

IDS Bulletin

Transforming Development Knowledge

Volume 48 | Number 4 | July 2017

COURTING CATASTROPHE? HUMANITARIAN POLICY AND PRACTICE IN A CHANGING CLIMATE

Editors Siri Eriksen, Lars Otto Naess,
Ruth Haug, Aditi Bhonagiri and
Lutgart Lenaerts



Notes on Contributors	iii
Introduction: Courting Catastrophe? Can Humanitarian Actions Contribute to Climate Change Adaptation?	
Siri Eriksen, Lars Otto Naess, Ruth Haug, Lutgart Lenaerts and Aditi Bhonagiri	1
Climate Change Adaptation Through Humanitarian Aid? Promises, Perils and Potentials of the 'New Humanitarianism'	
Andrei Marin and Lars Otto Naess	15
Scalable and Sustainable: How to Build Anticipatory Capacity into Social Protection Systems	
Cecilia Costella, Catalina Jaime, Julie Arrighi, Erin Coughlan de Perez, Pablo Suarez and Maarten van Aalst	31
Climate Change and Disasters: Institutional Complexities and Actors' Priorities for Mitigation, Adaptation and Response	
Bahadar Nawab and Ingrid Nyborg	47
Social Vulnerability and Local Adaptation in Humanitarian Response: The Case of Pakistan	
Ingrid Nyborg and Bahadar Nawab	63
The Power of 'Know-Who': Adaptation to Climate Change in a Changing Humanitarian Landscape in Isiolo, Kenya	
Marianne Mosberg, Elvin Nyukuri and Lars Otto Naess	79
<u>Social Protection or Humanitarian Assistance: Contested Input Subsidies and Climate Adaptation in Malawi</u>	
<u>Ruth Haug and Bjørn K.G. Wold</u>	93
Rethinking Food Aid in a Chronically Food-Insecure Region: Effects of Food Aid on Local Power Relations and Vulnerability Patterns in Northwestern Nepal	
Sigrid Nagoda	111
What Does Climate Change Adaptation Mean for Humanitarian Assistance? Guiding Principles for Policymakers and Practitioners	
Sigrid Nagoda, Siri Eriksen and Øivind Hetland	125
Glossary	139

Social Protection or Humanitarian Assistance: Contested Input Subsidies and Climate Adaptation in Malawi

Ruth Haug¹ and Bjørn K.G. Wold²

Abstract The purpose of this article is to assess factors that contributed to the apparent success of the Farm Input Support Programme (FISP) in the period 2005–15, and discuss the lessons that can be learned from this experience in relation to climate change adaptation. Important factors were the ability to balance external and internal drivers that affected policy formulation, national ownership and prestige that influenced and motivated implementation capability, creation of conducive conditions for agricultural development and the demand-driven nature of the programme. However, the flooding in 2015 and the drought in 2016 revealed that Malawi is in dire need of more effective measures that can reduce long-term vulnerability and build resilience to future adverse impacts of climate change. Still, lessons learned from the social protection programme can prove useful in relation to multiple efforts towards achieving sustainable climate change adaptation that could reduce the need for future humanitarian assistance.

Keywords: social protection, humanitarian assistance, input subsidies, climate adaptation, Malawi.

1 Introduction

Climate change contributes towards increased uncertainties around future risks for national food scarcity and a possible worsening of food insecurity and hunger in many countries in Africa (IPCC 2014; Hallegatte *et al.* 2016). Risks of drought and flooding call for an increased focus on climate adaptation and effective emergency responses that consider longer-term resilience (Thurlow *et al.* 2014; Challinor *et al.* 2016). Vulnerability to disasters such as drought and flooding is closely related to poverty (Hallegatte *et al.* 2016). Malawi is a country with extensive experience of drought and flooding. Serious hunger triggered by drought brought Malawi into the international crisis headlines in the 1990s and the first half of the 2000s. From 2005 to 2015, however, Malawi was able to go from being at the receiving end of extensive

© 2017 The Authors. *IDS Bulletin* © Institute of Development Studies | DOI: 10.19088/1968-2017155



This is an Open Access article distributed under the terms of the Creative Commons Attribution Non Commercial 4.0 International licence, which permits downloading and sharing provided the original authors and source are credited – but the work is not used for commercial purposes. <http://creativecommons.org/licenses/by-nc/4.0/legalcode>

The *IDS Bulletin* is published by Institute of Development Studies, Library Road, Brighton BN1 9RE, UK
This article is part of *IDS Bulletin* Vol. 48 No. 4 July 2017: 'Courting Catastrophe? Humanitarian Policy and Practice in a Changing Climate'; the Introduction is also recommended reading.

humanitarian assistance to becoming self-sufficient in staple foods, even exporting maize to Zimbabwe and Kenya (NSO 2005–2015; Government of Malawi 2016), as well as the country's traditional agricultural export commodity, tobacco. But after a decade of keeping serious hunger at bay, flooding in 2015 followed by El Niño and severe drought in 2016 brought Malawi back into the disaster headlines with almost half of the population being in need of food relief in 2016 (WFP 2016). From the mid-1990s, the Malawian government adjusted its agricultural policy to fight food insecurity and hunger, and invested in social protection through different input subsidy programmes such as the Farm Input Support Programme (FISP), which started in 2005 (HLPE 2012; Government of Malawi 2016). The main goal of social protection in the form of farm input subsidies has been to produce enough food in the country to avoid hunger. The political changes and the subsidised inputs have, according to several sources (Carr 2014; Arndt, Pauw and Thurlow 2014; Pauw, Beck and Mussa 2014; Government of Malawi 2016), contributed towards preventing hunger and the need for humanitarian assistance in the decade 2005–15. According to the Government of Malawi (2016), the FISP was able to advance food security by improving agricultural productivity, but failed to develop the necessary resilience in relation to the 2015 flooding and the 2016 El Niño and drought. The purpose of this article is to assess factors that contributed to the apparent success of the social protection programme FISP, and to discuss the lessons that can be learned from this experience in relation to climate change adaptation.

2 Approach and analytic framework

This article is based on analysis of data collected by the National Statistical Office of Malawi (NSO) and the Ministry of Agriculture, Irrigation and Water Development (MOAIWD) in the period 1997–2014, and a review of the literature including policy documents and newspaper articles, as well as a limited number of key informant interviews with university and ministry employees. Each year, the statistical unit in the MOAIWD produces and distributes detailed crop estimates to stakeholders in the country, based on data collected by the extension officers. The figures on area cultivated and total production at national, district and local levels by crop are available on demand. Most of the graphs presented in this article are based on these figures. Unfortunately, the MOAIWD and NSO apply slightly different survey approaches resulting in different estimates. The NSO is dependent on donor funds for many of the national surveys. For donors operating in many countries, the main interest may often be consistency across countries rather than over time within Malawi. As described in detail by Beck, Pauw and Mussa (2015), this may give inconsistent time series, especially for data constructs such as poverty estimates, when based on various survey types. It is therefore essential to follow trend estimates within each of the two major survey approaches rather than combining them. In cases where statistical data that has not been published are used, reference is given to the main publication from the survey that included these data.

To analyse factors that contributed to the apparent success of the social protection programme FISP in improving food security in the period 2005–15, we assess the political landscape that shaped the formulation of the FISP policy including national and international drivers. Secondly, we look at implementation capability in accordance with Booth *et al.* (2006) who underline that the degree to which policies are implemented depends on governance, power relations, institutional capability, voters' support, monetary resources and priorities. Thirdly, we analyse the appropriateness of the technology in relation to political frame conditions and impact. Regarding impact, we lean on Birner *et al.* (2006) who imply that social and technological innovations should result in impacts such as productivity increase, improved food and nutrition security, reduced poverty, better gender and social equity, more employment opportunities and increased resilience at all levels. To analyse trends in the food and nutrition security situation, we rely on the Global Hunger Index (IFPRI-GHI 2015). Lastly, to analyse what lessons could be learned from the social protection (FISP) experience in relation to climate change adaptation, we apply Eriksen and Marin's (2015) key principles for sustainable climate change adaptation:

- Describe vulnerability contextually, including multiple stressors;
- Acknowledge differing values and interests that affect adaptation outcomes;
- Suggest how local knowledge can be incorporated into adaptation responses;
- Consider potential feedback between local and global processes;
- Empower vulnerable groups in influencing development pathways and their climate change outcomes.

3 Social protection the 'Malawian way'

Around 85 per cent of the Malawian population (approximately 17 million people) live in rural areas (WB 2016). Agriculture accounts for 30–40 per cent of gross domestic product (GDP) and 80 per cent of foreign export earnings (EAD/UNDP 2016). Malawi is a country that is used to experiencing recurrent disastrous famines triggered by drought and flooding. Between 1967 and 2014, Malawi suffered seven serious droughts and 19 floods that adversely affected smallholders' production and food security (Government of Malawi 2015). In 2015, Malawi received the highest rainfall on record for the country, causing severe flooding, particularly in the Southern Region (*ibid.*). In 2016, El Niño-induced drought contributed towards another state of disaster (WFP 2016). Over the last decades, different Malawian governments have put in place various policies and strategies to secure food in the country. In the Malawi Growth and Development Strategy 2012–2016 (MGDS II), the government emphasised the strengthening of disaster risk management coordination, development of an integrated national early warning system and implementation of mitigation measures in

disaster-prone areas (EAD/UNDP 2016). Several other national policies and strategies such as the Disaster Preparedness and Relief Act 1991 (DPR), the National Disaster Risk Management Policy (NDRM), and the National Climate Change Policy have shaped policies and actions in preparation for the possible disasters that climate change may bring. In 2015, Malawi was granted support from the Green Climate Fund for the project 'Scaling up the Use of Modernized Climate Information and Early Warning Systems in Malawi' (Green Climate Fund 2015). In 2016, the Government of Malawi presented a new National Resilience Plan aimed at addressing the causes of climate change and minimising the negative effects on food security (Government of Malawi 2016).

Social protection in the form of input subsidies has been used by different Malawian governments both in relation to recovery schemes such as starter packages after drought, as well as in relation to long-term development efforts to increase productivity and improve food security (Sjaastad *et al.* 2007). Regarding the serious droughts in 1991/92 and 1994/95, humanitarian interventions by donors included food relief, but did not originally allow input subsidies. However, due to the low production of maize, the World Bank accepted that a free input programme should be established in 1995, and production increased as a subsequence (*ibid.*). After a year, the government abandoned the input subsidies under pressure from donors (Harrigan 2003). In the following years, fertiliser use dropped drastically and so did production, resulting in increased food insecurity and hunger. This situation led the Malawian government to establish its own subsidy programme in 1998, the Starter Pack Programme that lasted until 2000 (Harrigan 2003).

Then another devastating famine took place in the 2001/02 season, and donors were again willing to support input subsidy programmes (Sjaastad *et al.* 2007). Donors agreed to fund a larger fertiliser scheme, the Extended Targeted Input Programme for a limited period. In 2004, Dr Bingu wa Mutharika was elected as president, and with him came new policy reforms reversing the privatisation that had taken place during the structural adjustment period (*ibid.*). The Agricultural Development and Marketing Cooperation (ADMARC) was re-nationalised (but still allowing competition from private traders) and a new input subsidy programme, the FISP, was introduced. In his election campaign, presidential candidate Bingu wa Mutharika promised to extend the input subsidy programme if elected, and he kept his promise when he came into office.

Although donors have played an important role in discussions around input subsidies in Malawi, the FISP has, to a large degree, been funded by the Malawian government and not by direct donor support; for example, in 2005/06 no direct donor support to the programme was reported (Dorward and Chirwa 2014). In the following years, direct donor support varied from 5 per cent of total costs at the lowest level in 2013/14, to 32 per cent at the highest level in 2011/12 (Dorward and Chirwa 2014). The FISP has been a costly programme for the Malawian government and the lion's share of public spending on

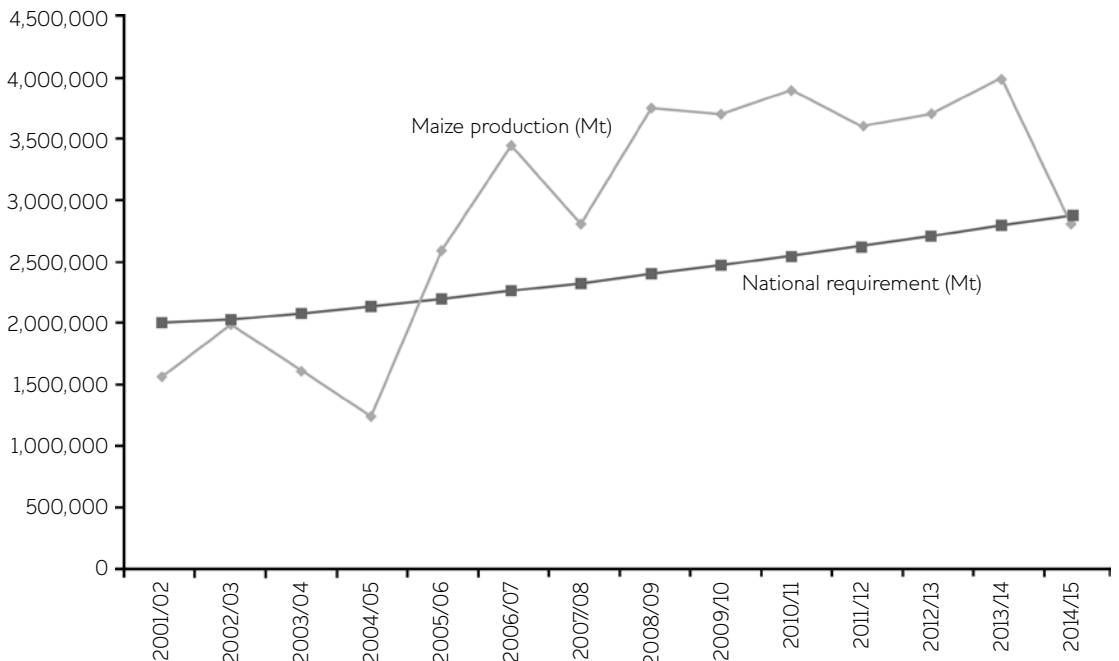
agriculture has gone into funding it. In 2014, agriculture accounted for around 20 per cent of government spending and the FISP received around 70 per cent of this amount (Government of Malawi 2016).

The design of the FISP has varied over the last ten years, but three important features have remained more or less static. Firstly, the programme involves both private and public input distributors, which means that the ADMARC operates in low-profit remote areas. Secondly, there is a targeting element, as the subsidised input should preferably reach the poorest half of the farming population, ensuring distribution to about half of the farmer households in the country. Thirdly, the subsidies cover a large share of the input costs, around 90 per cent of the price. A crucial element was to make the subsidy programme 90–100 per cent free to allow even risk-averse and cash-constrained farmers to use the coupons themselves rather than selling them cheaply to better-off farmers, district officers or traders.

4 Contested subsidies

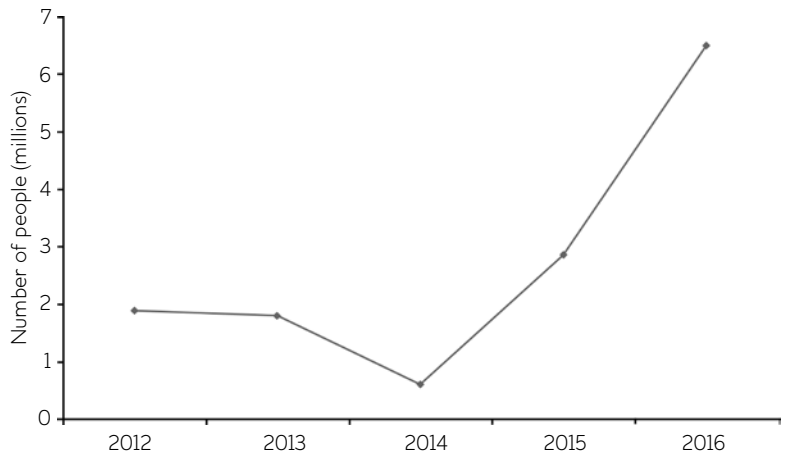
As described previously, social protection the ‘Malawian way’ involves targeted subsidisation of chemical fertiliser and improved seed. This policy has been heavily contested for various reasons. Donors and experts have challenged the input subsidies from a market liberalist point of view, claiming that input subsidies are not economically viable and that they distort the market (Minot and Benson 2009; Jayne and Rashid 2013; WB 2015). Similarly, reversing the structural adjustment’s privatisation of the ADMARC has been contested. The

Figure 1 Total maize production against national requirement



Source Government of Malawi (2016).

Figure 2 Trends in people in need of food assistance

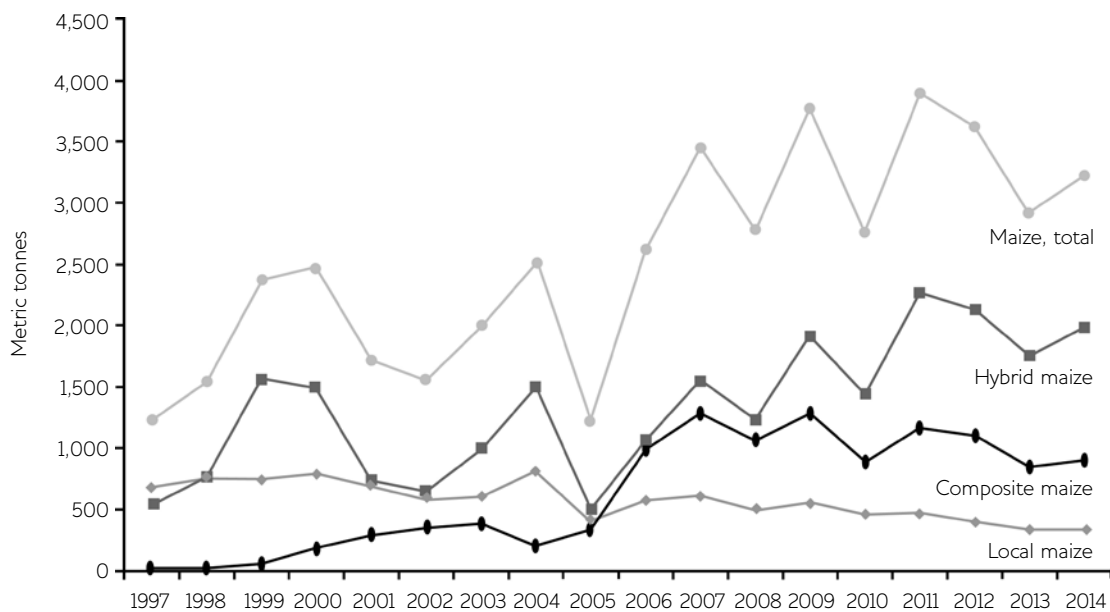


Source Government of Malawi (2016).

input subsidy programme is further contested from an environmental sustainability point of view in relation to possible soil degradation and loss of long-term soil productivity (De Schutter 2014; Grist 2015). The programme is also contested when it comes to crowding out necessary measures in relation to longer-term sustainable development, resilience-building and adaptation to climate change (Dorward and Chirwa 2014; Chinsinga and Chasukwa 2016; Government of Malawi 2016).

On the other hand, subsidising farm inputs has been successful in increasing agricultural productivity and improving household food security in the country, and thereby reducing the need for humanitarian assistance (Sjaastad *et al.* 2007; Carr 2014; Arndt *et al.* 2014; Pauw *et al.* 2014; Government of Malawi 2016). Figure 1 shows surplus maize production in relation to national requirement after the FISP was introduced in the period 2005–15. Figure 2 illustrates a decline in the number of people in need of food relief followed by a sharp increase after the 2015 flooding and the 2016 drought.

Whilst the Government of Malawi (2016) portrays the FISP as a success, in the sense that it broke the cycle of food insecurity, the programme failed to build the necessary resilience to withstand serious flooding and drought. The causal relationship between the FISP, productivity increase and improved food security could be questioned as other factors could have played a role, such as favourable rainfall. However, several studies of the FISP provide convincing evidence of a positive impact on improved food security (Carr 2014). Pauw and Thurlow (2014) go as far as stating that there has been a *dramatic decline in food insecurity* in Malawi due to the FISP. Arndt *et al.* (2014) estimate that each dollar spent on the FISP generates \$1.62 in national welfare improvements. Arndt *et al.* (2014) argue that in order to understand the impact of the FISP, indirect benefits should also be included; otherwise, two fifths of the FISP benefits are not captured.

Figure 3 Total maize production of smallholders and estates

Source MOAIWD (1997–2015).

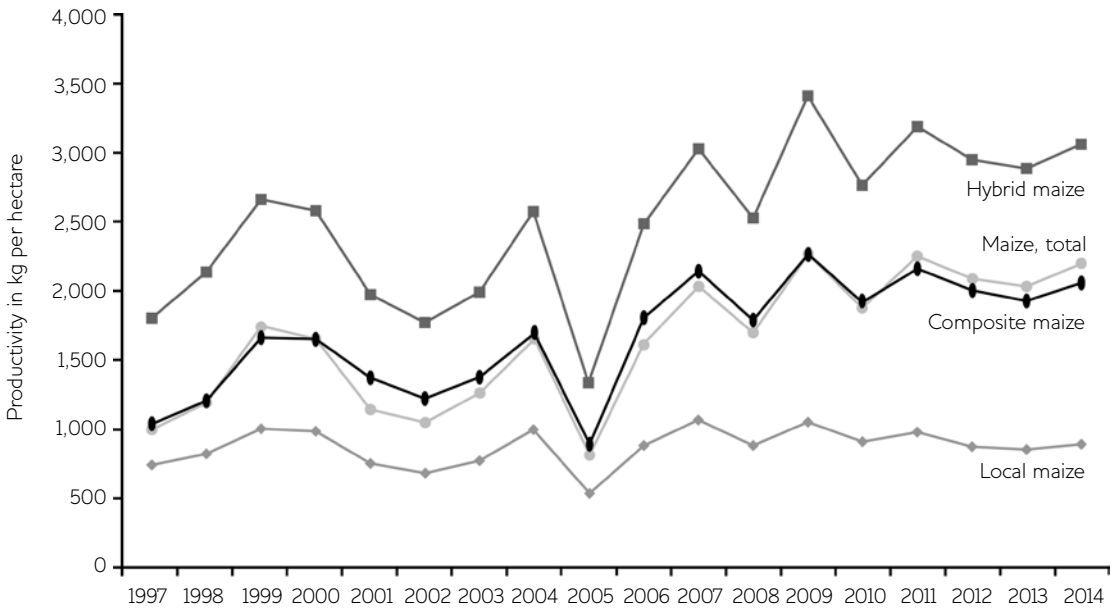
5 Factors that made the FISP work

When it comes to addressing the multiple stressors faced by Malawi, opinion differs as to what degree the reform of the ADMARC and subsidised inputs are the way forward. Statistical data show considerable production and productivity increase in the FISP period 2005–15. Compared with maize yield levels in neighbouring countries under similar production conditions, Malawi is doing better (WB 2016). Without the input subsidy, improved seed and fertiliser would have been out of reach for most Malawian smallholders (Carr 2014). The increase in maize production has more or less happened without an increase in the area under maize cultivation (MOAIWD 1997–2015).

Figure 3 shows that total maize production almost trebled in the period 1997–2014. Figure 4 illustrates how maize yields per hectare (ha) have more than doubled in the same period. The yield level for local maize averaged less than one Mt per ha while the yield level for hybrid maize reached around three Mt per ha over the last five years. Hybrid maize is rarely cultivated without fertiliser application, whilst local maize is grown both with and without fertiliser. Hence, the production curve for hybrid maize also indicates results for fertiliser use.

Increased production has definitely improved the food availability situation in Malawi, as shown in Figure 1. However, food security entails access to food and not only availability. In order to assess changes in the food security situation, we have looked at how Malawi has scored on the Global Hunger Index (GHI). GHI scores combine multiple indicators such as

Figure 4 Maize productivity of smallholder and estates



Source MOAIWD (1997–2015).

child nutrition and child mortality into one index number, which falls within the range 0–100, where a high score indicates severe food insecurity (IFPRI-GHI 2015). Malawi’s score has improved considerably from 58.9 in 1990 to 27.3 in 2015, which is slightly better than Tanzania and much better than Zambia (*ibid.*). Malawi has been able to reduce child mortality from 1 in 4 in 1990 to 1 in 13 in 2013, and has improved in all of the child nutrition indicators monitored through the Millennium Development Goal (MDG) process (WHO 2015). In Malawi, food security is about who produces the food, as improved food availability at national level will not be sufficient to secure poor smallholders’ access to the available food.

5.1 Balancing different interests and drivers

Formulating a policy that both reversed privatisation decisions made during structural adjustment, and establishing a substantial social protection programme in the form of input subsidy, was a balancing act juggling different national and international interests. Bingu wa Mutharika, Malawian president from 2004 to his death in 2012, regarded input subsidies as an effective alternative to food relief. He was able to manoeuvre in a political landscape influenced by external factors such as donors’ unwillingness to support his policy, scepticism towards state-controlled institutions and subsidies, scepticism towards chemical fertiliser and hybrid seed, demanding public–private partnerships and uncertain international market conditions, such as food and fertiliser prices.

On the other hand, President Bingu wa Mutharika faced internal drivers such as a strong demand from the voters (predominantly smallholder

farmers) for free or heavily subsidised improved seed and fertiliser. In this sense, input subsidies are heavily politicised; on the other hand, it could be argued that this is how democracy works: voters use the power of their vote to make demands on the government. In this way, farmers could be said to empower the government to go against the advice of experts and the views of many donors to go ahead and/or continue with input subsidy programmes. Bingu wa Mutharika seemed to realise that going against subsidies would mean losing the election, but at the same time, his state budget depended heavily on funding support from donors.

The two presidents succeeding Bingu wa Mutharika, his vice-president Joyce Banda and his brother Peter Mutharika, continued with the FISP. However, different governments have been open about the need to improve the FISP. At a FISP symposium in July 2014, Malawi's Minister of Agriculture, Irrigation and Water Development, Allan Chiyembekeza, called for a discussion on how the programme could work better, whilst maintaining that:

Official government estimates show that average maize yields have more than doubled since the introduction of FISP contributing to rapid agricultural Gross Domestic Product (GDP) growth of around 10 per cent per annum between 2005 to 2011 (StarAfrica 2014).

5.2 National ownership and prestige

The input subsidies and re-nationalisation of the ADMARC have been strongly owned by the Malawian presidents. President Bingu wa Mutharika defended the input subsidy programme in many fora, such as during a speech at Boston University in which he pointed out that 'although Western countries say African governments should not subsidise agriculture, Western governments subsidize their own farmers' (BU Today 2010). President Mutharika's brother and current president Peter Mutharika has continued Bingu wa Mutharika's position regarding Malawi's right to decide its own policy, including input subsidies. At the Forum for China–Africa Cooperation (FOCAC) in December 2015, Peter Mutharika stressed that:

[The] China Africa partnership needs to walk the path of localization of international goals and indigenization of policies. One of the saddest tragedies in most Africans is that we lost faith in ourselves, and stopped believing in ourselves, that we own the capacity to change our situation – Africa needs partnership that inspire[s] this inner capacity and dignify [*sic.*] our longing for self-dependence (*Nyasa Times* 2015).

Since 2007, China has played an important role in Malawi, providing both grants and loans to projects in areas such as education, energy, agriculture, water supply, tourism, trade and infrastructure (Banik and Chasukwa 2016). The collaboration with China has opened an alternative funding opportunity that has made Malawi somewhat less dependent upon its traditional donors. President Bingu wa Mutharika came into serious dispute with donors that led to the British High

Commissioner being expelled from Malawi in 2011 because he supposedly accused Mutharika of being 'increasingly arrogant and autocratic', which contributed towards freezing and cuts in aid from the UK and USA (Somerville 2012). Reduction in support from traditional donors hit Malawi hard as foreign assistance accounts for approximately 40 per cent of its development budget (Somerville 2012).

5.3 Implementation capability

What is particularly interesting with the FISP is the capability not only to formulate a policy, but also to be able to implement it in spite of significant institutional, logistical and funding challenges. President Bingu wa Mutharika was well aware that in order to ensure support for himself and his party, it was not enough to present a policy for improved food security; he had to demonstrate that he was also able to deliver on affordable fertiliser and improved seed to be re-elected. What we have seen in Malawi is not only that the government has gone against the advice of many experts and donors when changing the policy and establishing the input subsidy programme, but also that the government had the capability to implement and follow through with the programme.

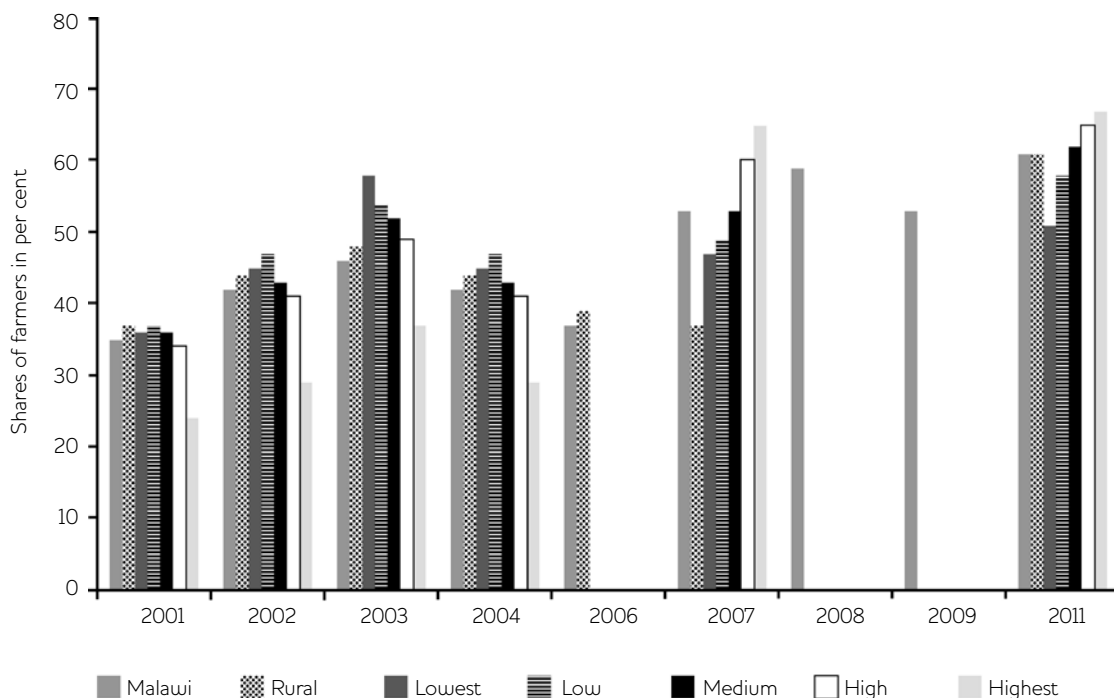
As described previously, the contestation around whether or not to have an input subsidy programme as well as how to design it, might have given the government additional motivation to ensure that implementation took place. Problems such as timely delivery, distribution throughout the country, uncertainties as to how the programme would work each year (for example, in relation to the number of targeted farmers and the level of subsidy) were more or less dealt with. The tight budget situation in Malawi and the willingness (or lack of willingness) among donors to co-finance, influences each year's design of the programme. From the central level, coupons are passed down to the districts and then to local chiefs who distribute coupons according to poverty criteria. Farmers who were not happy with how local chiefs distributed the coupons took action and established new villages in the same area. Their 'own' chief could then garner the responsibility for the distribution of coupons. However, the government closed this practice in 2008.

When the government cuts back on input coupons, chiefs are often blamed for the reduction. Such reductions make it difficult for the chiefs to distribute the coupons in a fair and predictable way. The extension system plays an important role in relation to advising on fertiliser use and what kind of seed to use (open-pollinated or hybrid). The media's focus on the performance of the subsidy programme has probably also revealed shortcomings, and contributed to the implementation. In addition, Malawi has a relatively strong farmers' union in the NASFAM, which voices farmers' views.

5.4 Political frame conditions and impact

In relation to the implementation of the FISP, the frame conditions were conducive to making it worthwhile for both smallholders and estates to invest capital and labour in efforts towards increasing their

Figure 5 Share of farmers receiving fertiliser coupons by poverty quintile

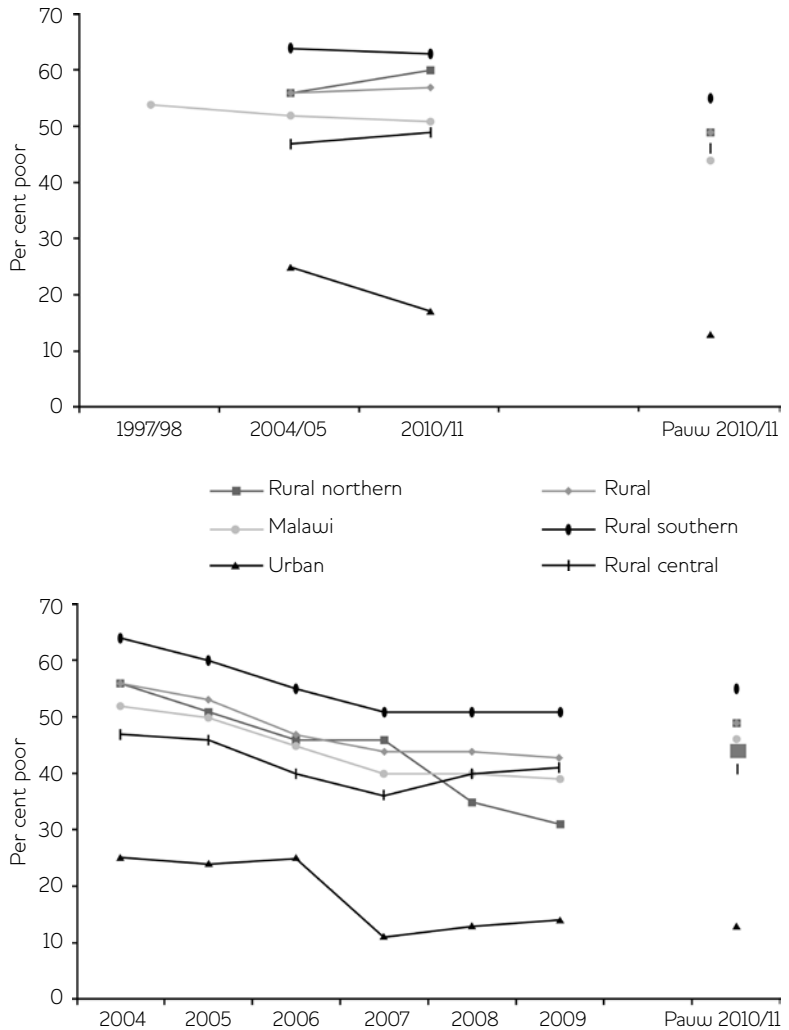


Source WMS 2001–2004 (NSO 2002–05); IHS2 (NSO 2005); WMS 2006–2009 (NSO 2007–10); WMS 2011 (NSO 2012b).

production. Smallholders are usually short on both capital and labour, a factor that should be recognised in efforts to make changes in farming practices and technology (Kirrane, Sharkey and Naess 2012). The input and output market worked well in most parts of the country. Where private traders were not willing to go because of low profits, the ADMARC stepped in. Farmers experienced that maize cultivation was profitable and a good way of earning some cash in addition to securing food for the household. Regarding impact, according to Birner *et al.* (2006) social and technological innovations should result in impacts beyond production and food security, including reduced poverty, better gender and social equality, more employment opportunities and increased resilience at all levels.

Since poverty reduction and gender equality are used as arguments for supporting the FISP, to what degree subsidies have reached these groups is an important factor in assessing the programme as a social protection measure. Figure 5 shows that between 35 and 60 per cent of the population have benefited from receiving subsidised fertiliser in the period 2001–11, and coupons have been distributed to all poverty groups. Whilst it may be assumed that the poor and less vocal groups lost out in the local distribution of vouchers, it appears that even the two lowest quintiles are well represented among the receivers throughout this period. Figure 5 illustrates that in 2004, around 45 per cent of the

Figures 6a and 6b Poverty head count by IHS1, IHS2 and IHS3 and WJMS 2004–2009 both compared with Pauw *et al.* (2014)



Source Estimates for 1997/98, 2004/05 and 2010/11 from IHS1, IHS2 and IHS3 (NSO 2000, 2005, 2012b); for 2004–09 from WJMS (NSO 2005–10) and for Pauw 2010/11 from Pauw *et al.* (2014).

two poorest poverty quintiles received fertiliser coupons, while less than 30 per cent of the highest quintile did.

In 2011, the situation had improved for all groups; the two poorest quintiles received 50 and 58 per cent each. Data from 2013/14 show that 47 per cent of farmers in the poorest quintile and 52 per cent in the second poorest quintile received coupons, while 30 per cent of the wealthiest group received coupons (WMS 2014 (NSO 2015)). With regard to gender equality, around the same proportion of male and female recipients are reported for 2013/14 (*ibid.*). To what degree this distribution of coupons is satisfactory from a poverty point of view is

arguable, as a larger proportion of poor smallholders could have been reached.

To what degree the FISP has contributed to poverty reduction in Malawi is also arguable. Different poverty analyses in Malawi apply different approaches and do not necessarily provide the same results. In order to assess the poverty trends under the FISP, we have looked at available data and results from the Integrated Household Surveys (IHS) (NSO 2005, 2012a) and the Welfare Monitoring Survey (WMS) 2001–2004 (NSO 2002–05), WMS 2006–2009 (NSO 2007–10), WMS 2011 (NSO 2012b). The IHSs show hardly any change in the average poverty level from 1997–98 to 2004–05 and 2010–11. However, these data have been re-analysed by Pauw *et al.* (2014), who found a larger decrease in poverty, as illustrated in Figure 6a. Their analysis is more consistent with the WMS model based on WMS estimates as illustrated in Figure 6b. The poverty headcount data in Figures 6a and 6b indicates that poverty levels are highest in the rural southern part of the country and lowest in urban areas. Although the data show a downward trend in poverty, a poverty level of on average 40–50 per cent is still very high. What we do not know is the contra-factual situation; what would the poverty situation be without the FISP? According to Chinsinga and O’Brien (2008), the FISP is as important to Malawians as the National Health Service is to Britain.

6 Sustainable climate change adaptation

In the previous section, we have assessed the factors that have contributed to the apparent success of the social protection programme FISP in improving food security and reducing the need for shorter-term humanitarian assistance in the period 2005–15. However, as the flooding in 2015 and the El Niño/drought in 2016 showed, Malawi is in dire need of additional measures that can reduce long-term vulnerability and build resilience towards climate change. What lessons, if any, can be learned from the FISP experience in relation to climate change adaptation? Eriksen and Marin’s (2015) key principles for assessing sustainable climate change adaptation provide a frame for addressing this question.

The first principle is to *describe vulnerability contextually, including multiple stressors*. The predicted negative impact of future climate change on economic growth and social development in Malawi is *like a black cloud hanging over the country* (Thurlow *et al.* 2014; Challinor *et al.* 2016). Already, Malawi is unable to cope with the serious droughts and flooding that are affecting it. According to the IPCC (2014), maize-based food systems such as in Malawi might experience yield losses from 18–22 per cent by 2050. In addition, poverty, corruption, donor dependency, small landholdings, and reliance on agriculture, particularly maize for food, and tobacco for export, contribute towards a situation of serious vulnerability.

The second principle is to *acknowledge differing values and interests that affect adaptation outcomes*. The FISP provides a valuable lesson regarding how to balance different interests and drivers when formulating a policy

contested by diverse actors for various reasons. Trusting one's own judgement rather than listening to external experts and donor advice, as well as listening to the demands of the people appear to be lessons for future Malawian governments.

The third principle is to *suggest how local knowledge can be incorporated into adaptation responses*. The lesson here is that since the FISP was only successful with regard to production and food security, and apparently unable to reduce longer-term vulnerability and build resilience, the inclusion of local knowledge might have helped in this situation. However, it is questionable as to what degree local knowledge could be the solution to the huge challenge of climate change adaptation. Perhaps local knowledge could be interpreted as recognition that some form of social protection is needed in Malawi.

The fourth principle is to *consider potential feedback between local and global processes*. A lesson from the FISP experience in this regard is that the national ownership and prestige that went into making the FISP a success contributed towards its implementation capability.

The fifth principle is to *empower vulnerable groups in influencing development pathways and their climate change outcomes*. A lesson here is that the Malawian government appeared somewhat vulnerable in its negotiations with donors regarding the FISP as a development strategy. To a certain extent, voters empowered the government by voicing a strong demand for subsidised inputs. Overall, when assessing what lessons could be learned from the FISP experience in relation to sustainable climate change adaptation, it is important to recognise situation specificity. We should thus be cautious when trying to draw general conclusions as regards applicability for future situations.

7 Conclusion

The policy reforms and the input subsidy programme FISP are heavily contested and far from perfect, but still, have been able to contribute towards positive results as regards agricultural productivity, food security and possibly poverty reduction. It is difficult to envisage how Malawi would cope without a social protection programme of some sort. Without social protection and considering the effect of future climate change, there would probably be substantial increases in human suffering and the need for demanding international humanitarian interventions.

There are many lessons to be learned from the FISP, not least related to the government's ability to implement the programme and the role that national ownership and the demand from voters played in this regard. However, the flooding in 2015 and the drought in 2016 revealed that Malawi is in dire need of more effective measures than the FISP that can reduce long-term vulnerability and build resilience to the future adverse impacts of climate change.

Notes

- 1 Department of International Environment and Development Studies (Noragric), Faculty of Landscape and Society, at the Norwegian University of Life Sciences (NMBU) (ruth.haug@nmbu.no).
- 2 Statistics Norway (bkw@ssb.no).

References

- Arndt, C.; Pauw, K. and Thurlow, J. (2014) *The Economy Wide Impacts and Risks of Malawi's Farm Input Subsidy Programme*, Working Paper 2014/099, Helsinki: World Institute for Development Economics Research of the United Nations University (UNU-WIDER)
- Banik, D. and Chasukwa, M. (2016) 'The Impact of Emerging Donors on Development and Poverty Reduction', in D. Banik and B. Chinsinga (eds), *Political Transition and Inclusive Development in Malawi*, London: Routledge
- Beck, U.; Pauw, K. and Mussa, R. (2015) *Methods Matter – The Sensitivity of Malawian Poverty Estimates to Definitions, Data, and Assumptions*, Working Paper 2015/126, Helsinki: World Institute for Development Economics Research of the United Nations University (UNU-WIDER)
- Birner, R.; Davis, K.; Pender, J.; Nkonya, E.; Anandajayasekeram, P.; Ekboir, J.; Mbabu, A. and Spielman, D.J. (2006) *From Best Practice to Best Fit: A Framework for Analyzing Pluralistic Agricultural Advisory Services Worldwide*, IFPRI Discussion Paper, Washington DC: International Food Policy Research Institute
- Booth, D.; Cammack, D.; Harrigan, J.; Kanyongolo, E.; Mature, M. and Ngwira, N. (2006) *Drivers of Change and Development in Malawi*, Working Paper 261, London: Overseas Development Institute (ODI)
- BU Today (2010) *Can Africa Feed Itself?*, 8 October, www.bu.edu/today/2010/can-africa-feed-itself/ (accessed July 2015)
- Carr, S. (2014) 'The Challenge of Africa's Nitrogen Drought: Some Indications from the Malawian Experience', *MaSSP Policy Note 19*, Washington DC: International Food Policy Research Institute
- Challinor, A.J.; Koehler, A.K.; Ramirez-Villegas, J.; Whitfield, S. and Das, B. (2016) 'Current Warming Will Reduce Yields Unless Maize Breeding and Seed Systems Adapt Immediately', *Nature Climate Change* 6: 954–8
- Chinsinga, B. and Chasukwa, M. (2016) 'Searching for a Holy Grail? The Nexus Between Agriculture and Youth Unemployment', in D. Banik and B. Chinsinga (eds), *Political Transition and Inclusive Development in Malawi*, London: Routledge
- Chinsinga, B. and O'Brien, A. (2008) *How Agricultural Subsidies are Working in Malawi*, Planting Ideas Report, London: Africa Research Institute
- De Schutter, O. (2014) *Report of the Special Rapporteur on the Right to Food on his Mission to Malawi*, Rome: Food and Agriculture Organization of the United Nations (FAO)
- Dorward, A. and Chirwa, E. (2014) *Evaluation of the 2013/14 Farm Input Subsidy Programme, Malawi. Program Implementation and Benefit Cost Analysis*, Malawi: Ministry of Agriculture Irrigation and Water Development

- EAD/UNDP (2016) *Malawi NAP Stocktaking Report*, prepared by S.K. Reddy and K.J. Gondwe, Malawi: Environmental Affairs Department (EAD) and United Nations Development Programme (UNDP)
- Eriksen, S. and Marin, A. (2015) 'Climate Change Adaptation and Development. Transforming Paradigms and Practices', in T.H. Indreberg, S. Eriksen, K. O'Brian and L. Sygna (eds), *Climate Change Adaptation and Development*, London: Routledge
- Government of Malawi (2016) *The National Resilience Plan. Breaking the Cycle of Food Insecurity in Malawi*, Malawi: Office of the Vice President
- Government of Malawi (2015) *Malawi 2015 Floods Post Disaster Needs Assessments Report*, Malawi: Ministry of Disaster Management Affairs
- Green Climate Fund (2015) *Consideration of Funding Proposals – Addendum: Funding Proposal Package for FP002*, GCF/B.11/04/Add.02, South Korea: Green Climate Fund
- Grist, N. (2015) *Malawi's Agriculture, Climate Change and Food Security: Country Analysis and Programming Recommendations*, Case Study Report, London: Department for International Development (DFID)
- Hallegette, S.; Bangalore, M.; Bonzanigo, L.; Fay, M.; Kane, T.; Narloch, U.; Rozenberg, J.; Treguer, D. and Vogt-Schilb, A. (2016) *Shock Waves: Managing the Impacts of Climate Change on Poverty*, Washington DC: World Bank
- Harrigan, J. (2003) 'U-Turns and Full Circles: Two Decades of Agricultural Reform in Malawi 1981–2000', *World Development* 31.5: 847–63
- HLPE (2012) *Social Protection for Food Security*, A Report by The High Level Panel of Experts on Food Security and Nutrition, Rome: Committee on World Food Security (CFS)
- IFPRI-GHI (2015) *Global Hunger Index*, www.ifpri.org/publication/2015-global-hunger-index-armed-conflict-and-challenge-hunger (accessed June 2016)
- IPCC (2014) *Climate Change 2014: Impact, Adaptation and Vulnerability*, Working Group II contribution to the fifth assessment report of the Intergovernmental Panel on Climate Change, IPCC, Geneva: World Meteorological Organization
- Jayne, T.S. and Rashid, S. (2013) 'Input Subsidy Programs in Sub-Saharan Africa: A Synthesis of Recent Evidence', *Agricultural Economics* 44: 1–16
- Kirrane, C.; Sharkey, C. and Naess, L.O. (2012) *Shaping Strategies: Factors and Actors in Climate Change Adaptation*, Research Report, Brighton: IDS and TRoCAIRE
- Minot, N. and Benson, T. (2009) 'Fertilizer Subsidies in Africa: Are Vouchers the Answer?', *IFPRI Issues Brief* 60, Washington DC: International Food Policy Research Institute
- MOAIWD (1997–2015) *Annual National Crop Estimates*, spreadsheet available from MOAIWD, Malawi: Ministry of Agriculture, Irrigation and Water Development
- NSO (2015) *Welfare Monitoring Survey (WMS 2014)*, Zomba, Malawi: National Statistical Office
- NSO (2002–05, 2007–10, 2012b) *Welfare Monitoring Survey (WMS 2001–2004, 2006–2009, 2011)*, Zomba, Malawi: National Statistical Office

- NSO (2000, 2005, 2012a) *Integrated Household Survey (IHS1, IHS2, IHS3) Household Socio-Economic Characteristics*, Zomba, Malawi: National Statistical Office
- Nyasa Times* (2015) 'Malawi–China Cooperation Vital for Development', 6 December, www.nyasatimes.com//2015/12/06/mutharika-says-malawi-china-cooperation-vital-for-modern-development (accessed December 2015)
- Pauw, K. and Thurlow, J. (2014) 'Malawi's Farm Input Subsidy Program: Where Do We Go from Here?', *MaSSP Policy Note* 18, Washington DC: International Food Policy Research Institute
- Pauw, K.; Beck, U. and Mussa, R. (2014) *Did Rapid Small-Holder-Led Agricultural Growth Fail to Reduce Rural Poverty? Making Sense of Malawi's Poverty Puzzle*, UNU-WIDER Working Paper 2014/123, Helsinki: World Institute for Development Economics Research of the United Nations University (UNU-WIDER)
- Sjaastad, E.; Kaarhus, R.; Vedeld, P. and Wold, B.K. (2007) *Privatization and Liberalization in the Agricultural Sector: An Examination of Processes and Outcomes in Three African Cases*, Noragric Report 39, Aas: Norwegian University of Life Sciences (NMBU)
- Somerville, K. (2012) *Malawi's Democracy Dips into Recession*, 21 March, www.faceofmalawi.com/2012/04/malawis-new-president-must-build-support-and-mend-donor-relations/comment-page-1/ (accessed June 2016)
- StarAfrica (2014) *Malawi Urges to Consider the Role of the Subsidized Input Program*, 6 June, <http://en.starafrika.com/news/malawi-urged-to-consider-the-role-of-subsidized-input-program.html> (accessed August 2014)
- Thurlow, J.; Arndt, C.; Schlosser, A. and Strzepek, K. (2014) 'Climate Change and Economic Growth Prospects for Malawi: An Uncertainty Approach', *Journal of African Economics* 23: 83–107
- WB (2016) *Country Statistics*, <http://data.worldbank.org/country/> (accessed May 2016)
- WB (2015) *Malawi: Agricultural Sector Risk Assessment*, Agricultural Global Practice Technical Assistance Paper, Washington DC: World Bank Group, <http://documents.worldbank.org/curated/en/802281467999353954/pdf/99941-WP-P148140-Box394838B-PUBLIC-TAPMalawi-ASRA-WEB-01072016.pdf> (accessed December 2015)
- WFP (World Food Programme) (2016) *Food Insecurity Worsens in Malawi, Needs Increase in Face of El Niño*, 17 February, www.wfp.org/news/news-release/food-insecurity-worsens-malawi-needs-increase-face-el-nino (accessed April 2016)
- WHO (World Health Organization) (2015) *Malawi Countdown: Understanding Progress on Child Survival*, www.countdown2015mnch.org/documents/CD_Malawi_July2015_2logos_FINAL2.pdf (accessed June 2016)

This page is intentionally left blank