly politicized, reflecting the political needs of a regime striving for legitimacy rather than the development needs of the sector itself. Reflecting the legacy of the Banda years, much of the populist appeal was based on strongly identifying government legitimacy with maize availability in the public mind. This was operationalized through government interventions to assist maize production.

As in the 1980s, the controversy between the Bank and the Government regarding interventionism centered on what the Government perceived to be an emerging food crisis. Despite the food crop diversification the Government was increasingly concerned with the mid-1990s stagnation in national maize output, which was still the dominant food crop. Between 1990–91 and 1994–95 maize production fell from 1,589,000 to 1,328,000 ton (see Figure 5) while yields fell from 1.14 to 1.08 mt/ha. The yield decline for improved maize was even greater. This raised concerns about the prospects for national food production and household food security.

In response to what it perceived to be an emerging food crisis, the UDF Government introduced the US\$23.5 million Starter Pack Program in 1998 to provide enough free seed and fertilizer along with extension advice for all smallholders to cultivate 0.1 ha of staple foods i.e., grains and legumes in the 1998–99 growing season. The Starter Pack Program was designed to boost food self-sufficiency, which the Government argued was cheaper than maize imports and better suited to ensuring household food security than reliance on markets, and represented a return to interventionism and subsidies.

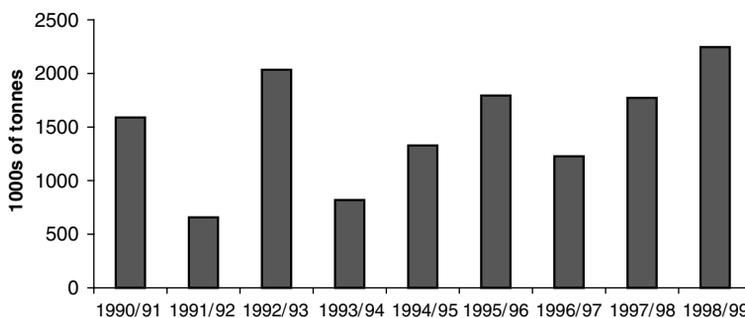


Figure 5. Smallholder maize production. Source: Government of Malawi Ministry of Agriculture Crop Estimates (various years).

Despite donor pressure on the Malawi Government to find an exit strategy from the Starter Pack Program and to find alternative more targeted ways of helping the poorest, the 1999–2000 Budget Statement announced that the Starter Pack Program would continue, at least for the next year (Government of Malawi, 1999a, p. 22). The 1999 White Paper on strategies to propel the economy into the next millennium (Government of Malawi, 1999b, p. 33) reiterated this intention to provide free inputs to all of the country's farmers. Partly in response to the Starter Pack maize production for 1998–99 was 27% up on the previous year (see Figure 5). But, the Program clearly violated the spirit of World Bank conditionality and in 1999 other donors became increasingly uncomfortable with the Government's move to an untargeted approach to subsidies. The Government for its part argued that food security considerations justified the intervention, that targeting was expensive and that since most Malawi's were poor and the pack was so small, leakage to the better-off was minimal.

In addition to importing and subsidizing fertilizer for the Starter Pack Program, the Government's desire to achieve food security has also resulted in other forms of intervention and subsidy. For example, in 1998 ADMARC responded to food shortages by importing over 120,000 ton of maize, which it sold at a loss below the import parity price. Many donors, particularly the Bank and IMF, have started to adopt a more dogmatic position, accusing the Government of intervening in markets in a manner which crowds out private traders. The Government for its part argues that privatization has been too rapid and that market liberalization has been promoted more with the objective of reducing the fiscal deficit than promoting efficiency and competition.

(d) *Unresolved issues relevant to low-income agrarian economies*

One important unresolved issue between Malawi and her principal donors centers around the relationship between cash crops and food crops and this is of relevance to other low-income agrarian economies currently pursuing cash crop liberalization programs. Has smallholder burley tobacco production displaced maize production in Malawi, and if so, does this matter? This question can only be answered within the context of a complex livelihood analysis and further research is required. It has added pertinence given the current (2002) food crisis in Malawi. Although the current food crisis has complex and multiple causes, initial evidence suggests a degree of displacement. Mkandawire (1999), Mkandawiri (1999), and Peters (1996) argue that expanded smallholder tobacco production has been displacing maize production and thus impacting on food security. This assertion is supported by Figure 6 which shows that the sharp increase in hectareage devoted to burley in the mid-1990s has not displaced other types of tobacco but has been found from elsewhere in a manner likely to have displaced food crops.

If the above initial evidence on tobacco displacing maize is correct, does it matter? Within the livelihoods framework this requires answers to the following questions: Has burley liberalization differentially affected livelihoods of Malawian smallholders and what implications does this have for income distribution and poverty alleviation? How has the liberalization process affected entitlements, particularly entitlements to food security, amongst different groups? Similar questions need to be addressed in other low-income agrarian economies promoting and liberalizing export crop production

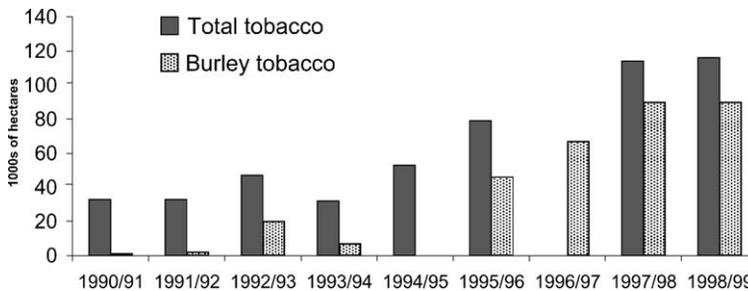


Figure 6. *Smallholder tobacco hectareage.* Source: *Government of Malawi Ministry of Agriculture Crop Estimates (various years).*

amongst smallholders. Within the current literature on Malawi there is general agreement that the liberalization of the production and marketing of burley has not benefited the majority of the poor but has mainly benefited wealthier smallholders with larger landholdings (Chilowa, 1998; Peters, 1996; Smith, 1999). But, the evidence on poverty impact is scant. Although poverty alleviation was the justification for the Bank's agricultural liberalization in Malawi, much of the policy debate has taken place in a vacuum with little reference to what is happening to poverty. The dearth of information is reflected in the absence of longitudinal surveys at the national level to show how poverty has changed over time. In the absence of information, trends in poverty have been inferred from per capita maize production or from Rapid Rural Appraisals. This information gap has not helped solve policy differences between Malawi and her donors.

If tobacco has displaced maize what are the implications for food security? At the level of national food security this question boils down to the debate between Malawi and the Bank regarding the relative roles of self-sufficiency and maize imports in achieving food security. This debate is of wider relevance to other low-income agrarian economies with an undiversified export base and underdeveloped marketing infrastructure. Mkandawiri (1999, p. 59) reflects the government's position when he argues

there is some potential danger of making the country increasingly less able to feed itself and therefore force it into the undesirable position of spending scarce foreign exchange on importing even staple food grains.

At the individual level, it seems unlikely that a process whereby tobacco replaces food production can guarantee individual food security unless there is a well-developed livelihoods strategy and market infrastructure ensuring *all* individuals have and can exercise entitlements to food.

The second key unresolved difference between the Malawi government and the Bank concerns the role of the state in agricultural development and the achievement of food security. Again, this debate is of relevance to other developing countries in the process of agricultural market liberalization. The Bank's view is that ADMARC should be completely commercialized and that private traders should be relied upon to provide intertemporal and interspatial food price smoothing as well as

supplying maize to the country's strategic reserve. It is hard to see however, how maize and food security can be completely commercialized in a poverty-stricken country with a highly underdeveloped private sector (Smith, 1995). For example, unlike South Africa with a sophisticated grain futures market, Malawi lacks a well-developed private sector and support in the form of good roads, infrastructure, communications, and financial sector. Scale barriers also mean that trade is dominated by petty traders who do not have adequate resources to make bulk purchases or to intermediate between surplus and deficit areas (Chilowa, 1998). This was illustrated by the experience of the late 1990s when maize purchases for the strategic reserve were tendered out to the private sector. The underdeveloped private sector, facing numerous constraints and unwilling to tie money up in maize as opposed to the more lucrative tobacco trade, failed to deliver.<sup>14</sup> As a result of the private sector's failure to deliver the Government via ADMARC has continued to import maize.

The clear dilemma is what role the Government should play in promoting food security over the fairly long period it will take for the private sector to develop, and how it should do this in such a manner that private sector development is not inhibited. How to sequence ADMARC's retreat with the encouragement of private trade and the extent of this retreat currently remains a grey area between Government and donors. While the Bank, IMF and some bilateral donors such as USAID have reverted to a push for state minimalism, other donors are becoming more sophisticated in their approach accepting that there are certain functions that the private sector cannot or will not provide:

Compared to the early 1980s, the pendulum of donor conventional wisdom appears to be swinging back to recognizing that the state does have a legitimate role in agricultural marketing activities. The problem still remains, however, of deciding what constitutes a reasonable balance between the state and the private sector given the wide array of market failure, market development or income distribution grounds justifying some form of intervention (Smith, 1995, p. 561).

As Smith has pointed out, the Bank's intention that ADMARC become, at the most, a buyer and seller of last resort operating as a commercial, financially self-sufficient organization was optimistic:

Very few, if any, countries in the region have managed to resolve the internal conflicts inherent in this intention, and Malawi is no exception to this (Smith, 1995, p. 265).

The synchronization of state retreat from agriculture with the development of a private sector capacity remains a key policy issue throughout much of the subSaharan region and the lessons of Malawi's overly hasty retreat are clearly relevant.

Likewise, on the more specific issue of agricultural subsidy removal, the Bank's shifting position on input subsidies and its lack of policy consistency in this area in Malawi reflects a more general lack of consensus regarding the role of subsidies in low-income countries operating in a global economy characterized by dumping of surplus commodities generated by subsidies in rich countries (Timmer, 1995).

Although this paper has stressed policy differences between the World Bank and the Malawi government and has analyzed the influences on the policy formulation process, there are important areas where the two see eye-to-eye. One area where the Bank and the Government seem to have reached agreement concerns the future of the estate subsector and the need for land redistribution. Estate tobacco production and the performance of the estate sector more generally gave cause for concern at the end of the 1990s. Although smallholder tobacco production increased during the 1990s, total production declined in 1998 and 1999 with sales falling from 158,000 ton in 1997 to 110,000 in 1999. In addition, during the 1990s there was a dramatic decline in estate tobacco production from 95,400 ton in 1990 to 40,300 ton in 1998. As a result by 1998 smallholders produced 70% of total tobacco production compared to 12.8% in 1990 (see Figure 2). Hence, what occurred during the 1990s was more of a switch in tobacco production away from the estates rather than a dramatic aggregate production increase. Much of the increased smallholder production was previously produced by estate tenants who became smallholders after liberalization. In addition, faced with increased input costs, following the sharp devaluation of the Kwacha in the late 1990s, many of the estates stopped producing and instead became intermediate buyers of smallholder tobacco.

The crisis in the estate sector was clearly illustrated by the contraction of this subsector.

Estate growth was negative at  $-12.3\%$  and  $-0.9\%$  in 1998 and 1999 respectively (see Table 1). As tenants became smallholders or started selling direct to intermediate buyers and as smallholder incomes started to increase, the estates faced increased labor costs and problems of labor recruitment and had to pay higher prices to outgrowers. At the same time the estates were hit by higher interest rates, declining credit, higher input prices and tighter enforcement of land rent payments. In short, the former tenancy system was unraveling and estates were failing to respond to the challenge by establishing new types of estate-smallholder relationships. As a result a large number of estates entered into receivership or were put up for sale by the commercial banks while some large estates started to consolidate their operations by shedding staff and selling their less productive farms.

In response to the estate crisis the Government appointed consultants to produce a report on the sector's future. The findings were dim. With the exception of a few well-capitalized and managed estates prospects for agricultural diversification were poor. In response the Bank (1997, p. 18) reached the radical conclusion that the poorly managed estates lacking equity "... have no future unless purchased by outsiders." It concluded that the estate sector would need to become smaller and more efficient without special privileges such as low land rents and taxation. The implication of a smaller estate sector was that estate land would need to be redistributed. On this front the Bank produced a bold and radical statement:

While the current estate "crisis" introduces the potential for political backlash and land-related conflicts, it also provides a historic opportunity to simultaneously redress some of the disequalizing effects of the past massive conversion of customary land to leasehold land and to improve the utilization of land ... In the interests of long-term economic and social development, there is an urgent need to put in place a transparent process for the orderly transfer of land (World Bank, 1997, p. 5).

By developing a land market and removing the legal and perceived constraints that limited leasing and selling of unused or poorly used land it was hoped that a new land tenure system could be developed, which would provide more secure land rights and thereby stimulate investment.

In addition to the estate crisis, political factors forced the land reform issue onto the

policy agenda. In the run-up to democratization in 1993–94 there developed a radical and militant smallholder assertiveness on the issue of land reform, particularly in the densely populated Southern Region. Smallholders squatted on private land and demanded that the inequities of land access be addressed. The new UDF Government responded and was voted to power partly on the promise of land reform. The World Bank and other donors, with a broad-based appreciation of the need for legislative reform, intervened advocating a gradual and systematic land reform process rather than a forced redistribution program. This has drawn the Bank into a policy area it normally shies away from and has resulted in a lengthy process to develop a reform agenda and consensus.

## 5. CONCLUSIONS

Malawian agriculture has undergone a striking structural transformation in the 1990s. A dynamic smallholder sector has emerged replacing the old estate dominance and led by the production of burley tobacco. At the same time food crop production has been diversified toward nontraditional crops. Although less impressive, the structure of input and crop marketing has also changed with private traders playing an increased role. These changes suggest that the more structuralist approach to agricultural reform, which was adopted from the late 1980s onward, has been much more successful than the old pricisism and state minimalism of the first part of the 1980s. This reorientation of agricultural policy in Malawi represented a major and welcomed U-turn on the part of the World Bank, not just in Malawi but also in other low-income agrarian economies.

Events in the second half of the 1990s, however, give cause for concern. There is evidence that both the Bank and the Malawi Government are turning full circle back to their old conflicting dogmatism, the Government reverting to a more interventionist stance and the Bank for its part advocating input and credit subsidy removal, food imports and state minimalism. This schism is partly the result of the transition to democracy, which has led the new democratic Government to politicize the issues of food security, input and credit subsidies via renewed state interventionism.

The positions taken up by the Bank and the Government at the end of the 1990s clearly illustrate that there are still unresolved structural issues in Malawi's agricultural sector. These include the role of the state in agricultural input and produce markets, the future of ADMARC, the role of imports versus production in achieving food security, and role of input subsidies. To date divisions between the Government and the World Bank on these issues remain unresolved and dialogue continues. In addition the need for land reform and environmental protection remains pressing.

Future development depends upon a resolution of the above issues which dominate debates on policy prescriptions for the agricultural sector not just in Malawi but elsewhere in the region (Jayne & Jones, 1997; Smith, 1995). A resolution is crucial for Malawi because, despite the structural transformation of the 1990s, major challenges face the Government. Rural poverty is still pervasive with some 80% of rural households being net purchasers of maize and 55% of the population, most of them smallholders, unable to meet their basic needs. This along with declining soil fertility means that food security remains a pressing problem. Even with the beginnings of a delayed Green Revolution maize yields are still low (despite one of the highest per capita consumption rates in the world). In addition to improving food crop productivity there is a need to initiate crop, livestock and value-added agro-processing product diversification to reduce the economy's heavy reliance on tobacco and maize. Moreover, although smallholders are outperforming estates, agricultural practices and marketing arrangements remain inefficient and there is still insufficient finance for smallholder production. More generally, smallholders face growing land, capital and human capital constraints. Marketing constraints also persist. Despite market liberalization, product and factor markets remain fragmented and unreliable, and rural infrastructure is poor. Private traders face transport, credit storage, and information constraints with scale-related barriers, meaning that trade is dominated by petty traders (Chilowa, 1998; Mkwezalamba, 1989). In addition, a more inclusive agricultural policy is required. A significant proportion of smallholders did not benefit from liberalization such as that for burley tobacco, or from the improved maize technology partly because the extension service focused on a few input intensive recommenda-

tions for the richest 25% of smallholders who received credit. The livelihoods and entitlements paradigm provides an important framework in which to approach this issue.

Productivity is also low in the estate subsector, particularly for tobacco production on which the country remains heavily reliant, with cultivatable land unutilized and returns to capital low while about two-thirds of estate employees, both tenants and laborers, are still impoverished. There is a pressing need to resolve the estate crisis and provide more efficient

use of estate land. This will entail the politically difficult task of scaling down the estate sector and redistributing land. It remains to be seen whether the new democratic government has the political strength to achieve this task. Finally, there is an urgent need to halt the process of environmental degradation. To this end, the new Government has passed several Acts of Parliament and formed a National Council for the Environment. These Acts and policies lean heavily toward community-based management and utilization of natural resources.

## NOTES

1. For a list of agricultural policy reform conditions attached to World Bank adjustment loans approved during 1981–96 see Chilowa (1998) Appendix.
2. The term “policy U-turn” is used in this paper to refer to two phenomena. First, a dramatic reversal of previously implemented policies. For example, abolishing fertilizer subsidies and then reintroducing them. Second, and more subtly, a reversal in attitude to the general policy stance. For example, replacing the strategy of achieving food security through imports with one of security through domestic production.
3. Tobacco and tea prices plummeted and oil-based imports such as fuel and fertilizer increased in price.
4. The more general demise of the Malawian economy at the end of the 1970s and the early 1980s is described in Harrigan (1995), which also provides a SAL policy matrix (Table 3.3) detailing World Bank reform conditions in all sectors of the economy.
5. This phenomenon of high own-price crop elasticities combined with a low price elasticity for aggregate supply is not unique to Malawi. Bond (1983) has calculated the average aggregate price elasticity of agricultural supply for nine subSaharan countries to be only 0.18 in the short run and 0.21 in the long run, despite finding high own-price elasticities for individual crops. Lipton (1987) and Streeten (1987) have presented a similar general hypothesis in arguing against excessive and exclusive reliance on improvements in price incentives to generate a positive aggregate supply response from the agricultural sector of low-income LDCs where producers face a range of production constraints leading to a low price elasticity of aggregate supply.
6. Price liberalization here refers to the introduction of import and export parity prices by ADMARC.
7. It is beyond the scope of this paper to discuss the complex causes of shifts in policy paradigm amongst international institutions such as the Bank. One obvious reason, however, was the influence of the increasing amount of research suggesting that the application of the former state minimalist and pricist policies had failed to achieve their objectives.
8. In landlocked countries with an undiversified export base and market failures (such as Malawi) it was acknowledged that reliance on food imports was a potentially risky strategy.
9. The Bank supported ASAC with a series of traditional projects including projects to develop agricultural marketing, credit projects and extension projects. By explicitly regarding sector and project lending activities as complementary, the Bank showed itself willing to respond to Lele’s plea:
 

“Increasing smallholder productivity will require a well-co-ordinated approach on a variety of fronts and this will require renewed commitment by donors to old-fashioned project lending, albeit in the context of a conducive macroeconomic and sector policy environment” (Lele, 1988, p. 37).
10. During 1988–92 the percentage of maize area planted with hybrids increased from 7% to 24% and in the 1992 drought year they represented half of maize output clearly showing that they were becoming a food crop rather than just a cash crop for better off farmers. This has prompted talk of Malawi’s “delayed Green Revolution” (Smale, 1995).

11. This led to the introduction of an intermediate buyer system for burley. These buyers grade, bale and deliver tobacco to the auction floor providing an alternative marketing channel to smallholders who do not have direct access to the auction.
12. Although there was evidence of crowding in on some larger farms as tobacco incomes were used to purchase maize seed and fertilizer.
13. During 1990–95 more than 50% of fertilizer used by smallholders on maize was provided free. For example, in 1993–94 and 1994–95 smallholders in areas worst affected by drought received a free input package of enough hybrid seed and fertilizer to plant 0.2 ha of land. This Drought Recovery Inputs program benefited about 800,000 households.
14. A similar failure to deliver was seen in the privatized seed market and in the fertilizer market where six of the eight private trading companies closed at the end of the 1990s.

## REFERENCES

- Bond, M. (1983). Agricultural response to price in sub-Saharan African countries. *IMF Staff Papers*, 30(4).
- Chilowa, W. (1998). The impact of agricultural liberalization on food security in Malawi. *Food Policy*.
- Christiansen, R., & Southworth, V. (1988). Agricultural pricing and marketing policy in Malawi: implications for a development strategy. Paper prepared for the World Bank's research study on *Managing Agricultural Development in Africa (MADIA)* and presented at the Symposium on 'Agricultural Policies for Growth and Development', Mangochi, Malawi, 31 October–4 November.
- Cleaver, K. (1985). *The impact of price and exchange rate policies on agriculture in sub-Saharan Africa*. Washington DC: The World Bank (World Bank Staff Working Paper 728).
- Colman, D., & Gorbett, G. (1975). *Economic and sociological issues in the development of the Lower Shire Valley*. Unpublished research paper, University of Manchester.
- Cromwell, E. (1992). Malawi. In A. Duncan, & J. Howell (Eds.), *Structural adjustment and the African farmer*. London: James Currey.
- Dean, E. (1966). *The supply response of African farmers*. Amsterdam: North Holland.
- Ellis, F. (2000). *Rural livelihoods and diversity in developing countries*. Oxford: Oxford University Press.
- Francis, E. (2000). *Making a living: changing livelihoods in rural Africa*. London: Routledge.
- Government of Malawi (1971). *Statement of development policies 1971–80*. Zomba Malawi: Malawi Government Printer.
- Government of Malawi (1986). *Report on ADMARC reconstruction*. Lilongwe Malawi: Malawi Government Ministry of Finance and Department of Economic Planning and Development.
- Government of Malawi (1998). *Vision 2020: National long-term development perspective for Malawi, Vol. 1*. Lilongwe Malawi: Malawi National Economic Council.
- Government of Malawi (1999a). *Launching the agenda for the next millennium, 1999/2000*. Lilongwe Malawi: Malawi Government Budget Statement, July.
- Government of Malawi (1999b). *Malawi policy framework paper*. Lilongwe Malawi: Government of Malawi.
- Government of Malawi (various years). *Ministry of Agriculture annual crop estimates*.
- Harrigan, J. (1988). Malawi: the impact of pricing on smallholder agriculture 1971–88. *Development Policy Review*, 6, 415–433.
- Harrigan, J. (1995). *Programme aid conditionality: the case of the World Bank's three structural adjustment loans to Malawi*. Unpublished Ph.D. dissertation, The University of Manchester, Manchester, UK.
- Harrigan, J. (1997). Modeling the impact of World Bank policy-based lending: the case of Malawi's agricultural sector. *The Journal of Development Studies*, 33(6).
- Harrigan, J. (2001). *From dictatorship to democracy: economic policy in Malawi 1964–2000*. Aldershot: Ashgate.
- International Monetary Fund (2002). *Malawi-2002 Article IV consultation concluding statement of the IMF mission*. <http://www.imf.org/external/np/ms/2002/051402.htm>.
- Jayne, T. S., & Jones, S. (1997). Food marketing and pricing policy in Eastern and Southern Africa: a survey. *World Development*, 25(9).
- Kaluwa, B. M. (1992). Malawi food marketing: private trader operation and state intervention. In J. B. Wyckoff, & M. Ruku (Eds.), *Food security research in Southern Africa: policy implications*.
- Kherallah, M., & Govindan, K. (1999). The sequencing of agricultural market reforms in Malawi. *Journal of African Economies*, 8(2).
- Kirchner, J., Singh, I., & Squire, L. (1985). *Agricultural pricing and marketing policies in Malawi: a multi-market analysis*. Washington DC: World Bank (CPD Discussion Paper).
- Kydd, J., & Christiansen, R. (1982). Structural change in Malawi since independence: consequences of a development strategy based on large scale agriculture. *World Development*, 10(5), 355–375.
- Kydd, J., & Hewitt, A. (1986a). The effectiveness of structural adjustment lending: initial evidence from Malawi. *World Development*, 24(3), 347–365.

- Kydd, J., & Hewitt, A. (1986b). Limit to recovery: Malawi after six years of adjustment 1980–85. *Development and Change*, 17, 531–555.
- Lele, U. (1988). *Structural adjustment, agricultural development and the poor: some lessons from the Malawian experience*. Paper presented at the Symposium on Agricultural Policies for Growth and Development: Mangochi, Malawi.
- Lele, U. (1989). *Agricultural growth, domestic policies the external environment and assistance to Africa: lessons of a quarter century*. Washington DC: World Bank.
- Lipton, M. (1987). Limits of price policy for agriculture: which way for the World Bank? *Development Policy Review*, 5, 197–215.
- Mills, J. C. (1975). *Price responsiveness of Malawian smallholder farmers: fast, slow or none?* University of Malawi, Chancellor College, Department of Economics Occasional Paper No. 2, February.
- Mills, J. C. (1983). Technology in the subsistence sector of Malawi. Conference Paper, University of Edinburgh Conference on Appropriate Technology, September.
- Minford, P., & Ohs, P. (1976). Supply response of Malawi labour. *East Africa Economic Review*, 8(1).
- Mkandawire, M. (1999). *Poverty and macroeconomic management in Malawi*. Harare: Sapes Books.
- Mkandawiri, T. (1999). *Agriculture, employment and poverty in Malawi*. Harare: International Labor Office Advisory Team (ILO/SAMAT Policy Paper No. 9).
- Mkwezalamba, M. (1989). *The impact of liberalization of smallholder agricultural produce pricing and marketing in Malawi*. Lilongwe, Malawi: Ministry of Agriculture.
- Mosley, P., Harrigan, J., & Toye, J. (1995). *Aid and power the World Bank and policy-based lending, Vol. I and II*. London: Routledge.
- Orr, A. (2000). Green gold? Burley tobacco, smallholder agriculture, and poverty alleviation in Malawi. *World Development*, 28(2), 347–363.
- Peters, P. (1996). *Failed magic or social context? Market liberalisation and the rural poor in Malawi*. Cambridge, MA: Harvard Institute for International Development (Development Discussion Paper No. 562).
- Pryor, F. (1990). The political economy of poverty, equity and growth: Malawi and Madagascar. *World Bank Comparative Study Series*. Oxford: Oxford University Press.
- Sahn, D., & Arulpragasam, J. (1991). The stagnation of smallholder agriculture in Malawi: a decade of structural adjustment. *Food Policy*.
- Sahn, D., Arulpragasam, J., & Merid, L. (1990). *Policy reform and poverty in Malawi: a survey of a decade of experience*. Cornell Food and Nutrition Policy Program, Monograph 7, Ithaca, NY: Cornell University December.
- Salter, W. E. G. (1959). Internal balance and external balance: the role of price and expenditure effects. *Economic Record*, 653(71), 226–238.
- Smale, M. (1995). Maize is life: Malawi's delayed green revolution. *World Development*, 23(5), 819–831.
- Smith, L. (1995). Malawi: reforming the state's role in agricultural marketing. *Food Policy*, 20(6), 561–571.
- Smith, W. (1999). *Safety nets in Malawi: how much? For how many?* Lilongwe Malawi: World Bank.
- Streeten, P. (1987). *What price food?* London: Macmillan.
- Swan, T. W. (1960). Economic control in a dependent economy. *Economic Record*, 36(73), 51–66.
- Tarp, F. (1993). *Stabilization and structural adjustment: macroeconomic frameworks for analyzing the crisis in sub-Saharan Africa*. London: Routledge.
- Timmer, C. P. (1995). Getting agriculture moving: do markets provide the right signals? *Food Policy*, 20.
- USAID (1999). *Congressional presentation*. <http://www.info.usaid.gov/pubs/cp99/af/mw.htm>.
- World Bank (1981a). *Accelerated development in sub-Saharan Africa an agenda for action*. Washington DC: World Bank.
- World Bank (1981b). *Malawi: the development of the agricultural sector*. Washington DC. The World Bank, May (Report No. 3459-MAI).
- World Bank (1988). *Report on adjustment lending*. Document R88-199, Country Economics Department: Washington DC: World Bank.
- World Bank (1989a). *Sub-Saharan Africa: from crisis to sustainable growth: a long-term perspective study*. Washington DC: World Bank.
- World Bank (1990a). *Report on adjustment lending II: policies for the recovery of growth*. Document R90-99, Washington DC: World Bank.
- World Bank (1990b). *Report and recommendation of the President of the International Development Association to the Executive Directors on a Proposed Credit of SDR 52.6 million (US\$70.0 million equivalent) to the Republic of Malawi for an Agricultural Sector Adjustment Program*. Washington DC: World Bank (Report No. P-5189-MAI).
- World Bank (1995). *Malawi: agriculture sector memorandum: strategy options in the 1990s, Vol. 1*. Washington DC: World Bank (Southern Africa Department).
- World Bank (1997). *Accelerating Malawi's growth: long-term prospects and transitional problems*. Washington DC: World Bank (Southern Africa Department).