Future Agricultures

Working Paper

Agriculture and Social Protection in Malawi

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Introduction

This paper reviews social protection and agriculture policies in Malawi in order to explore the links, synergies and conflicts that lie between them. It begins with brief background information about Malawi, in terms of its economic and welfare indicators. Particular emphasis is placed on understanding agricultural and social protection policies within the context of (a) political issues and (b) market and livelihood development. This is followed with a review of agricultural and social protection policies, their interactions and their impacts on livelihoods and welfare. Specific attention is given to evolving input subsidy policies which are of particular relevance to this review. We conclude with a discussion of lessons that can be learned from Malawian experience with agriculture and social protection.

Background

Before examining specific agricultural and social protection policies in terms of their evolution and outcomes, it is important to place these in context. We focus on three particular (and inter-related) aspects of context, the political context (as this affects the policy choices that politicians make), the economic context (as this affects the policy demands, resources and hence options), and the agricultural and rural livelihood context (as this affects the policy demands and policy outcomes). A broad historical understanding is critical in understanding these contexts, and table 1 sets out major pertinent events since 1990/91.

The Economic Context

With more than 55% of its rural population in poverty and 24% ultra-poor in 2004/5 (National Statistical Office, 2005, and GNI per capita of around 170 US$, Malawi is one of the poorest countries in the world, as evidenced by a range of social and economic indicators (see table 2). Many people in Malawi are characterized by high levels of vulnerability, due to the fragility of their livelihoods, susceptibility to shocks, and large numbers of non-poor people living just above the poverty line (Devereux et al., 2006).

There are many elements in the poor performance of the Malawian economy. Some of these represent long term generic features of the country which have not changed over the last 40 years or so since independence, despite major (if somewhat erratic) investments and policies to address them. These include high dependence on agriculture; low productivity in production of maize (the dominant staple crop which accounts for around 70% of cultivated area); lack of other exploitable natural resources; isolation and high import and export costs due to its land- locked location and poor external transport systems; poor physical infrastructure; chronic poor health, with very high infant mortality from malaria, water-borne diseases, and mal- and under-nutrition; and low levels of literacy and education[1]. Other elements have emerged more recently as a result of development failures or wider economic, social and natural processes. These include high population densities and small land holdings, falling soil fertility, high rates of HIV/AIDS infection, morbidity and mortality; and depressed world prices for traditional export crops. A further set of problems emerged from the mid 1990s due to policy and governance failures, and these include the collapse of the industrial economy due to exposure to outside competition; poor macro-economic management with large budget deficits, high interest rates, large devaluations of the Malawi Kwacha (MK), and high inflation rates; high crime rates in urban and rural areas; and weak governance[2].

Some of these latter problems, particularly problems of poor macro-economic management, are being addressed, following a change in government since 2004. This points to the need for understanding agricultural and social protection policies in Malawi in the context of wider political change in Malawi.

The Political Context

Booth et al., 2006 argue that Malawian politics is best understood in terms of neo-patrimonialism where politics is centred around the president who uses the power and resources of the state to dispense patronage to sustain political power. It is helpful to consider here a simple distinction between three different patronage client groups which have, at different times, been important in Malawi: the political elite, the middle classes, and the wider masses in the population. Regional dimensions are also important, in garnering the ongoing support of regional elites and, in the run up to elections, of regional masses. Instruments for dispensing patronage are the design and implementation of policies and projects, in as far as these mobilize resources, yield benefits or showcase commitment for different class and regional interest groups over different time periods.

The political context of agricultural and social protection policies in Malawi is best explained in relation to the periods of tenure of the three presidents of Malawi since independence: Kamuzu Banda (from 1964 to 1994), Bakili Mluzi (from 1994 to 2004), and Bingu Mutharika (the current President, elected in 2004).

The first president of Malawi, Kamuzu Banda, held the reigns of power for thirty years from independence in 1964 until he was ousted in democratic elections in 1994. He presided over a highly personalized and repressive regime. Booth et al., 2006 consider two phases of policy under Banda, the first delivering quite rapid economic growth but achieving this through a set of ultimately economically and politically unsustainable policies. These focussed on the development of highly import dependent estate agriculture producing tobacco while the smallholder sector grew much more slowly[4] and was restricted to cultivation of food crops and low value cash crops, while providing a low cost labour reserve for estate agriculture. Banda used the promotion of tobacco (Malawi's 'green gold') in the estate sector as an important means of dispensing political patronage to elites and emerging middle class based primarily in the central and, with time, in the northern regions. Middle class support was also garnered by investments in secondary and higher education and by growth in civil service employment, while mass support rested upon large scale visible investments in a variety of infrastructural and development projects, including fertilizer and credit subsidies, and a commitment to deliver national food security. Estate and smallholder agriculture were highly regulated, with a high

Table 1. Major pertinent events in Malawi from 1990/911

		Major Input Interventions	Maize Production (mt)	Peak pre-harvest maize price, MK/kg*	Min post-harvest maize price MK/kg*	Real peak pre-harvest maize price (1990 prices)	Real min harvest price (1990 prices)
1990/91	On going structural adjustment & liberalisation promoted by donors			0.48	0.31	0.44	0.29
1991/92	Widespread Southern Africa drought , low yields & with growing movement for mulitiparty democracy & elections, credit default & SACA collapse		657,000	0.44	0.42	0.33	0.32
1992/93		Large free fertilizer * distribution	2,033,957	0.92	0.52	0.56	0.32
1993/94	Multi party elections. Election of President Muluzi. drought conditions, low uptake of hybrid seeds.		818,999	0.84	0.70	0.38	0.32
1994/95			1,327,865	1.39	1.22	0.34	0.30
1995/96			1,793,461	6.50	1.92	1.14	0.34
1996/97	Removal of fertiliser subsidy with rapid devaluation led to soaring input prices, low production despite good rains		1,226,478	3.10	2.47	0.50	0.40
1997/98	1997/98 drought in Karonga Agricultural Development Division and floods in Shire Valley in 1997/98 season.		1,623,507	7.60	4.15	0.94	0.51
1998/99		Starter pack (2.88 million)	2,399,781	11.55	6.27	0.98	0.53
1999/00	Re-election of President Muluzi	Starter pack (2.88 million)	2,501,311	8.84	5.15	0.58	0.34
2000/01	Starter pack scaled back. Heavy March rains. Poor harvest, dry spells and floods in some areas, low input uptake.	TIP (1.5mill)	1,619,091	7.50	7.16	0.40	0.38
2001/02	2001/02 season: early rains, late rains, dry spell in February & floods in the escarpment & lakeshore exacerbated by low input use	TIP (1 mill)	1,437,043	32.50	14.10	1.51	0.66
2002/03		Extended TIP (1.9+0.8 mill)	1,758,688	19.03	9.47	0.81	0.40
2003/04	Election of President Bingu Mutharika.	TIP (1.7mill)	1,733,125	19.10	12.96	0.73	0.49
2004/05	Political expectations of universal fertiliser subsidy did not materialise: late TIP distribution, poor March rains low production	late TIP (2 mill)	1,225,234	51	18	1.69	0.59
2005/06	Maize export ban.. Very high maize prices in growing season, some harvest price support. Fertilizer and maize seed subsidy.	Input subsidy (147,000 mt)	2,720,762	30	10	0.87	0.29
2006/07	Scaling up of agricultural input subsidy. Very low maize prices during growing season, continued export ban lifted end of Feb..	Input subsidy (175,000 mt)		10		0.26	

Table 2. Social and economic indicators for Malawi

		1975	1985	1995	1997	1999	2000	2001	2002	2003	2004	2005	2006
Population	Population, total (millions)	5.2	7.2	10.1	10.6	11.2	11.5	11.8	12.1	12.3	12.6	12.9	13.2
	Rural population (% of total population)	92	90	87	86	85	85	84	84	84	83	83	82
	Rural population density (rural population/km^2 arable land)	364	368	468	467	466	465	453	441	421	..	..	..
Health	Life expectancy at birth, total (years)	..	46	43	42	..	40	..	40	..	..	41	..
	Mortality rate, under-5 (per 1,000)	304	245	193	..	..	155	..	..	..	..	125	..
	Prevalence of HIV, total (% of population ages 15-49)	..	..	..	..	..	..	..	..	14.2	..	14.1	..
Education	School enrollment, primary (% gross)	..	..	..	..	139	139	141	135	..	125	122	..
Economy	GNI per capita, Atlas method (current US$)	130	160	160	200	180	150	140	140	150	160	160	170
	GDP growth (annual %)	6.1	4.6	16.7	3.8	3.0	1.6	-5.0	2.9	6.1	7.1	2.8	8.4
	Inflation, consumer prices (annual %)	..	21.9	83.3	9.1	44.8	29.6	22.7	14.7	9.6	11.4	15.4	14.0
	Real interest rate (%)	..	9	-17	6	10	17	24	29	36	22	15	16
	Agriculture, value added (% of GDP)	37	43	30	33	38	40	39	39	40	39	35	36
	Industry, value added (% of GDP)	20	11	20	18	18	18	17	16	16	17	19	20
	Services, etc., value added (% of GDP)	42	35	50	49	44	43	45	45	44	44	46	45
Trade	Imports of goods and services (% of GDP)	46	30	48	34	43	35	39	46	50	51	52	53
	Food imports (% of merchandise imports)	9	8	14	..	12	10	12	24	17	17	18	..
Agriculture	Fertilizer consumption ('000 metric tons)*	22	65	196	187	192	167	175	202	208	228	292	296
	Irrigated land (% of cropland)	0.93	0.97	1.50	1.68	2.06	2.46	2.35	2.30	2.16	..	..	..
	Land under cereal production ('000 hectares)	1,160	1,217	1,354	1,399	1,510	1,570	1,587	1,636	1,704	1,683	1,245	..

degree of state intervention through generally effective parastatals and government ministries. Booth et al., 2006 characterize Banda's approach in this period as 'patronage following policy'. There was little explicit attention to social protection in this policy phase as government and the Malawi Congress Party played down the existence of chronic poverty.

The fragility of the growth developed under these policies became apparent when the economy was hit by a number of external shocks in the early 1980s. The government was then forced to recognize the need for different polices and to seek financial assistance, with policy conditions, from the IMF and World Bank. Malawi consequently entered its second post independence policy phase, of liberalization. Policies then looked to increase smallholder export crop production by increasing farmgate prices while holding down maize (food) prices (Harrigan, 2003) and this encouraged the substitution of smallholder maize production by cash crops which, with removal of fertilizer subsidies and unsuccessful market reforms, resulted in a food crisis in 1987, with rapid increases in maize prices. Banda's sense of responsibility in delivering food self sufficiency to the country (and his vulnerability to growing calls for political change and the failure of an important part of his mass patronage) led to policy reversals and the reintroduction of fertilizer subsidies and government intervention in maize markets. Despite a positive maize production response to these policy changes, maize shortages continued with two severe droughts in the 1992-1994 period. At the same time access to patronage from tobacco was extended to a much larger part of the middle classes, primarily in the central and northern regions, through the promotion of large numbers of small scale tobacco estates.

Following the transition to multi-party democracy and presidential elections in 1994, Malawi's second president, Bakili Muluzi, served two terms of office, from 1994 to 2004. A major change in agricultural policy in the mid 1990s was the repeal of the Special Crops Act, which had restricted smallholder cultivation of some crops, most notably burley tobacco. The liberalization of burley tobacco production was extremely successful, with rapid growth in the number of smallholders growing the crop, and without (initially at least) expected declines in quality (Harrigan, 2003). However the 10 years from 1994 were characterised by severe macro-economic mismanagement, rampant inflation, dramatic falls in the value of the Malawi Kwacha, and a weakening of government capacity. Opportunistic privatization, funding diversions and the issue of bonds to finance budget deficits became an important source of patronage for a primarily southern region elite with commercial rather than agricultural interests, so that short term financial interests of politicians drove policy with 'policies following patronage' (Booth et al., 2006). As the real value of civil service salaries collapsed, middle class patronage involved what Booth et al., 2006 describe as the 'democratization' of corruption. With the government's political power base in the south of the country (in contrast to Banda's base in the less populous centre), and with stagnation of the economy, growing land pressure in the south, declining soil fertility and experience of wider use of fertiliser in the early 1990s, the politics and mass patronage of maize self sufficiency became associated with the politics of fertilizer subsidies. In 1998 the UDF government introduced the universal provision of small packs of maize seed and fertilizer under the starter pack programme. This will be described and discussed in more detail later, but we note here the populist political roots of this programme and ambiguity as to its role in promoting agricultural development, social protection and/or short term political patronage objectives .

'Fertiliser politics' has subsequently become a major feature of Malawi. In the 2004 presidential election, in which President Bingu Mutharika was elected, the two major parties both campaigned with promises of different forms of fertiliser subsidy. Fertiliser subsidies have continued to be a major political issue in subsequent political manoeuvring associated with the President's breaking away from former president Muluzi to form his own party. The new government has also placed a major emphasis on improving macro-economic management and Booth et al., 2006 appear to be borne out in their suggestion that President Mutharika's term would be in some ways "be closer to the Banda tradition than to Muluzi's, with patronage being subordinated to an overall vision".

Understanding agricultural and social protection policy changes in Malawi also requires an understanding of changing donor interventions (Harrigan, 2003; Chinsinga, 2006; Chinsinga, 2007). These were very supportive of agricultural policies in the first phase of dualistic policy described above, making very large investments in integrated rural development projects. Concerns about the problems of Malawi's dualistic and interventionist policies, as regards both economic vulnerabilities and constraints on smallholder development, then came to the fore at the same time as a wider shift in ideology to structural adjustment and the Washington consensus. This was a major driver of the liberalization policies in Malawi as it took on structural adjustment loans in the early 1980s. Harrigan, 2003 then describes a series of 'U turns' by the World Bank in agreeing to the reintroduction of fertilizer subsidies and then later insisting on their removal and opposing their re-introduction under the start pack programme. Chinsinga, 2006 describes more recent differences between donors and changes in individual donor positions. These positions have been driven by domestic donor politics, economic ideology, humanitarian concerns, and personal concerns of often short term in-country staff. Changing donor policies have been important because (a) they have suffered frequent changes and inconsistencies, and (b) they have been unduly influential as a result both of the high dependence of the Malawian economy on foreign aid and of weaknesses (particularly under Muluzi) in government capacity and commitment to articulate consistent policies.

A number of important insights emerge from this discussion. We note that the use by different presidents of different approaches to delivering patronage to client groups with different regional interests has been a core determinant of the prominence and resources given to agricultural policies and of the nature of these polices. A major challenge which both Banda and Muluzi faced

in this was the need to deliver short term patronage without compromising longer term capacity of the economy to support such patronage. Thus 'patronage policies' were critical in the promotion of agricultural policies and investment under Banda, while failures by the policies in dealing with core poverty/ vulnerability and food security problems led to their demise. Conversely the failure of 'commerce based' patronage polices under Muluzi has led to a resurgent interest in fertilizer subsidies. This ebb and flow of political interest in agriculture has revolved around the different regional and patronage group interests in food, fertilizer and tobacco and has at times coincided with and at times conflicted with a different pattern of changing interests among donors. Social protection has featured in this only in the pursuit of food security in the agriculture/food security/fertilizer nexus and in the provision of relief during food crises: Chinsinga, 2007 notes that although it is a pillar in the Malawi Growth and Development Strategy, the development of wider social protection policy in Malawi has been a largely donor driven process and has not involved political debate or processes.

We also note that an entirely appropriate and legitimate political preoccupation with food security arises not because of the dominance of the rural population in Malawi but because food security is an important preoccupation for poor people, whether urban or rural, who spend a large proportion of their income on staple foods and who are very vulnerable to price changes. The emphasis on fertilizer subsidies as a response to food insecurity, however, is determined by recognition that (a) high price volatility in relation to domestic supply shocks is a result of lack of integration of national and international maize markets (due to poor international transport links, and there are also foreign exchange constraints), (b) that the majority of poor food insecure people and of the electorate, particularly in the south, are rural deficit producers facing particular constraints in accessing fertilizers, (c) that less poor rural people also face difficulties in accessing fertilizer but have an interest in fertilizer access for the production of food and non-food cash crops, and (d) most urban people have strong links with rural people and rural interests. Core to the importance of fertilizers in the food security narrative, therefore, is an understanding of market failures in serving rural livelihoods, an understanding which has been shared by Malawian politicians and technocrats – but often not by donors. This difference in understanding of market failures has been an important reason for government / donor disagreements regarding instruments for pursuing the social protection and agriculture agendas of donors and the mass patronage and agriculture development agendas of domestic politics even where their interests in these agendas appear to converge. We therefore now turn to consider briefly key features of markets and livelihoods in rural Malawi.

The Markets and Livelihood Context

There are two important features of rural markets and livelihoods in Malawi that are relevant to our analysis of agriculture and social protection policy.

First major interactions arise between agriculture and social protection because of the major importance of small scale, low productivity and risky agriculture in the livelihoods of poor rural people. While agriculture is by no means the only source of income of poor rural people, it is critically important to their livelihoods. There are surprisingly few empirical estimates of the proportion of rural Malawians' income coming from own farm activities. National Statistical Office, 2005 estimate agricultural activities as comprising 50% of rural household incomes and 55% of the lowest income quartile for rural and urban households, and these estimates are consistent with the commonly cited figure of 50% of income being farm income in different parts of Africa (Ellis, 1998; Reardon, 1998; Jayne et al., 2001). Dorward, 2006 estimated figures of 33% own farm income in 1998 (closer to figures of 20 to 45% in different southern Africa case studies cited by Bryceson, 1999, although more recent analysis suggests own farm incomes of 50% or more in two different rural areas, but around 40% among poorer households (Dorward, 2007). Such figures underestimate the wider importance of agriculture in rural livelihoods, however. First, food expenditures are estimated to account for just over 61% of total expenditures in the lowest income quintile in the rural population in 2004 (National Statistical Office, 2005). A large part of the 50% or more non-own farm income of poor people is also derived from employment on other people's farms and from providing services to other rural people whose incomes and demand for services are also heavily dependent on agriculture (Dorward, 2006). This very large importance of agriculture coupled with the low and risky nature of smallholder agriculture in Malawi means that agriculture is a major source of vulnerability in rural livelihoods. This is illustrated by examining the shocks that rural people reported had severely affected them in the period 1999/2000 to 2004/5, as shown in table 3. Similar results were found in another nationally representative but smaller sample survey conducted in 2007, reported in table 4.

In the survey reported in table 4, households reported on shocks over the previous three years. In the 2007 survey two extra categories of shock or stress were added to the list about which respondents were asked ('lower crop yields due to poor soil fertility' and 'reduced ganyu opportunities'). What is striking about these tables is the very high proportion of rural households affected by a range of food and agricultural shocks: from 1999/2000 to 2004/5 the two most (and very) common shocks and five of the seven most important shocks were related to food and agriculture. Similarly from 2005 to 2007, generally good agricultural years, six of the seven most important reported shocks or stresses were related to food and agriculture. Social protection – whether provisioning, preventive, promotional or transformational – must therefore be concerned with agriculture, and vice versa.

The second major feature of rural markets and livelihoods in Malawi relevant to our analysis of agriculture and social protection policy is the very low levels of market development and economic activity.

Dorward and Kydd, 2004 argue that a defining characteristic of rural areas in Malawi is that low and fragile incomes and low demand lead to limited market activity

based on very small transactions. The dependence on a relatively narrow range of risky and low productivity activities, which leads to increased covariant risk and vulnerability in the economy within which rural livelihoods are located, is exacerbated by poor infrastructure, services and communications, with poor roads and transport services and poor telecommunications, leading to high costs in physical movement of goods and services in and out of rural areas, together with high costs of communication about market opportunities and prices.

The result of the low general level of economic activity, of the risks from lack of diversification, and of poor communications, is thin markets, with very low traded volumes of key commodities, manufactures and services (notably agricultural produce, agricultural inputs and agricultural finance). Thin markets are both a cause of and are caused by high costs and risks in trading small volumes in small transactions, requiring high risk premiums and margins to make it profitable to engage in markets. However these high margins themselves depress demand, and the result is a low level equilibrium trap and market failure Kydd and Dorward, 2004. These problems are particularly acute in input, output and financial markets needed for intensification and increased maize productivity.

This analysis has important implications for understanding livelihood constraints and vulnerability, and in the design and implementation of agricultural and social protection policies and instruments. It identifies low levels of rural market development as both a key constraint to development and livelihood security on the one hand, and a result of poverty and vulnerability on the other. This then suggests that without the existence of established and functioning thick markets, markets cannot be relied on to deliver agricultural and food delivery services. Two major questions emerge from this:

- how can agricultural service markets (principally for inputs and credit) and food markets be developed in the medium to long term?
- how can agricultural services and food access be provided in the short term in a way that crowds in rather than crowds out market development?

These questions interact strongly with the political context discussed earlier and in particular with the different interests and ideologies of technocrats, politicians and donors: in the first phase of policy under Banda there was a consensus recognising these questions, and development and patronage interests in agricultural and social protection policy complemented each other. Subsequent agricultural liberalisation policies involved lack of agreement regarding these questions (generally between the predominant Malawian analysis on the one hand and donor analysis on the other, but also between donors) and hence policy conflict and reversals as different views have prevailed. A more pragmatic consensus appears to have been emerging more recently across the different actors in Malawi, but the two questions outlined above are at the heart of (a) debates about agricultural and social protection policies, and (b) significant interest in potential synergies and conflicts between agricultural and social protection policies.

Table 3. Proportion of rural households severely affected by different shocks, 2000 to 2004

Shock	% rural households affected
Large rise in price of food	79.2
Lower crop yields due to drought or floods	68.8
Illness or accident of household member	48.1
Large fall in sale prices for crops	42.5
Death of other family member of household	42.1
Livestock died or stolen	37.1
Crop disease or crop pests	26.3
Household business failure non-agricultural	22.1
Theft	20.2
Birth in the household	12.2
Dwelling damaged or destroyed	11.2
Break-up of the household	10.4
Death of working member of household	9.6
Loss of salaried employment or non-payment of salary	7.8
End of regular assistance aid or remittances	7.7
Other	5.6
Death of household head	5

Source: National Statistical Office, 2005, p136

Agricultural and Social Protection Policies

We now explore in more detail the major agricultural and social protection policies pursued in Malawi over the last 40 years or so in the changing economic, political and livelihood contexts discussed. We structure this using Dorward et al., 2006's classification of four agricultural/social protection policies relations: social protection from agriculture, social protection independent of agriculture, social protection for agriculture, and social protection through agriculture. However we add, optimistically perhaps, a further category of social protection with agriculture. Discussion on each is linked to the political and market/ livelihood contexts discussed above, policy impacts (intended and actual) on livelihoods (in terms of provision, prevention, promotion and transformation), and synergies and conflicts between agricultural and social protection policies, instruments and impacts.

Social protection from agriculture

The pre-liberalization policies for smallholder development promoted under President Banda up to the early 1980s are a prima facie example of policies with implicit

Table 4. Proportion of rural households severely affected by different shocks and stresses, 2005 to 2007

Shock	% rural households affected
Lower crop yields due to poor soil fertility	33.3%
Short acute illness/ accident of H member	24.3%
Lower crop yields due to drought or floods	23.3%
Large rise in price of food	19.9%
Livestock died or were stolen	18.6%
Crop disease of crop pests	13.0%
Reduced ganyu opportunities	11.3%
Theft	11.2%
Increased expenditure demand	7.3%
Large fall in sales prices for crops	7.2%
Death of household member	5.5%
Dwelling damaged, destroyed	5.3%
Chronic illness, disability	4.9%
Household business failure, non-agr	4.9%
Birth in the household	4.0%
Breakup of the household	3.1%
Other	2.2%
Marriage/other social events	1.8%
End of regular assistance, aid or remittances from outside household	1.5%
Loss of salaried employment or non-payment of salaries	1.4%

Source: Agricultural Inputs Subsidy Survey, 2007

or explicit promotion of social protection from agriculture as described by Dorward et al., 2006. Subsequent agricultural policies in Malawi have been strongly influenced by these early policies, but have seldom been implemented with the same coherence or resources.

Post independence smallholder agricultural development policy revolved around the establishment and then scaling up and out of four large donor financed integrated rural development projects (one in the northern region, two in the centre and one in the south) to a national programme of projects covering the majority of the country. Although elements varied between projects, there were a number of common core activities: agricultural extension; financing and supply of improved seeds and fertilisers for maize and cash crops; construction of feeder roads and market facilities; construction of offices and staff housing; and construction of health facilities. Within the context of supporting infrastructure, the core of smallholder agricultural development involved the promotion of farming groups which were then able to take input loans, receiving the loans in kind and repaying the loans when selling their produce, through interlocking arrangements involving the parastatal market board, ADMARC. The system was very successful in expanding access to purchased inputs, particularly in maize production, and in achieving very high rates of credit repayment. Fundamental to this success were (a) the role of the parastatal marketing agency, ADMARC, as a sole seller of inputs to smallholder and sole buyer of produce from them, (b) facilitation of this system being a major role for extension staff, which consumed most of their time, (c) strict enforcement of penalties for non repayment, such penalties being the denial of access to all members of a defaulting group of input purchases not only on credit but also for cash and, in some cases, heavy handed confiscation of assets of defaulters. ADMARC also maintained pan territorial and pan-seasonal prices.

These policies had complex anti-poor and pro-poor elements (Chirwa et al., 2006). The interests of the poor were damaged by food prices frequently being held above import parity, and cheaper imported food prices might have allowed the large number of malnourished poor better access to food in some years (although lower maize prices would have depressed incentives for investment in improved seed and fertiliser use in maize). ADMARC also tended to tax the smallholder sector, and the proceeds of this were transferred to the estate sector, which also benefited from cheap labour in an exploitative tenant system of tobacco production.

However the smallholder development projects described above invested considerable sums in rural areas, and although the direct beneficiaries of the agricultural programmes were generally (but not always) less poor farmers, they did promote national food self sufficiency and local food availability (both through local production and through the network of ADMARC markets which sold maize) and stimulate economic growth in rural areas. Smallholder taxation was also mainly of cash crops and the smallholder maize system was moderately subsidised by ADMARC (Kydd and Christiansen, 1982). Smallholder taxation was also offset and with time eclipsed by government infrastructural investment in the IRDPs described above and by the implicit subsidies in the support of groups in obtaining credit and in marketing their produce.

This set of agricultural policies can be seen as setting up a system that addressed many of the demands made of it. Support for estates provided direct patronage to elites (and resources for dispensing patronage) and to emerging middle classes as noted earlier, particularly in the central region. Donor resources supported smallholder agricultural development that provided infrastructure and agricultural services and food access to smallholders (addressing the market development trap), thus meeting donor developmental objectives and government developmental and patronage objectives, the latter being achieved by regionally distributed visible project investments, with civil service and parastatal employment, improved incomes to less poor farmers, and stable food availability in rural areas. The major social protection outcomes of these policies were stable pan territorial, pan seasonal food prices, and reliable food availability in most rural areas in the country. It is also possible to recognise other potential synergies in terms of social protection contributions from these agricultural

policies, although as noted above it must be recognised that the direct beneficiaries of these policies were not generally the poorer members of rural communities and differences between regions in the benefits produced by these policies are likely. Nevertheless both the flow of seasonal finance to less poor households and the increased incomes arising from the use of those inputs (and their multiplier effects) should have increased seasonal liquidity in rural communities, raising demand and wages for casual labour, and increasing community resources for informal local social protection measures. The discussion of pro- and anti-poor elements of these policies, also, however, illustrates conflicts over maize prices (low prices are good for poor, food insecure consumers but high prices are needed to stimulate investment), while the longer term failure of the government to sustain these policies illustrates the difficulties governments face in allocating limited resources between the short term demands for distribution of benefits to different interest groups on the one hand and longer term demands for investment in growth on the other.

Social protection independent of agriculture

As liberalisation and later multi-party democracy and currency devaluation led to the demise of the interlocking smallholder agricultural credit system and integrated rural development approach at the core of the agricultural policies described above, subsequent agricultural policies were not seen as part of such a comprehensive vision of rural development. Agriculture, and indeed individual crops, were seen as needing market solutions, and these were more crop and commodity specific. The best example of this is probably the development of smallholder tobacco, which, as discussed earlier, was very successful. Harrigan, 2003, reports a number of benefits from this expansion: a major cash injection with multipliers feeding through into the rest of the non-farm rural economy, the use of tobacco income to buy seed and fertilizer for maize production, and market development. However she also notes that middle income smallholders were the predominant direct beneficiaries, and while there were significant numbers of poorer smallholders with very limited land growing tobacco, tobacco began to crowd out maize on these farms. This led to severe declines in maize production when devaluation of the Malawi Kwacha and the removal of input subsidies made use of fertilizer on maize un-economic, while growth in smallholder tobacco production has been mainly in the central and northern regions, not in the southern region where holdings are smallest and the extent, incidence and severity of poverty are greatest (Prowse, 2007, National Statistical Office, 2005).

A variety of social protection instruments were then introduced. Initially mainly safety nets, these reflected both poor rural Malawians' need for safety nets in the context of increased food insecurity and increasing vulnerability from, inter alia, declining holding sizes and soil fertility and the spread of HIV/AIDS. With time a wide variety of different social protection programmes and instruments have been implemented (Slater and Tsoka, 2007). The most common instruments that could be considered in the category 'independent of agriculture' were targeted nutrition programmes, food transfers, public works programmes, school feeding programmes, credit transfers, and more recently cash transfers. However some of these may be designed to deliver direct benefits to agriculture in a community or to individual farm households in terms of public works on agricultural infrastructure (such as irrigation works, or even roads) but the quality of such work needs to improve (Slater and Tsoka, 2007).

The agricultural synergies and conflicts of many of these programmes are well known: injections of cash and food into people's livelihoods can make a critical contribution at lean times of year before harvest when labour is needed by people to work on their fields, and may allow them to work on their fields rather than seek work for cash or food elsewhere. However cash or food for work programmes face a dilemma in that if they are providing work and income at the time when people need it most, then this will take people from their fields and undermine their own production (Slater and Tsoka, 2007).These programmes also face wider problems regarding the extent and value of their contributions to rural assets and most importantly to the livelihoods of participants (Devereux and MacAuslan, 2006). The various safety net programmes have had a variety of mixes of provision, protection and promotion objectives (the latter often in terms of promoting education and health), but a tendency for programmes to lack long term funding and consistency has undermined the extent to which they can be relied upon by rural households and allow poor households to undertake potentially risky investments (Slater and Tsoka, 2007).

A study on the multiplier effects of a Concern Worldwide cash transfer programme in Malawi found a significant multiplier effect of 2.11 from the cash programme (Davies, 2007). In terms of who gains, the study revealed that local commerce and village traders were significant winners with many people purchasing goods from these two groups. The study found that smallholder farmers gained more from the programme than their larger counterparts because they were able to source traders from this increased demand (ibid).

Seasonal price volatility also has implications for the implementation of social protection programming, particularly cash transfers. Typically cash transfer programmes or cash-for-work programmes provide a set rate per month per household member; however, in cases where food prices are rising, particularly in emergency situations, the purchasing power of the transfer can quickly be eroded, undermining household food security. A recent transfer programme in Malawi by Concern Worldwide provides an innovative example of how social protection instruments can be adjusted to respond to seasonal food price changes. The FACT programme included a combination of both food and cash transfers, with the cash portion of the payment adjusted for household size and linked with the price of food stables. Overall the programme was successful in smoothing food consumption during the food crisis as well as protecting households from costly coping strategies (Devereux, 2006). A purely cash programme was

also implemented by Oxfam GB during the same time period which also found that cash allowed beneficiaries to smooth consumption as well as purchase agricultural inputs. However, unlike the FACT programme, the cash amounts were not adjusted for food inflation which impacted households' ability to access food, namely a trade-based entitlement failure (Harvey and Savage, 2006).

Devereux notes that although cash transfers in the FACT programme can mitigate the effects of seasonality on poor people, they can also exacerbate seasonal food price inflation and do not address deeper structural problems in production, markets, policies and governance (Devereux, 2007).

Social protection for agriculture

New interest in the potential for social protection reducing risk in people's livelihoods and allowing them to take higher yielding but more risky investments to escape poverty have led to a resurgence of interest in different forms of insurance. The importance of agriculture and agricultural risks in rural livelihoods in Malawi leads to an interest in agricultural insurance. Although never widely pursued in Malawi, very large agricultural insurance schemes were tried in Asia and Latin America in the 1960s and 70s but due to covariant risk, moral hazard, high transaction costs and political economy problems, these were generally extremely costly and offered little benefit to poorer farmers (Hazell et al., 1986). Agricultural insurance schemes then fell out of favour. More recently, however, a rediscovery in social protection analysis of the importance of risk as a deadweight on poor people's livelihoods has coincided with the development of new micro-finance and weather index approaches to insurance, and to a revival of interest in agricultural insurance.

In Malawi, the Government in partnership with the World Bank partnered with Opportunity International and the National Smallholder Farmers Association of Malawi (NASFAM) to develop a pilot weather-indexed crop insurance in 2005/2006. The insurance product was sold in a few districts to approximately 900 smallholder farmers and involved only one crop, groundnuts. Through the scheme, farmers entered into a loan agreement with an interest rate that includes a weather insurance premium. The loan enabled households to access an input package which included improved groundnut seed. The insurance payout is based on a cumulative rainfall index set at three specific dates throughout the growing season. If rainfall levels fall below the set trigger, there is an immediate payout based on the proportion of the rainfall shortfall. In the event of a severe drought, the borrower would pay only a fraction of the loan due, while the rest is paid by the insurer directly to the lender. Because the insurance functions as a guarantee against the loan, high-risk and low-income farmers are able to obtain the credit they need to invest in seeds and other inputs necessary for higher yielding crops.

A recent evaluation following the first year of the Malawi programme reveals that there is a high level of satisfaction with the programme with 86 percent of surveyed farmers indicating that they would like to continue participation in the programme. With that said, a very low percentage of farmers understood the concept of the weather index with most of them indicating that they chose to join the programme because it facilitated access to credit and improved ground nut seeds (Suarez et al., 2007).

The programme has attracted considerable interest. However it is important to note that it is supporting provision of input credit in cash crop production. Valuable though this can be in promoting cash crop production, with important developmental benefits in the areas where cash crop production (or potential) is important, it is difficult to see how the approach can be extended to address risks faced in maize production by the poor and to promote greater input use in maize production.

Social protection through agriculture

As discussed earlier, recognition within Malawi of the importance of agriculture for food security, of the need for fertilizers to raise yields for poor farmers with smallholdings and declining yields under continuous maize cropping, and of difficulties in accessing maize seed and inputs have led to major political, economic and developmental interests in social protection instruments aimed at increasing poor people's access to agricultural inputs (seed and fertilizer) for maize production. In this and the following section we review three different programmes and instruments concerned with input delivery to poor people: inputs for work, free input distribution, and a voucher based input subsidy. These programmes have operated at different scales and in different ways, and we characterize them according to dominant perceptions of their objectives, but recognize that these perceptions vary, and hence the distinction between social protection 'through' and 'with' agriculture may not be clear cut. Making the distinction is nevertheless useful, as it highlights the different objectives of stakeholders in supporting different programmes. As we shall see, ambiguity and diversity in understandings of programme objectives has been widespread, and had both benefits and costs.

'Inputs for work' describes the use of public works programmes to deliver social protection but in contrast to food for work and cash for work programmes, participants are paid with agricultural inputs. Compared to free input distribution and input subsidies, inputs for work has only been implemented on a local scale implemented by NGOs with donor funding, generally with explicit social protection rather than agricultural development objectives. Payment with inputs is intended to overcome some of the difficulties with food and cash for work programmes by providing participants with work during the dry season, when there is little competition for labour with work on their fields, but this provides benefits during the following cropping season (by easing labour and cash demands for households looking to find cash with which to purchase fertilizer) and/or during the cropping season in the following year, by increasing the maize harvest and hence food stocks during that season. An evaluation of a pilot project in two districts of Malawi

cited by Devereux and MacAuslan, 2006 concluded that the project was more popular with participants than food or cash for work, and yielded a very favourable return in the value of increased maize produced.

Free input distribution has been a much more widely used approach to extending access to inputs across the country, with large scale government distributions starting from 1993 in response to currency devaluation, the removal of fertiliser subsidies, the collapse of the credit system for maize inputs, and drought (Devereux and MacAuslan, 2006). In 1998, the government implemented a universal 'Starter Pack' programme, under which every smallholder was provided with enough seeds and fertiliser to plant 0.1 hectares of land. This, with good weather, was a contributor to an estimated increase of 67 percent increase in maize output, with maize production reaching 2.5 million tonnes (Levy, 2005). The Starter Pack programme was funded by DFID and was continued in 1999, but was highly controversial.

Controversy with the Starter Pack (and subsequent targeted programmes) was rooted in the different stakeholder interests and the political context discussed earlier, related to different perceptions of its objectives. As originally conceived, the Starter Pack was not a social protection instrument but an agricultural development programme. It was intended to include legume and maize seed and fertiliser, and it was intended to be accompanied by a strong extension programme and be implemented in a way that would promote farmer skills in more intensive maize production and in diversification out of maize and would also encourage the growth of commercial input distribution systems in rural areas. It was therefore an agricultural development intervention that was intended to address the market and livelihood constraints discussed earlier. The likely effectiveness of different elements of the programme in addressing these constraints can be debated. In fact the programme was funded and implemented more as a social protection programme, with major emphasis on fertiliser provision to promote food production, and less emphasis on agricultural education, provision of legume seed, or the development of commercial input delivery systems. The programme was highly politicised, coming just before the 1999 presidential elections, and was seen as particularly beneficial for the southern region, the ruling party's power base.

Donors were concerned about the politicisation of the programme, its high cost, its apparent emphasis on maize rather than on promoting diversification, its effects on input markets, and its efficiency as regards targeting and benefits to the poor. There was concern that large numbers of non-poor people were benefiting, and that receipt of inputs by such people was simply a transfer, with starter pack inputs displacing commercial purchases, although the extent of displacement is disputed. As a result DFID support of the programme in subsequent years was scaled back to the Targeted Input Programme (TIP).

Targeting, however, faced problems. There were considerable difficulties in the selection of beneficiaries and in the effectiveness of targeting. More fundamentally, however, Levy, 2005 argues that starter pack assisted poorer households in two ways, by increasing their own maize production and, by stimulating national maize production, reducing maize prices. The second benefit was lost when the programme was scaled back to a targeted programme. Dorward and Kydd, 2005 simulate the effects of maize price and wage effects of the universal starter pack and compare this with effects under a targeted programme, and argue that even if targeting cold be achieved without exclusion and inclusion problems, and ignoring the increased costs associated with targeting, but ignoring displacement effects, the wage and maize price effects of a universal subsidy could be more cost effective than a targeted programme in delivering welfare benefits to the target group. They were concerned, however, that by depressing maize prices, the universal programme 'may undermine the important growth contributions of less poor households that engage in more intensive labour demanding maize-production' (pp.274).

A wider point emerges from this, that where markets are thin and not working properly then market based approaches to food security will not work in poor rural economies (as demonstrated in Malawi's 2001/2002 crisis). Dorward and Kydd, 2005 argue that the Malawian market and livelihood context requires a temporal approach to food security and poverty reduction which takes account of the need for both initial provision of market services and longer term market development as illustrated in table 5.

In the short term, food security requires policies to work in the absence of effective markets, with an important role for protective and provisioning social protection instruments which do not rely on markets. Productivity enhancing safety nets are likely to play an important role.

- in the medium-term there is a need to develop effective markets while maintaining short term protective measures;
- in the longer term, once markets and firms are well established, then market-based social protection measures policies can be relied upon for both social protection and to promote rural growth.

There are important lessons here for the relationship between social protection and agricultural development policies, in that this relationship, and the types of policies and instruments needed, differ between countries and regions at different stages of development and with different levels of economic activity and market development. This means that lessons from areas with different characteristics should be applied with great caution to other areas with different conditions – for example it cannot be assumed that market solutions working in countries which have already undergone some rural growth. Lessons from successful market based programmes in Latin America or Asia therefore cannot be applied in many African countries without fundamental questions about the appropriateness of market based instruments in the poorer and less developed rural economies found in many African countries. It also means that successful development requires complex transitions not only in policy objectives but in the nature of instruments, most notably in a switch from more non-market to market based instruments.

Table 5. Policy requirements for short and long term achievements of food security, poverty reduction and economic growth

Policy Goals	Requirements for Short/Medium Term Achievement (Policy purpose)	Requirements for Medium/Long Term Achievement (Policy purpose)
Food security : Secure & affordable access to food	Increased food self-sufficiency (household & national) with food delivery &/or productivity enhancing safety nets & humanitarian response	Increased household & national food market access (low & stable cost, secure, timely) through wider entitlements with (mainly) market economy based safety nets & humanitarian response
Poverty reduction: Real incomes of the poor increased & more secure, through low food costs, higher returns to labour, & safety nets.	Safety nets to increase/ secure real incomes & develop/protect assets (see above)	Broad based growth with opportunities & wages for unskilled rural labour, low food prices, and safety net & humanitarian response as above
Rural economic growth: Increased levels of local economic activity, with stable income opportunities supporting poverty reduction & food security	Short/medium term achievement not possible.	Macro economic stability & low interest rates; growth in agricultural & non agricultural sectors tightening labour markets and raising real incomes with stable/affordable food prices. Development of market economy. Initial growth must be achieved without depending on (non-existent) markets or firms.

Source: Modified from Dorward and Kydd, 2005

Particular challenges here are that in the early stages of development non-market mechanisms must be deployed in ways that crowd in rather than crowd out market development, and for this to be occur there must be both stability and adaptability in policy (Dorward and Kydd, 2004).

Social protection with agriculture

High food prices and food shortages following poor harvests in 2000/1 and 200/2 (after the scaling back of the starter pack programme), led to food security and fertiliser subsidies becoming a major political issue in the lead up to the 2004 presidential elections, with both the major parties and their candidates promising fertiliser subsidies, though of different kinds. After the election the new government delayed the introduction of subsidies, perhaps due to the need for controlling government expenditure to qualify for debt relief (Chinsinga, 2006). Uncertainty about a subsidy led to delays in a decision to implement another targeted input programme, and also led to delays in fertiliser imports and to farmers delaying fertiliser purchases. The result was another poor season with subsequent food shortages, high prices and very expensive importation of maize.

The government then decided to implement a fertilizer and maize seed subsidy. A full description of the programme is provided in Imperial College et al., 2007. The stated objectives of the programme were to promote access to and use of fertilizers in both maize and tobacco production in order to increase agricultural productivity and food security. The subsidy was implemented through the distribution of coupons or vouchers which recipients could then redeem for any of four fertilizer types, at approximately one third of the normal cash price. 6,000MT OPV maize seed were also offered for sale at a similar discount without coupons There was considerable variation between areas in the criteria determining prioritization and selection of beneficiaries, numbers of people receiving coupons, and numbers of coupons received per recipient household.

All distribution of subsidised inputs was by two parastatals ADMARC and SFFRM who reported subsidy sales of 131,000 tonnes of fertiliser. No information is available on seed sales. The reported direct costs of the programme were MK7.2 billion against a budget of MK5.1 billion, excluding overhead costs. The programme was not supported by donors, indeed some did not approve of it (Chinsinga, 2006), and was financed from the government budget, though it should be noted that this benefited from direct budgetary support.

Imperial College et al., 2007 report estimates that 2005/6 private sector sales were more than 50% lower than sales in the previous year, suggesting substantial displacement of commercial sales, and hence incremental fertilizer use on maize as a result of the subsidy was estimated to be around 45,000 tonnes. This is considerably less than the subsidized sales of just under 110,000 tonnes of 'maize fertilisers', although recent data suggest that initial estimates of displacement of around 60% may be something of an over-estimate. Nevertheless significant displacement appears to have both reduced the benefits of the programme and led to difficulties for commercial input suppliers.

Coupled with good rains, the programme produced a bumper harvest. Despite a considerable number of reports of irregularities, reports which were seized on by opposition politicians, the programme was very popular, and the government proceeded to implement

it again in the following (2006/7) season, but this time some donors, notably DFID, came in with financial support to finance and encourage changes to the system that would promote greater involvement of the private sector in sales of subsidised seed and fertiliser. A total of 175,000 tonnes of subsidised maize and tobacco fertilisers were sold, with just under 50,000 tonnes of this sold by a limited number of private dealers with rural retail outlets. 4,500 tonnes of maize hybrid and OPV maize seed were sold, with 57% of this sold by private retailers. A number of innovative mechanisms were introduced to try to promote greater involvement of the private sector and greater choice for farmers.

An independent evaluation of the programme is not yet completed but we highlight the following preliminary results (Imperial College et al., 2007), subject to revision:

- nationally, 54% of rural households are estimated to have received coupons, and within this less poor households (measured by land holding and by asset value tercile) are somewhat more likely to receive coupons than poor households (48 to 50% compared with 38 to 39%), and among recipient households those receiving more coupons tended to be less poor than those receiving less coupons.
- the overall displacement rate for fertilisers (that is the % of subsidy sales replacing commercial sales) was around 40 to 50%, with apparent greater displacement where coupons were received by better off farmers and very little displacement among poorer farmers.[5]
- Maize prices in 2006/7 have been relatively low and stable during the cropping season, and rural wage rates higher than in the past (more perhaps the result of the effects of the 2005/6 weather and subsidy than of the 2006/7 subsidy, but nevertheless relevant to an evaluation of the subsidy, as discussed later)[6]

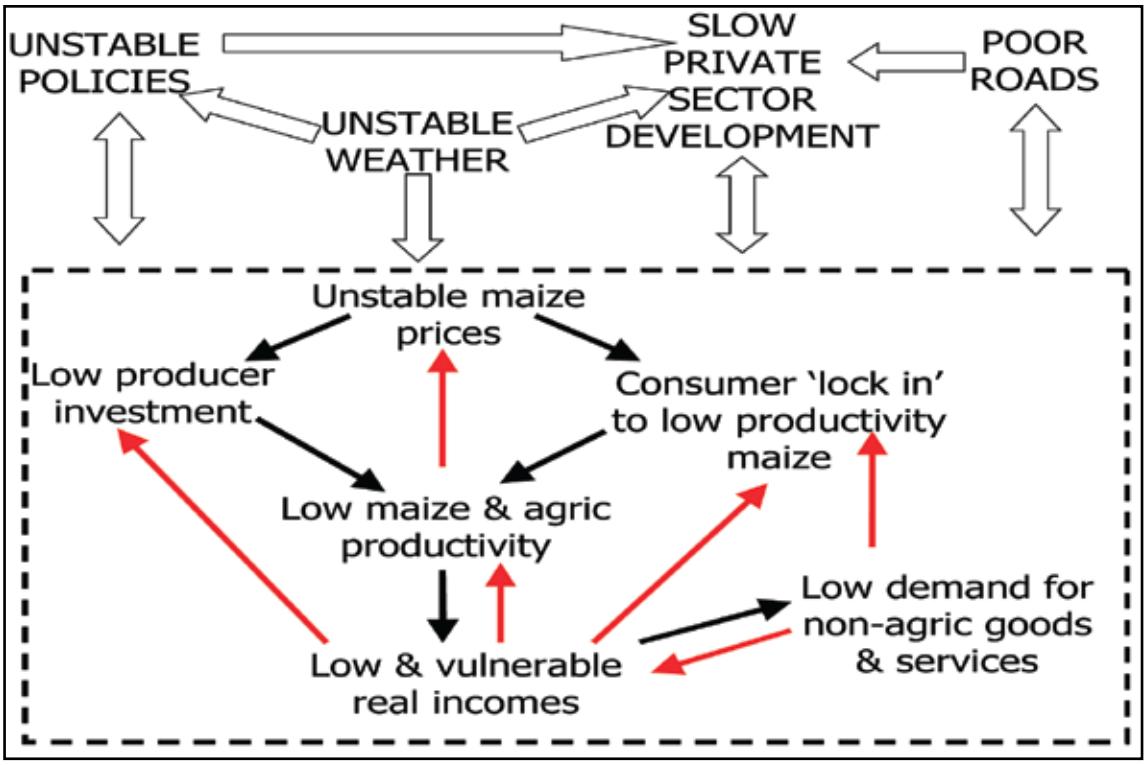
Evaluation of the achievements of the programme are difficult given that the objectives of the programme are not clear, with different stakeholders in the programme having different perceptions of the objectives. Thus there is broad agreement that the objectives of the programme are to improve land and labour productivity and production of both food and cash crops by cash constrained smallholder farmers, to promote economic growth and to reduce vulnerability to food insecurity, hunger and poverty. A further objective emphasised by some is promotion of the development of the private sector agro dealer (input) network. There are, however, a variety of understandings about how increased food security and reduced hunger are promoted under the programme: some see food security primarily in terms of national food self sufficiency while others see food security in terms of household food self sufficiency. These different understandings have far reaching implications for questions about the benefits of the programme, about the way it should be implemented (in particular targeting), about its scale and about how and when it should be scaled down, modified and phased out.

While agricultural productivity and social protection feature strongly in the objectives discussed above, there is a notable lack of discussion on how the programme should contribute to longer term economic growth and development and sustained poverty reduction. Imperial College et al., 2007 argue that the market and livelihood conditions in rural Malawi mean that agricultural, rural and national economic development are constrained by a number of interacting poverty and productivity traps which themselves constrain input and maize market development, investments in maize intensification, diversification out of maize into other agricultural and non-agricultural activities, the ability of (particularly poor) rural people to protect themselves from shocks, and wider local and national economic development. The result is a vicious circle of unstable maize prices inhibiting (a) net producers' investment in maize production, (b) net consumers' reliance on the market for maize purchases, and (c) poor consumers' exits from low productivity maize cultivation. These in turn inhibit the growth of the non-farm economy. This vicious circle, illustrated in figure 1, is exacerbated by, among other things, unstable and changing policies, weather instability, poor road infrastructure, and constrained private sector development. At the heart of this are household, local and national vulnerability and poverty traps.

This analysis suggests that maize input subsidies can make important contributions to lower (and perhaps more stable) maize prices and to raising maize productivity, with the paradoxical long run objective of encouraging less people to grow maize, but to grow it more productively. For this to be achieved, however, it is important, that a subsidy programme is not only efficiently and consistently implemented on a large scale, but also that it is supported by complementary policies that promote its efficiency. These are needed to prevent maize prices from rising in years of low harvest, to provide social protection to stabilize and raise real incomes of the poor, and to promote agricultural productivity for cash and oil grain/ legume crops through research and extension and provision of credit for inputs. These policies do compete for resources, but with proper coordinated design and implementation can also complement and support each other. Thus, Imperial College et al., 2007 argue, an effective input subsidy implemented efficiently and consistently over a number of years with low displacement of commercial sales could simultaneously contribute to increased agricultural productivity, increased real incomes for poor consumers (through reduced maize prices and through increased real wages arising both from this and from the stimulus to the rural non-farm economy that should follow). It would not, however, promote stable low maize prices unless (a) consistently implemented over a sustained period and (b) accompanied by consistent reliable policies that will augment domestic grain supplies in the event of a climatic shock (strategic grain reserves and/or imports and import finance). Similarly it should be more effective if accompanied by:

- Social protection policies that protect people against other shocks and assist the productive poor to access matching funds
- Agricultural interventions promoting research and extension for maize and for other crops, and improved access to seasonal finance for other crops
- Road construction and policies promoting both growth of the non-farm economy and of the private sector (in agricultural and non-agricultural sectors).

Figure 1. Vicious Circle of the Low Productivity Maize Production Trap



Source: Imperial College et al., 2007

- Policies promoting wider private sector development across the country
- Health and education investments to promote a flexible and productive population able to respond to and create new economic opportunities.

The relationship of the input subsidy programme with complementary policies is illustrated in Figure 2.

Viewing the subsidy programme in this way poses challenges and some hard questions about policy coordination and phasing, particularly regarding (a) maize markets and prices (as influenced by producer subsidies and trade policy) and (b) the processes of structural change which are essential for development and which the programme should be trying to promote.

- What are appropriate prices for maize that will (a) allow local real incomes and demand for local goods and services to increase so that poor deficit producers can concentrate on other more productive activities serving this demand but (b) give other farmers the incentive to produce a surplus? How will this differ between different areas and change over time? How should this relate to maize trade policy, and particularly export policy?
- How can the processes of development and structural transitions be managed consistently, allowing consumers and producers to have confidence in maize markets and promoting non-farm and private sector development to occur at different speeds in, for example, more and less remote areas?

Dorward, 2007 explores some of these issues using simulations of interactions between different household types within low and high population density rural economies, with explicit attention to interactions through maize and labour markets. This analysis draws out the importance of understanding different direct effects of subsidy access on different households and the different indirect effects of these as they affect labour and maize markets. These are illustrated in figure 3, which shows a rather complex set of direct and indirect impacts and their relationships.

There are three possible uses of the subsidy by subsidy recipients: reselling of coupons or subsidized inputs (this is likely to be more common among poorer households but was not commonly reported in 2007), use of the inputs in production, or displacement of otherwise unsubsidised purchases (common among less poor households). These lead to two main types of direct benefit for recipients: immediate income transfers from reselling or displacement, or incremental production at harvest if the inputs are used on farm[7]. We consider these in turn.

Transfers are likely to lead to immediate tightening of the labour market, as poorer households hire out less ganyu (which they would otherwise do to meet immediate consumption requirement) and (to a much lesser extent) less poor households increase their immediate consumption of local goods and services. Increased wages lead to immediate real income and hence welfare and consumption gains to poorer households, both recipients and non-recipients. Increased real incomes for the poor (or the need to hire out less labour) should also mean that gains from direct transfers to poor people and higher wages should lead to subsequent incremental production and welfare gains to them, even without any incremental input use (though these will be offset to some extent in the wider economy by losses of low cost labour to the less poor). Less poor people who hire in labour may, however, incur a loss in net real income if they have to pay higher wages when hiring labour in

and for purchasing local goods and services whose prices are determined largely by unskilled wage costs.

Incremental production from incremental use of inputs and/or incremental use of labour on maize should lead to lower maize prices at harvest and during the subsequent season, with greater households stocks of maize (depending on receipt and use of the subsidy and on the extent and effects of increased pre harvest wages). This benefits poorer people who are net maize buyers, and should lead to increased real incomes and consumption of maize and other goods and services. Net sellers of maize, on the other hand, will suffer reduced real incomes. Changes in income in the subsequent season then have similar impacts on labour markets and wages as those discussed for the first season. Further subsidy impacts shown in figure 3 are that increased real incomes should lead to greater farm and non-farm investment (in human and social capital as well as in financial, natural and physical capital for particular enterprises), and that growing real incomes in rural areas should lead to increased demand for locally produced goods and services, including non staple foods. Impacts on demand for and investment in input services will depend heavily on the way that subsidies are implemented.

Dorward, 2007 estimates direct impacts from receipt of a subsidised package of one 50kg bag of fertilizer and 2kg maize seed are increases of between 2 and 5% in net income in the year of subsidy (with higher proportionate but smaller absolute net income gains for poorer households). If, however, impacts of the indirect effects of a universal subsidy are taken into account, then poorer households real net income gains rise to 6 to 8% in both the subsidy year and in the subsequent year, even without the implementation of a subsidy in the subsequent year.

The points that arise from this rather detailed discussion are that important distinctions need to be made between direct transfer and incremental input use impacts, and between the impacts of these on poorer and less poor households both in the year of implementation and in the subsequent year. In this different effects on poor and less poor recipients need to be considered, taking account of complex production, welfare, labour and maize market effects within the rural economy. Important policy issues about targeting emerge from this, regarding both targeting between areas with greater or smaller proportions of poor and less poor people, and targeting between poor and less poor people within areas. Consideration of the relative benefits of input, cash or food transfers must also take account of different market externalities, targeting/ access issues, and implementation costs associated with these different social protection instruments.

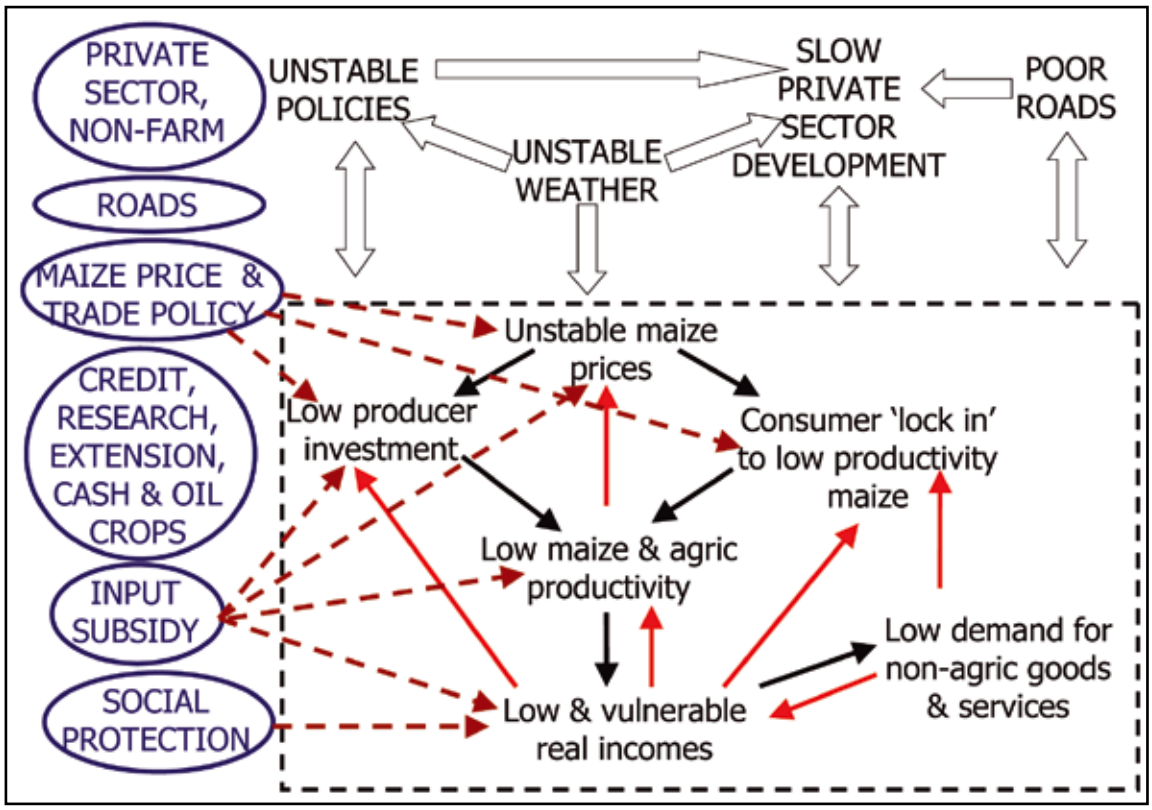
Conclusions: lessons from the Malawian experience

This paper has reviewed the context of the Malawian experience of interactions between agricultural and social protection policies and examined the evolution of agricultural and social protection policies and instruments over the last 40 years or so, in terms of their interactions and outcome.

We highlight the following main lessons:

The market and livelihood context of Malawi has been a major determinant of the evolution of agricultural and social protection policies and continues to be a major

Figure 2 Policies to Attack the Low Productivity Maize Production Trap



Source: Imperial College et al., 2007

determinant of the nature of the interactions and potential interactions between them. Critical elements of this context are poverty, seasonality, vulnerability, low productivity, high dependence on maize, high land pressure, poor market development and infrastructure, maize price variability, and the importance and fragility of casual (ganyu) labour markets in the livelihoods and 'coping strategies' of poor people. Great care needs to be taken in transferring lessons from Malawi to other countries with different market and livelihood structures and constraints (and conversely care needs to be taken in applying in Malawi lessons from elsewhere).

The political context, both domestic politics and their interaction with donor interests, has been another major determinant of the evolution of agricultural and social protection policies.

There are enormous complexities in the number of issues and stakeholders affecting the development and impacts of different policies and instruments, and in the changing nature of and conflicting and complementary relationships between the issues, and contested perceptions about them. Debates around these issues concern national and household food security and food self-sufficiency; dependence on and diversification out of maize as a staple crop, the potential for other food crops and impacts of cash crop development on food security, poverty and growth; the role of markets; government and private sector roles and relationships; likely changes in and effects of maize price and wage rate changes under different scenarios; costs, private benefits and market externalities from different forms of transfers and subsidies; targeting mechanisms, their costs and effectiveness, and their (local and regional) social and political implications; differing emphases on different technical and social analyses and objectives; and conflicts and synergies between short, medium and long term objectives.

Policy outcomes are complex and determined by choice of instruments and means of implementation. The use of subsidy vouchers and the way that they are distributed and redeemed has profound effects on policy impacts – in terms of overall welfare and growth, the distribution of those gains among poor and less poor people, and the development of commercial input delivery services.

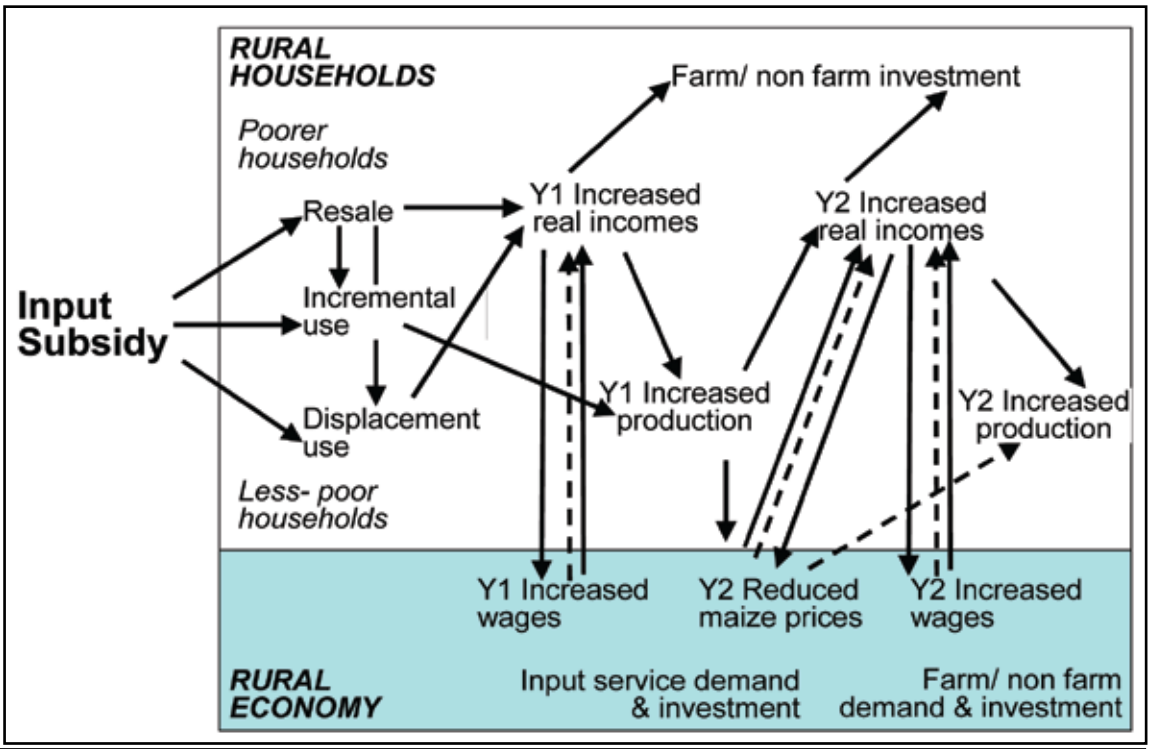
It is important that long term growth and development objectives are thought through and articulated, so that short to medium term decisions take account of them and instruments are modified and scaled up and out in ways that are consistent with long term growth and development aims and processes- and this should involve investing in agricultural productivity and food security to enable poor rural people to move out of agriculture.

A mix of complementary social protection, agricultural and wider economic and institutional policies across different sectors are needed for effective promotion of short, medium and long term social protection, agricultural and non-agricultural development, and poverty reduction.

We conclude with a brief discussion of two issues that have not yet been addressed in the paper but that need to be mentioned as significant for any consideration of agricultural and social protection policy interactions in Malawi: financial trade-offs and gender considerations.

Examination of financial trade-offs is difficult given difficulties in making precise classifications of different programmes and identifying their costs. Slater and Tsoka, 2007 present a table with the costs of the main social protection interventions from 2002/3 to 2005/6, but recognise that data for a number of projects is missing, and recognize a number of reporting difficulties, so that

Figure 3 Tracing out direct and indirect subsidy impacts



costs are generally under-estimated. Table 4 compares the costs of programmes listed in Slater and Tsoka, 2007 and grouped according to our classification of social protection instruments independent of, for, through and with agriculture, but grouping programmes 'independent of' and 'for' agriculture together as (a) it is not possible to differentiate them in the table from Slater and Tsoka, 2007 and (b) our major interest is in comparing programmes working 'through' and 'with' agriculture against others. Treating the figures with appropriate caution, it is nevertheless interesting to note that social protection independent of and for agriculture has consumed the lion's share of resources (much of it in emergency relief). Social protection through and with agriculture are, respectively, dominated by the Targeted Input programme prior to 2005/6,and by the input subsidy programme in 2005/6. However the trade-offs in spending between different types of programme are difficult to identify as these will vary by funding source (different donors and the Government budget). The 2005/6 and 2006/7 subsidies were (respectively) entirely and largely funded by the Government budget, and the 2006/7 programme was budgeted to take up 43% of the Ministry of Agriculture budget in direct (not overhead costs) and the programme was subsequently 26% over budget.

Gender issues are critical to food security in Malawi, to agricultural and non-agricultural opportunities and constraints and to access to targeted food, cash or input transfers for households with different characteristics (for example male and female headed households). In general terms female headed households in Malawi tend to have less land and to be poorer and more food insecure than male headed households, though there are less poor female headed households, and the greater number of male headed households means that there are more poor male headed households than poor female headed households. Relative situations and numbers of male and female headed households also vary between different areas. However poor female headed households tend to have higher dependency ratios and hence be more labour constrained than poor male headed households (National Statistical Office, 2005; Dorward, 2007), and this suggests that they may be less likely to be able to make incremental use of subsidized inputs, and hence other forms of transfer may be more appropriate for them than input subsidies. This is a general concern regarding high dependency ratio, labour constrained households.

Table 6. Comparison of social protection programme costs, 2002/3 to 2006

Programme types	Years	Cost (US$ M)	
		Total	Annual
Social protection independent of / for agriculture	2003-6	402	100
Social protection through agriculture*	2003-5	76	25
Social protection with agriculture	2005/6	60	60
Total social protection		538	

* excludes 2002/3 extended TIP, likely to add approximately 40mUS$ to total and to increase annual cost of social protection through agriculture to a little under 40mUS$. Annual figures are divided by number of years implemented

Source: calculated from Slater and Tsoka, 2007

End Notes

[1] from Imperial College et al., 2007

[2] From the mid 1990s there have been major improvements in primary school enrolment and its gender balance (but not in the quality of primary education) and substantial falls in infant and under five mortality (though these are still very high).

[3] From 2005 there has been a dramatic improvement in macro economic management and consequent reduction of inflation and interest rates and much greater currency stability. Good weather and input subsidies have also contributed to growth in food production, as will be discussed later. In the previous decade there had been few bright spots.

[4] Thus from 1964 to 1977 the estate sector grew at an average of 17% per annum while smallholder agriculture grew at less than 3% per annum Harrigan, 2003.

[5] Latest estimates are 30 to 40% displacement in 2006/7 (SOAS et al, 2008).

[6] Maize prices rose dramatically in January to March 2008, reflecting maize shortages following the export of 300,000 mt to Zimbabwe, and possible stock losses from other causes.

[7] Note that the purchases of resold inputs may lead to displacement and transfer benefits or incremental use and incremental production benefits.

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