



The Program on Governance
and Local Development

The Local Governance Performance Index (LGPI) in Malawi: Selected Findings on Land

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Executive Summary

Land is particularly important in Malawi. Eighty-four percent of the country's population lives in rural areas,¹ and most of the rural population depends on agriculture for its livelihood. Yet almost all agricultural activity takes place on only 21,200 square kilometers of arable land.² Malawi is densely populated (with 183 inhabitants per square kilometer, significantly higher than the continental average of 42) and land dependent.³ It is not surprising, then, that land is highly valued, a source of conflict, and politically important.

Land Acquisition

The LGPI finds that 86 percent of the households in Malawi farm land, including 97 percent of the households in rural areas and 58 percent in urban areas. Land is usually acquired through inheritance or marriage, but inheritance does not appear to be determined exclusively by matrilineal and patrilineal systems. It was more common for households within the matrilineal system to inherit land from their mother's side of the family (63 percent), and for households within the patrilineal system to inherit land from the father's side (64 percent.) However, 16 percent of households in the patrilineal system got land from the mother's side, and nearly 25 percent of households in the matrilineal systems got land from the father's side.

Legal Documentation

Official government land titles are quite rare in Malawi. The LGPI finds that only 13 percent of the landowners have a document proving that they own their land. Fifteen percent of the female-headed households report holding a land title, compared to 13 percent of the households with a male head, but the difference is not statistically significant. More highly educated Malawians appear to be better positioned to obtain land titles. Seven percent of those with no formal education had a document proving their ownership of the land, while 17 percent of those with primary school education and 17 percent of those with intermediate to postgraduate education

¹ World Bank. 2016. "Population Density." Available at http://data.worldbank.org/indicator/EN.POP.DNST?year_high_desc=true.

² Food and Agriculture Organization. 2013. "Malawi: BEFS Country Brief." Available at <http://www.fao.org/energy/36344-02a1af0b958d1fb2c240782302c947837.pdf>.

³ World Bank. 2016. "Population Density." Available at http://data.worldbank.org/indicator/EN.POP.DNST?year_high_desc=true.

levels had documentation of their land ownership. Similarly, wealthier individuals are more likely to obtain land documentation. Nine percent of the Malawians in the lowest wealth quartile had documentation that proved their ownership of the land, compared to 21 percent of the Malawians in the highest wealth quartile, and 13 percent of the Malawians in the second and third wealth quartiles.

Land Disputes

Land disputes are a significant problem in Malawi. When asked why people in the community have disputes, over one-fifth of Malawians point to land as a major cause of local disputes. Indeed, 14 percent of the Malawians stated that they had been in a land dispute during the previous 12 months. There is no significant difference in the likelihood that individuals are engaged in land disputes with regard to gender, female- or male-headed households, or matrilineal or patrilineal system. The vast majority of those who have a land dispute seek help in resolving it: 85 percent of those who had been involved in a land dispute in the previous 12 months asked someone for help, turning most frequently to a village head or a neighborhood block leader (60 percent), followed by a family relative (13 percent).

Decision-Making Regarding Land Use

A significant portion (35 percent) of households—39 percent of male-headed households and 42 percent of female-headed households—report that the head of the household and his/her spouse make joint decisions regarding their land.⁴ The household head is more likely to make all decisions regarding the land in patrilineal systems (64 percent) than in matrilineal systems (52 percent). Heads of households in rural areas are also more likely than those in urban areas to make land-related decisions alone (59 percent versus 35 percent).

Improvements

The vast majority (88 percent) of households had made improvements on their land in the previous two years. Improvements tend to be in inputs: using fertilizers (69 percent), using improved seeds (61 percent), and planting trees (29 percent). Capital investments in the previous

⁴ This is not statistically significant in a multivariate analysis.

two years were more rare: building structures (12 percent), renovating, or improving homes (8 percent) and building or improving irrigation systems (4 percent). There is quite a big difference among the districts when it comes to using fertilizers, with some of the southern districts — Mulanje, Nsanje and Chikwawa—using fewer fertilizers than others.

Government Subsidies

The LGPI finds that there is a perception that government subsidies (e.g., fertilizers) are distributed unfairly. Sixty-two percent of respondents feel that they are eligible for government subsidies but have been unable to obtain them. They also believe that people who do not need subsidies receive them instead. When asked to say whether there are none, a few, or many families eligible for government subsidies in their village or neighborhood but have been unable to obtain them, 67 percent said “many,” 17 percent said “a few,” and 9 percent said “none.” When asked if the respondent thought there are “many,” “a few,” or “none” households that receive subsidies (e.g., fertilizers) but that are not poor, 43 percent responded “many,” 30 percent said “a few,” and 20 percent said “none.” Eight percent didn’t know or refused to answer.

1. Introduction

Land is particularly important in Malawi. Eighty-four percent of the country's population live in rural areas,¹ and most of the rural population depends on agriculture for its livelihood. Yet, almost all agricultural activity takes place on only 21,200 square kilometers of arable land.² Malawi is densely populated (with 183 inhabitants per square kilometer, significantly higher than the continental average of 42) and land-dependent.³ It is not surprising, then, that land is highly valued, a source of conflict, and politically important.

This report examines land use in Malawi today, and it proceeds as follows. The next section outlines the importance of land, as well as landholdings practices, climate, and development challenges. Section 3 describes the political and administrative context that shape land use. Section 4 introduces the Local Government Performance Index (LGPI), the survey instrument on which the findings of this report are based. Section 5 presents LGPI findings on land ownership. Section 6 deals with land disputes, and Section 7 with decision-making. In section 8 we present our findings regarding what improvement Malawians make to their land. Section 9 covers government subsidies (e.g., fertilizers) and Malawians' reactions to their implementation. Section 10 concludes.

2. Land in Malawi

2.1 Landholding Practices

Malawi's landholding system is a result of colonial history and settlement patterns, the one-party era's agricultural policies and demographic trends. For a long time, Malawi was without a comprehensive land policy.⁴ In 2002 the National Land Policy was passed, initiated by the government in 1995 as a first step to decentralize the land administration to the local and district

¹ World Bank. 2016. "Population Density." Available at http://data.worldbank.org/indicator/EN.POP.DNST?year_high_desc=true.

² Food and Agriculture Organization. 2013. "Malawi: BEFS Country Brief." Available at <http://www.fao.org/energy/36344-02a1af0b958d1fb2c240782302c947837.pdf>.

³ World Bank. 2016. "Population Density." Available at http://data.worldbank.org/indicator/EN.POP.DNST?year_high_desc=true.

⁴ Matchaya, Greenwell. 2009. "Land Ownership Security in Malawi." *African Journal of Agricultural Research* 4(1):001–013.

level⁵ in an effort to establish a better land administration system. The Land Law (Amendment) Bill was passed in 2006. However, due to centralization of land administration in Malawi, the bill was inadequate. In 2013, an additional 11 land-related bills that promoted decentralization and increased local participation were presented to the parliament.⁶ As of September 2016, four of these bills had been passed.

Malawi has three categories of land: customary, public, and private. Customary land is held or used by a community member under customary law and is under the jurisdiction of customary traditional authorities. Although in theory customary land belongs to the community, in practice the individual in the community has the right to cultivate it and sometimes uses the land as though he or she were the owner.⁷ The Customary Land Act of 2016 places administration of customary land under a village committee chaired by the traditional authority.⁸ Public land is held or used by the government in the public interest. This includes, for example, historical areas and national parks, but also government land used for public purposes, such as schools and government buildings. Private land is owned or held under freehold title, lease, Certificate of Claim, or land registered as private land under the Registered Land Act of 1967. Around 15 percent of the land in Malawi is either private or public, and around 85 percent is customary.⁹ The majority of the rural population use land under customary law, and around 28 percent of the rural population is involved in the land-rental market, either as tenants or as landlords.

For the most part, land is acquired through marriage or inheritance. However, land can also be accessed through government resettlement programs, traditional leaders, land leasing, rental, or purchase. There are notable differences in land inheritance practices based on matrilineal and patrilineal systems.¹⁰ In the patrilineal traditions, which are used by approximately 17 percent of

⁵ USAID, 2010. "USAID Country Profile, Property Rights and Resource Governance Malawi." Available at: http://www.usaidlandtenure.net/sites/default/files/country-profiles/full-reports/USAID_Land_Tenure_Malawi_Profile.pdf.

⁶ International Land Coalition. 2015. "National Engagement Strategy Malawi."

⁷ Matchaya, Greenwell. 2009. "Land ownership security in Malawi." *African Journal of Agricultural Research*. 4(1): 001–013.

⁸ Tchale, Hardwick. 2014. "Piloting Community-Based Land Reform in Malawi: Innovations and Emerging Good Practices." In Byamugisha, Frank. *Agricultural Land Redistribution and Land Administration in Sub-Saharan Africa: Case Studies of Recent Reforms*. The World Bank Group: 17–26.

⁹ USAID, 2010. "USAID Country Profile, Property Rights and Resource Governance Malawi." Available at http://www.usaidlandtenure.net/sites/default/files/country-profiles/full-reports/USAID_Land_Tenure_Malawi_Profile.pdf.

¹⁰ In Malawi, 81 percent of ethnic groups are matrilineal, 16.3 percent are patrilineal, and 2.7 percent, comprising mostly expatriate settlers, are undetermined. The majority of ethnic groups in the central and southern regions tend

Malawi's ethnic groups and are based primarily in the north of the country, a newly married woman joins her husband in his home village, the offspring identify their father's village as their home, and land is inherited through the male lineage. By contrast, in the typical matrilineal tradition, which governs 81 percent of Malawi's ethnic groups and is concentrated in the central and southern regions, a family establishes its home in the mother's village, the children of the offspring call their mother's village home, and land is passed on through the female offspring.¹¹ Land owned by households with a female head is generally smaller, produces less maize, and possesses fewer livestock.¹² Men in matrilineal villages, women in patrilineal villages, and orphans thus suffer the most from tenure insecurity.

Finally, it is important to note that the distribution of land in Malawi is highly skewed. Around 30,000 private estates hold 13 percent of the country's total land, producing crops mainly for export; while smallholders cultivate approximately 69 percent of land, producing mostly for consumption. Subsistence farmers generally have small parcels of land, with 58 percent having less than one hectare for farming. Eleven percent are nearly landless.¹³

2.2 Climatic Challenges

Malawi frequently suffers from floods, drought, and, in some areas, earthquakes, which creates significant challenges for land development and agricultural production. Between 1979 and 2010, natural disasters have directly affected almost 22 million Malawians and resulted in the deaths of nearly 2,600.¹⁴ During the 2014–2015 period alone, heavy rains directly affected an estimated 1.1 million people,¹⁵ displacing 230,000 and leaving 106 dead.¹⁶ Similarly, a drought in 2005 left more than one-third of the country experiencing food shortages.¹⁷

to follow matrilineal traditions; groups in the north (including the dominant Tumbuka ethnic group) are generally patrilineal.

¹¹ Note, however, that some among the Chewa ethnic group, who are matrilineal, practice virilocality, or *chitengwa*, by settling in the husband's home.

¹² USAID, 2010. "USAID Country Profile, Property Rights and Resource Governance Malawi." Available at http://www.usaidlandtenure.net/sites/default/files/country-profiles/full-reports/USAID_Land_Tenure_Malawi_Profile.pdf.

¹³ Ibid.

¹⁴ Government of Malawi. 2015. "National Disaster Risk Management Policy." Available at http://www.ifrc.org/docs/IDRL/43755_malawidrmpolicy2015.pdf.

¹⁵ Office for the Coordination of Humanitarian Affairs. 2015. *Humanitarian Bulletin*. Available at http://reliefweb.int/sites/reliefweb.int/files/resources/ocha_rosa_humanitarian_bulletin_issue18_may2015.pdf.

¹⁶ Government of Malawi. 2015. "Malawi 2015 Floods Post Disaster Needs Assessment Report." Available at <http://reliefweb.int/sites/reliefweb.int/files/resources/Malawi-2015-Floods-Post-Disaster-Needs-Assessment-Report.pdf>.

¹⁷ United Nations Development Programme. 2007. "Famine in Malawi: Causes and Consequences." Available at http://hdr.undp.org/sites/default/files/menon_roshni_2007a_malawi.pdf.

The natural disasters have adverse economic effects. For instance, droughts can cost the country up to 1 percent of its annual GDP, and the loss of arable land and damage to irrigation infrastructure—just two of the ramifications of heavy rain—can cost the country 0.7 percent of its annual GDP.¹⁸ Livelihood shocks (e.g., drought or flood) make it hard to cope with smaller shocks, such as minor changes in rainfall patterns.¹⁹

Deforestation is a serious problem as well. The country lost over half of its 4.4 million hectares of forest cover between 1973 and 1991, and the net deforestation rate remains at over 36,000 hectares a year.²⁰ Deforestation is a particularly difficult problem to deal with, given that over 84 percent of homes use firewood as their main source of cooking fuel,²¹ which puts further strain on Malawi's forest reserves.²² Concerns about deforestation have led the government to reduce earlier plans to turn forestland into farmland in an effort to expand agricultural production; attention is now focused on rehabilitating forests through replanting programs.

Malawi's major geographic asset is that it is home to one of the world's great freshwater systems. Lake Malawi is the ninth-largest lake in the world, containing nearly 7 percent of the world's total available surface freshwater.²³ The lake is an excellent source of water and also helps to provide the country with a valuable supply of nutrition. It has been estimated that around 70 percent of the country's dietary animal protein comes from fish, mainly sourced from Lake Malawi.²⁴

2.4 Poverty and Development Challenges

Climatic challenges, combined with the high population pressures on land, put much of Malawi's population in a precarious position. Almost half (47 percent) of Malawians are food-energy deficient, meaning that their regular diet fails to provide them with the minimum dietary energy requirement per day to lead an active and healthy life.²⁵ Food insecurity is most pronounced in

¹⁸ Global Facility for Disaster Reduction and Recovery. 2013. "Malawi: Country Program Update." Available at <http://www.gfdr.org/sites/gfdr.org/files/Malawi.pdf>.

¹⁹ Andrew Charman. 2013. "Social Protection and Labour Markets in Malawi: The Centrality of Agriculture." In *UNDP: Social Protection, Growth and Employment Evidence from India, Kenya, Malawi, Mexico and Tajikistan*.

²⁰ Government of Malawi. 2011. "Economic Valuation of Sustainable Natural Resource Use in Malawi." Available at http://www.mw.undp.org/content/dam/malawi/docs/environment/Economic_Valuation_of_Sustainable_Natural_Resources_Use_in_Malawi.pdf.

²¹ Malawi National Statistics Office. 2014. "Integrated Household Panel Survey 2010–2013."

²² Only 9 percent of homes have access to electricity, and only 33 percent of homes are within 100 meters of an electricity source. Solar power is negligible; only 3.4 percent of homes own solar panels.

²³ International Lake Environment Committee Foundation. 2006. "Lake Malawi: Experience and Lessons Learned Brief." Available at: http://www.worldlakes.org/uploads/16_lake_malawi_nyasa_27february2006.pdf.

²⁴ Ibid.

²⁵ Comprehensive Food Security and Vulnerability Analysis and Nutrition Assessment. 2012. World Food Programme 4. Retrieved from <http://documents.wfp.org/stellent/groups/public/documents/ena/wfp253658.pdf>.

the south of the country, but it is also prevalent in the central districts of Lilongwe and Mchinji. Reliance on subsistence agriculture traps many Malawian families in a cycle of poverty, since poor households cannot invest in the inputs required to boost yields, and poor farmers typically sell any surplus soon after harvest in order to earn income and repay debts. This exposes farmers to fluctuating market prices and means they cannot benefit from selling when prices rise.²⁶

Malawi is also one of the poorest countries in the world, ranking 173 out of 188 countries and territories in the Human Development Index (a multidimensional measure of human development).²⁷ Nearly 51 percent of the population resides below the national poverty line,²⁸ and an estimated 12 percent of the population is classified as ultra poor (those suffering from chronic hunger most of the year).²⁹ Sixty-three percent of households use a pit latrine; 47 percent of households still spend over 30 minutes collecting their drinking water each day; nearly 74 percent of the country's population still lives more than two kilometers from an all-season road.³⁰

Pressures are unlikely to ease soon. Malawi has the 12th-fastest-growing population in the world, with an annual growth rate of 3.2 percent.³¹ Over 46 percent of the population is below the age of 15,³² compared to just 16 percent in this age group within the European Union's total population.³³

3. Politics and Land Administration

Land administration in Malawi is shaped by its dual political structure. The elected parliament and executive play an important role in shaping legislation regulating the distribution of land and

²⁶ Ibid.

²⁷ This statistic and others in this paragraph (unless otherwise noted) are from UNDP. 2015. "Work for human development: Briefing note for countries on the 2015 Human Development Report—Malawi." Available at http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/MWI.pdf.

²⁸ Poverty head count ratio as of 2010, according to World Bank World Development Indicators. Available at <http://data.worldbank.org/country/malawi>.

²⁹ Malawi National Statistics Office. 2014. "Integrated Household Panel Survey 2010–2013." Available at http://www.nsomalawi.mw/images/stories/data_on_line/economics/ihs/IHPS_2013/IHPS_Report.pdf.

³⁰ All the statistics listed in this paragraph are from the Malawi National Statistics Office's Integrated Household Panel Survey 2010–2013, the DHS Program's Malawi: Demographic and Health Survey, and the World Bank's (2011) "Malawi's Infrastructure: A Continental Perspective," available at <http://documents.worldbank.org/curated/en/151641468089370729/pdf/WPS5598.pdf>.

³¹ The World Bank. 2012. "World Development Indicators." Available from http://data.worldbank.org/indicator/SP.POP.GROW?year_high_desc=true

³² Malawi National Statistics Office. 2014. "Integrated Household Panel Survey 2010–2013."

³³ OECD. 2016. "Young Population." Available at: <https://data.oecd.org/pop/young-population.htm - indicator-chart>.

inputs (e.g., subsidized fertilizer, seeds). At the same time, hereditarily appointed authorities in the traditional system play an important role in determining individuals' access to land and government subsidies.

3.1 Malawi's Political System

In a 1993 referendum, Malawians voted for the reintroduction of a multiparty political system, and the following year peaceful, transitional elections took place. A new constitution, adopted on May 18, 1995, reflected liberal democratic norms and included a progressive bill of rights. In terms of political organization, the new constitution established Malawi as a multiparty republic administered by a three-branched government. A president, elected by popular vote for a five-year term, heads the executive branch, serves as both head of state and head of the government, and is assisted by cabinet members. The legislative branch consists of the National Assembly, a unicameral body of representatives elected by popular vote to serve for five years. The judicial branch consists of a Supreme Court of Appeal and a High Court. (The president appoints the chief justice, while other High Court judges are appointed on the advice of the Judicial Service Commission.³⁴) Universal suffrage is set at 18 years of age. Between 1994 and 2015, Malawi held five successful parliamentary and presidential elections (1994, 1999, 2004, 2009, and 2014), although local government elections were repeatedly postponed and took place only in 2000 and 2014.

The establishment of democracy in Malawi raised hopes of good democratic governance that would translate into effective management of the economy for growth and poverty reduction; however, 22 years down the line, the initial promises and goals of the national democracy project remain elusive. A number of political parties have emerged since democratization, but they remain highly personalized identities, acting as vehicles for the election of their leaders rather than offering something closer to a collective national good. All political parties that have come to power have forged settlements within which the political elites and those well connected to the political establishment have benefited at the expense of national development.³⁵ This has significantly shaped the ability of public officials to formulate and carry out policies in accordance

³⁴ CIA World Factbook 2007, available at: <http://www.sciencedirect.com/science/article/pii/S0147596707000741>

³⁵ Tenthani, Kizito, and Blessings Chinsinga. 2016. "Political Parties, Political Settlement and Political Development," in Dan Banik and Blessings Chinsinga (eds). *Political Transition and Inclusive Development in Malawi: The Democratic Dividend*. London: Routledge. 35–56.

with the public interest where “public interest” is heavily constrained by the requirement to service patronage networks of one kind or another.

Alongside the local government system operates a traditional system of hereditary chiefs that is regulated by the Chiefs Act of 1967. Chiefs have been a core part of the social fabric of Malawi since precolonial times; each village has a village head, with tiered levels of traditional authority above this. Thus a group village head presides over a cluster of villages; and traditional authorities bring together groupings of group village heads. The role of traditional leaders remains ambiguous, but chieftainship has been a notable feature of rural areas of Malawi. The fact that there more or less haven’t been locally elected councillors since 2005, causing a political and administrative vacuum, increases the importance of the functions that chiefs perform for both their subjects and the state. In the urban and peri-urban areas, hereditary chiefs also exist, and their role in these jurisdictions remains a contested terrain.

Over the years, other nonhereditary leaders, known as block leaders or town chiefs, have emerged as a result of political and economic circumstances, as townships have grown and people have moved to them to live and work. The local-governance vacuum created by the postponement of local elections has also resulted in the increased importance of block leaders, as they are selected by communities to address problems arising from rapid and relatively unplanned urbanization.

The historical legacy of strong presidents and chiefdoms shapes politics today. Politics is characterized by patterns of “big man” rule, the distribution of patronage, and divergence of formal and informal rules. Decisions commonly flow from the center outward along vertical, ethno-regional channels, underpinned by the patronage power held locally, often by traditional authorities such as village chiefs. This significantly shapes the allocation of public resources and distribution of services.

3.2 The Public Administration

The public administration in Malawi operates at three levels. The first includes government ministries and departments that oversee public programs at the national level. The second level of operations is the regional one. Administratively the country is divided into three regions: Northern, Central, and Southern. The majority of government ministries and departments have offices at the regional level that link the national offices and the district government administrations.

The country is also divided into eight Agricultural Development Divisions; Karonga, Mzuzu, Kasungu, Salima, Machinga, Lilongwe, Blantyre, and Shire Valley.³⁶ The divisions map onto the country's four agroecological zones, which are based on altitude: Lower Shire Valley, low altitude, middle altitude, and high altitude. Agricultural extension officers, located within these agriculture zones, aim to support local farmers through the provision of fertilizers and seeds, particularly of maize, pigeon peas, and peanuts. These officers also report local conditions to the central government.

3.3 Land Regulations

In 2016, several land-related bills were passed by the National Assembly in July and approved by the president in September. These are the Principle Land Bill, the Physical Planning Bill, the Land Survey Bill, and the Customary Land Bill. There are several other land bills that government intends to introduce, including the Registered Land (Amendment) Bill and the Lands Acquisition Bill.³⁷ One of the major criticisms from opposition parties when the new bills were introduced is that with them, the chiefs no longer have authority over land. Practically speaking, the role of chiefs has indeed been reduced because a village land committee can now approve land transactions, whereas previously chiefs had almost total control over land matters. Over the years, chiefs have informally handled most land disputes. Under the new system, chiefs still are required to preside over land dispute matters before such disputes are referred to formal courts. Initial registration of customary land will be free, but transactional fees will apply when land changes ownership.³⁸

The Ministry of Lands, Housing, and Urban Development is the primary agency responsible for land in Malawi. It was founded in 1997, after the Ministry of Lands and Valuation, the Ministry of Physical Planning and Surveys, the Ministry of Housing, and the Department of Buildings in the Ministry of Works and Supplies merged. The Ministry of Agriculture and Food Security is responsible for the agricultural sector.³⁹ Before the Customary Land Act of 2016, chiefs were in

³⁶ Chinsinga, Blessings. 2013. "The Political Economy of Agricultural Policy Processes in Malawi: A Case Study of the Fertilizer Subsidy Program." Working paper produced as part of the Future Agricultures Consortium's Political Economy of Agricultural Policy in Africa work stream.

³⁷ Malawi News Agency. August 1, 2016. "Malawi: New Land Laws to Empower Chiefs, People." <https://landportal.info/news/2016/09/malawi-new-land-laws-empower-chiefs-people>.

³⁸ Ibid.

³⁹ USAID, 2010. "USAID Country Profile, Property Rights and Resource Governance Malawi." Available at http://www.usaidlandtenure.net/sites/default/files/country-profiles/full-reports/USAID_Land_Tenure_Malawi_Profile.pdf.

principle responsible for allocating customary land, but in practice individuals had user rights akin to those associated with private land; hence the land could be passed on to offspring.

In a study conducted in April 2016 by Dulani, Lust, and Swila, respondents in the Department of Lands in Blantyre indicate that registering land in Malawi is a long and time-consuming process. It is not uncommon to wait years to get official documentation.⁴⁰ The government has, however, sought to address this in the new Customary Land Act (2016), which calls for the establishment of local committees chaired by village heads to approve ownership transfer of customary land. Another finding from the Dulani, Lust, and Swila study gives an additional reason that it is not common to have documentation proving ownership of the land; some (although certainly not all) of the respondents in the focus groups did not see any point of registering their land at a government office because the village head had the most control over land rights. The study also found that, for some respondents in more remote areas, the costs of registering land – including travel costs – outweighed the benefits of obtaining a government document.⁴¹ It is not surprising that the LGPI finds that 11 percent of Malawians living in rural areas having documentation of ownership compared to 27 percent of those living in urban areas.

3.4 Government Subsidies and Programs

The most prominent government agriculture program is the Farm Input Subsidy Programme (FISP), which aims to ensure food security by increasing agricultural productivity. Since its inception in 2005, the FISP has targeted approximately 1.5 million rural smallholders, or about half of all farmers in Malawi.⁴² Identifying the intended beneficiaries is challenging. In practice, eligibility is frequently determined by local leaders, who do not always apply the same criteria, leading to inconsistent targeting across districts and over time. Evaluations of the FISP show that resource-poor farmers are frequently less likely to receive subsidies⁴³—a point of contention that is borne out in the survey results described below.

⁴⁰ Dulani, Boniface. Ellen Lust, and Hannah Swila. 2016. “Binding Constraints in Service Delivery in Malawi Report.” Unpublished paper.

⁴¹ Ibid

⁴² Arndt, Channing, Karl Pauw, and James Thurlow. 2016. “The Economy-Wide Impacts and Risks of Malawi's Farm Input Subsidy Program.” *American Journal of Agricultural Economics* 98(3): 962–980.

⁴³ Ibid.

In addition to the FISP, the government sponsors a variety of public works programs (PWP), which provide regular payments to individuals in exchange for work, often in rural areas.⁴⁴ These programs aim at decreasing chronic or shock-induced poverty and providing social protection. Most PWPs in Malawi rely on self-targeting. Wages are set to be equal or below market wages for unskilled labor, to ensure that projects attract only people with few other income-generating opportunities. District coverage varies, but the majority of districts benefit from at least three PWPs, and around 1.2 million Malawians work in one of the PWPs for at least some days each year.⁴⁵

4. The Local Governance Performance Index

The analysis presented in this report draws from the Local Governance Performance Index (LGPI),⁴⁶ implemented in Malawi from March 24 to April 27, 2016. The LGPI provides a new approach to the measurement, analysis, and improvement of local governance. The tool aims to help countries collect, assess, and benchmark detailed information concerning issues of local and public-sector performance and service delivery to citizens and businesses. The goals are to provide information to help pinpoint, diagnose, and foster discussion among citizens, policymakers, and the development community regarding areas of need; help formulate policy recommendations; provide a benchmark for assessing policy implementation; and allow us to examine the factors driving good governance and quality service provision.

The LGPI has several distinctive features. First, the core instrument includes batteries on health, education, security, voice, and participation, as well as other metrics of governance and service delivery, permitting us to examine and compare relationships between governance and outcomes across sectors. Second, we focus on behavioral measures. Individuals are asked, for instance, if they have direct experience with health clinics, schools and other services. The survey further probes experiences of those who accessed these services, asking about the quality of service

⁴⁴ PWPs in Malawi are implemented by the European Union, the World Bank, the Local Development Fund, and the World Food Programme, in cooperation with the Ministry of Local Government and Rural Development. Pellerano, Luca, and Florian Juergens. N.d. "Social Protection in Malawi: Assessment Based National Dialogue Brief." Irish Aid/International Labor Organization.

⁴⁵ Ibid.

⁴⁶ The Local Governance Performance Index (LGPI) in Malawi was made possible by generous support from a number of sources. The Program on Governance and Local Development (GLD) initially designed and piloted the LGPI in Tunisia with generous funding from the Moulay Hicham Foundation, the Carnegie Corporation of New York, The World Bank, and Yale University. The survey was revised and fielded in Malawi with support from the Swedish Research Council and the Norwegian Research Council.

delivery, whether they have experienced problems, from whom they've sought help if they have experienced problems, and what the outcomes of the process have been. These data provide a detailed map of citizens' experiences with governance and service delivery, and permit an in-depth assessment of institutional quality and capacity. Third, the LGPI employs a methodology of heavily clustering surveys at the village level. This allows for explicit measures of local variation in governance and outcomes that are undetectable in most surveys, which are usually representative only at the national level. Finally, the LGPI captures satisfaction with and expectations about local services, as well as state and non-state actors, making it possible to compare citizens' experiences with their levels of satisfaction and trust in these actors.

The survey was fielded in 15 of Malawi's 28 districts, spanning all three administrative regions. Within each region, traditional authorities (TAs) or, in urban areas, local council wards were randomly selected for the study. A total of 18 TAs and four urban wards were selected according to the principle of probability proportional to size (PPS) from three regional strata (Table 1).

Region/Stratum	District	Traditional Authority
Northern	Chitipa	Mwaulambya
	Rumphi	Mwankhunikira
	Mzimba	Chindi Kampingo Sibande Mtwalo
	Nkhata Bay	Kabunduli
	Mzuzu	Viphya ward
Central	Kasungu	Simlemba
	Lilongwe City	Area 25 ward Area 36 ward
	Dedza	Pemba Tambala
	Ntcheu	Kwataine
Southern	Balaka	Kalembo
	Blantyre	Kapeni
	Blantyre City	Namiyango ward
	Chikwawa	Chapananga Ngabu
	Mangochi	Jalasi
	Mulanje	Mabuka
	Nsanje	Mbenje
	Zomba	Mwambo

Table 1: Traditional authorities and local government wards included in the 2016 LGPI Malawi survey.

In each TA, four enumeration areas (EAs)⁴⁷ were randomly sampled using PPS sampling. A similar PPS sampling was used to select four EAs in the local government wards in Malawi's four main cities. The EA boundaries were carefully plotted and exported to an application that was installed on tablets that were used to collect data in the field. These maps ensured that enumerators collected data only within designated areas and did not stray outside of those areas by mistake. In each enumeration area, a team of field-workers was tasked with randomly selecting a total of four villages (or blocks in the urban EAs) in which to conduct household interviews. To ensure a sufficient number of interviews, the teams were required to conduct up to 22 interviews per village, yielding an average of 88 interviews per EA and 352 interviews per TA or ward.

Fieldwork teams randomly selected households within each village/ward. Upon entry into a village/ward, the field teams were instructed to find out from local leaders the number of households in the village/ward. They divided the number of households by 22 to determine the walk pattern, identifying the nth household for interview. In each household, respondents were chosen randomly from among those over 18 years old using the Kish selection grid. There are 8,114 complete interviews, approximately 369 in each of the 22 traditional authorities and local government wards. The Institute of Public Opinion and Research (IPOR) implemented the survey under the oversight of Dr. Boniface Dulani, IPOR's senior partner and a lecturer at the University of Malawi. Fifty-five interviewers recruited by IPOR conducted interviews in Chichewa, Chitumbuka, and English. Responses were entered on tablets running SurveyToGo software.

5. Land Ownership

5.1 Acquisition of Land

The LGPI confirms the importance of land in Malawi. The survey found that 86 percent of the households in Malawi farm. Ninety-seven percent of the households in rural areas are involved in farming, compared to 58 percent in urban areas.

⁴⁷ Enumeration areas are geographic areas designed for census-taking. They have no other administrative role.

Land is usually acquired through inheritance or marriage, but the survey finds that inheritance does not appear to be determined exclusively by matrilineal and patrilineal systems. Almost half of the households (48 percent) acquired their land through their mothers' side of the family, and 38 percent acquired land through their father's side. Not surprisingly, it was more common among households within the matrilineal system to inherit land from their mother's side of the family (63 percent); however, 16 percent of households in the patrilineal system also got their land from the mother's side.⁴⁸ Similarly, the land was passed on from the father's side in 64 percent of the households in patrilineal villages, but nearly 25 percent of households in matrilineal systems also got their land from their father's side.⁴⁹

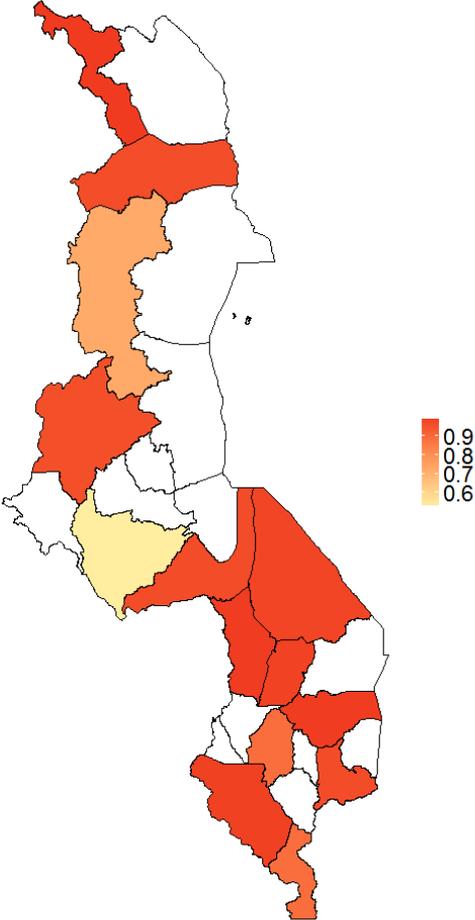


Figure 1. Average percentage of households that farm, by district

⁴⁸ This relationship was not statistically significant in a multivariate analysis.

⁴⁹ This relationship was not statistically significant in a multivariate analysis.

Patterns of land acquisition vary quite a lot between districts, due largely to the geographic distribution of matrilineal and patrilineal systems. For example, 86 percent of the land in the district of Ntcheu had belonged to the mother’s side of the family, while only 4 percent of the households in Chitipa acquired their land from the mother’s side. Seventy percent of Malawians in the district of Chitipa farm land that belonged to their father’s side. Twenty-two percent of households in Nsanje rent their land from someone else, while only 5 percent of the households in Mulanje do so. Only 0.9 percent of Malawians overall acquired their land through the Community-Based Rural Development Project.

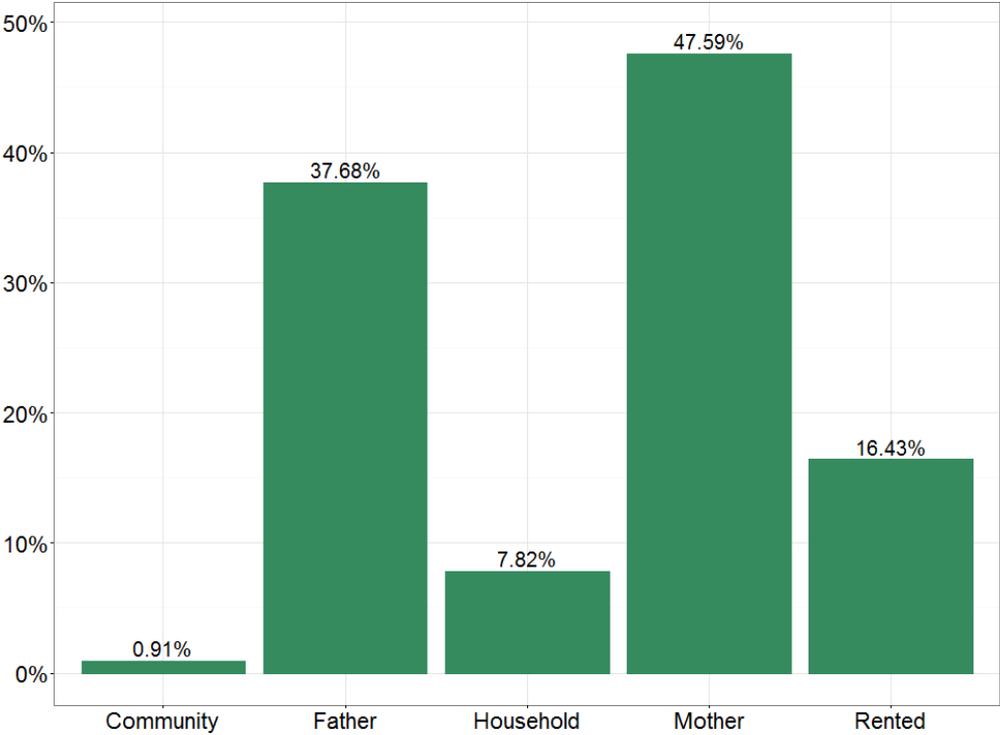


Figure 2. How Did the Household Acquire Any of Its Land?

There seems to be a correlation between level of education and mode of land ownership. In most households (78 percent), the head of household owns the land solely. However, more educated the Malawians are more likely to hold their land jointly with others. Eighty-four percent of Malawians with no formal education reported that their household head owned their land individually, compared to 64 percent of Malawians with intermediate or higher education.

Poorer, rural Malawians are frequently the sole proprietors of their property. In the two lowest-wealth quartiles, around 80 percent of the household heads own their farm solely, while 74 percent of the household heads in the highest-wealth quartile own their land solely. In rural areas, in 82 percent of the households, the head of household solely owns the land he or she farms, compared to 62 percent in households in urban areas.⁵⁰ Only 14 percent of the households in rural areas farm land that is owned by someone else, while 30 percent of the households in urban areas do the same.⁵¹ Importantly, however, these relationships are not significant when demographic controls are taken into account. Nor does there appear to be a significant difference in the likelihood that the head of the household owns the land by in matrilineal (79 percent of households) and patrilineal (78 percent of households) systems.

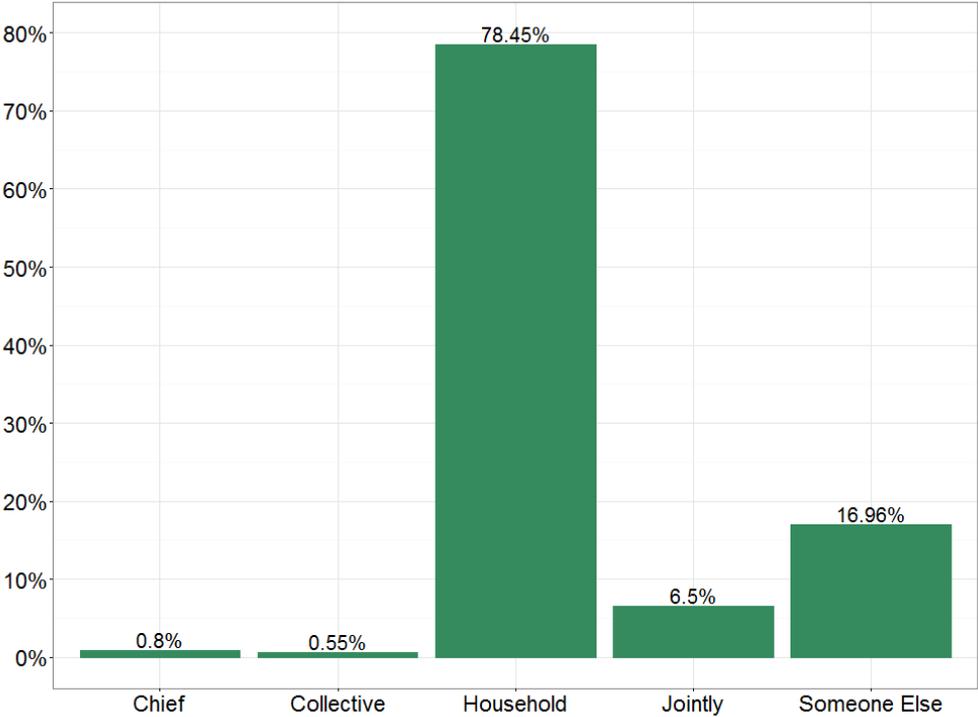


Figure 3. Who owns the land?

5.2 Legal documentation

Official government land titles are quite rare in Malawi. The LGPI finds that only 13 percent of the landowners have a document proving that they have rights to the land. Fifteen percent of the

⁵⁰ This relation is not significant in a multivariate analysis.

⁵¹ This relation is not significant in a multivariate analysis.

female-headed households report holding a land title, compared to 13 percent of the households with a male head, but the difference is not statistically significant.⁵²

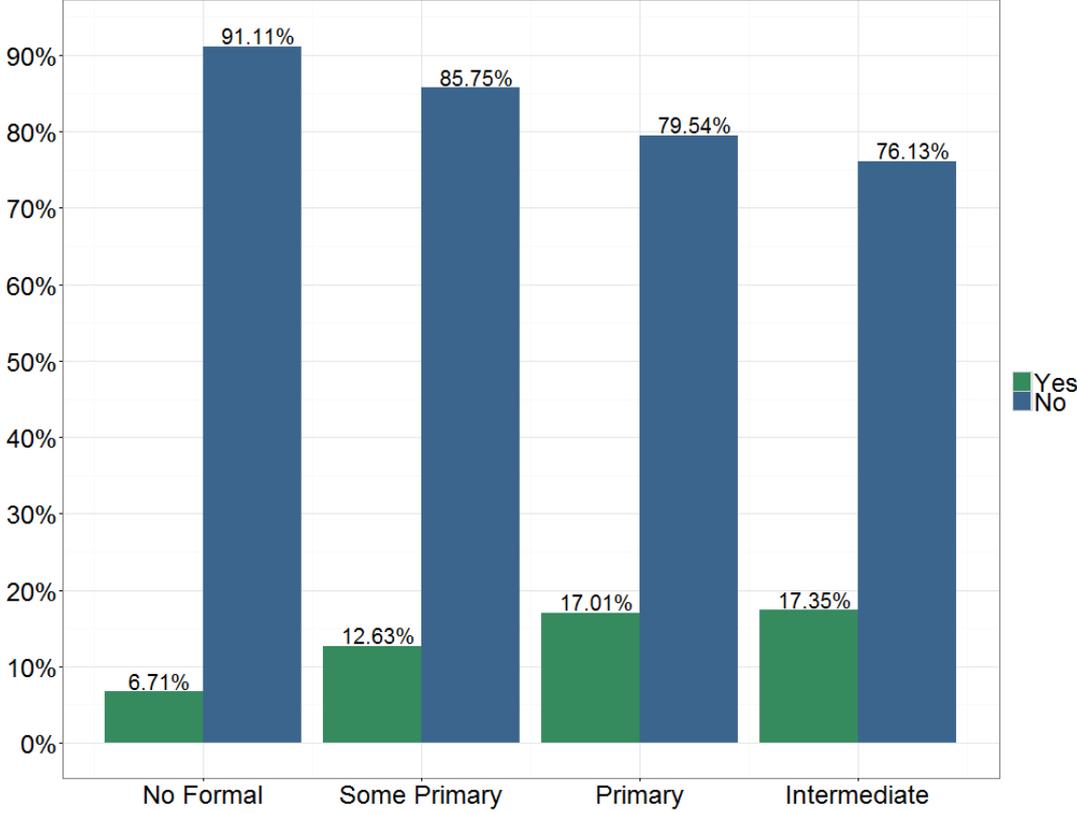


Figure 4. Does the head of household have any document that proves he/she owns the land? By education.

More highly educated Malawians appear to be better positioned to obtain land titles. Seven percent of those with no formal education had a document that proved their ownership of the land, while 17 percent of those with primary school education and 17 percent of those with intermediate level to postgraduate level of education had documentation of their land ownership. (See Figure 4) This may be because educated people have better ability to understand the process and are able to fill in the necessary forms.⁵³

⁵² This was not statistically significant in a multivariate analysis.

⁵³ A focus group participant in the study by Dulani, Lust, and Swila draws a similar conclusion.

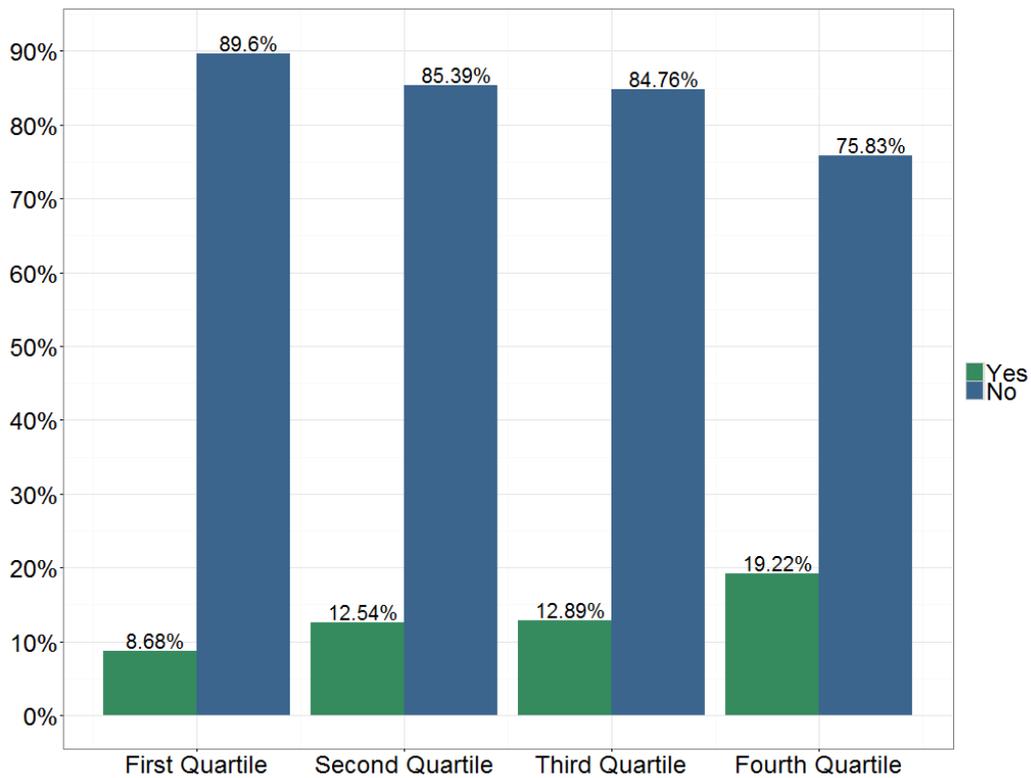


Figure 5. Does the head of household have any document that proves he/she owns the land? By wealth quartile.

Wealth may also aid in obtaining land documentation. Another respondent in the focus group study cited above stated that rich people are favored because it is easier to get connections to the people working in offices that provide land registration. The survey finds some support for this. Nine percent of the Malawians in the lowest wealth quartile had documentation that proved their ownership of the land compared to 21 percent of the Malawians in the highest wealth quartile, and 13 percent of the Malawians in the second and third wealth quartile. (See Figure 5.)

6. Land Disputes

Land disputes are a significant problem in Malawi. When asked about reasons why people have disputes, over 1 in five Malawians pointed to land as a reason.

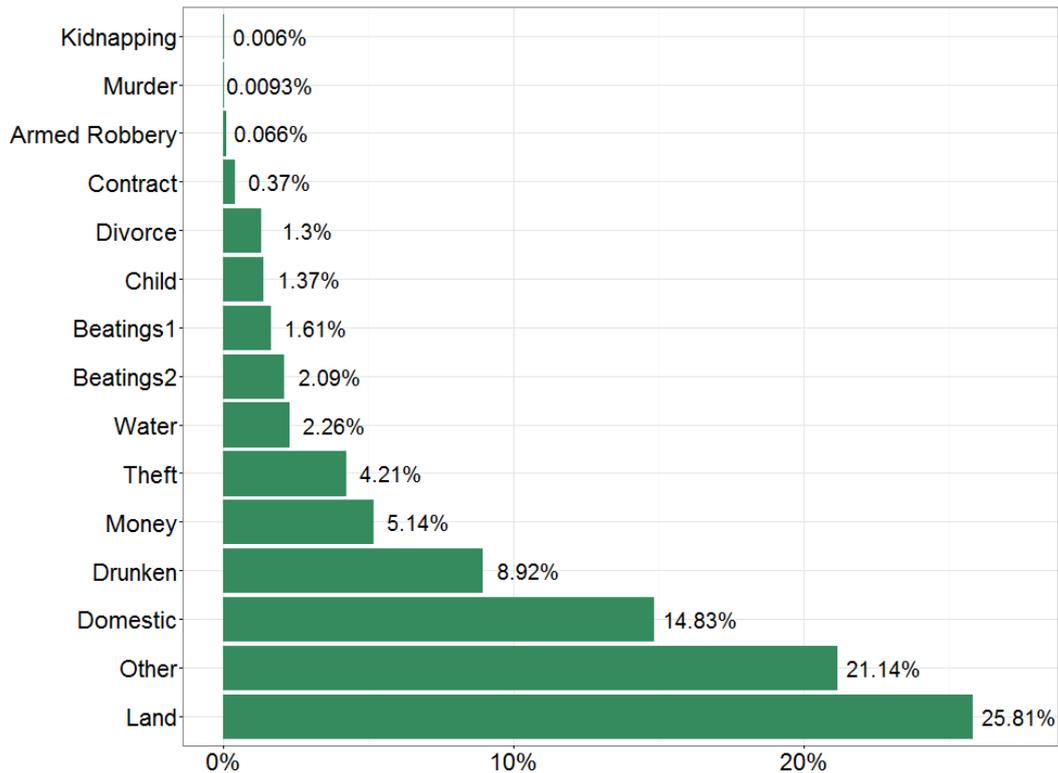


Figure 6. Reasons why people have disputes.

Indeed, 14 percent of the Malawians state that they have been in a land dispute for the past 12 months. (See Figure 7.) There is no significant gender difference with regard to engagement in land disputes: 14 percent of men and 13 percent of women stated that they were involved in a land dispute. There was also no significant difference between female- and male-headed households. Female-headed households (17 percent) were more likely to report that they have been in a land dispute than male-headed households (13 percent), but this difference was not significant when other demographic variables are taken into account. Similarly, there is no significant variation in matrilineal and patrilineal systems: 16 percent of the Malawians living in a patrilineal household reported that they had been in a land dispute the past 12 months, while 13 percent of the Malawians in matrilineal households reported the same. Again, this difference was not significant.

The vast majority of those who have a land dispute seek help in solving it: 85 percent, of those who had been involved in a land dispute in the past 12 months asked someone for help. This is high compared to other sectors. For instance, when it comes to education, 24 percent reported having problems paying fees, but only 21 percent of them sought help.

People may be likely to seek help in land disputes because these are critical to their livelihood, and also because they can find local actors who can help resolve their problems. Most people in a land dispute turn to the village head or neighborhood block leader (60 percent) to seek assistance. This is followed by a family relative (13 percent). They are much less likely to turn to the state. Only 5 percent went to the police, and 4 percent turned to a court of justice, to resolve the dispute. Sixteen percent did not seek help from anyone. (See Figure 7.)

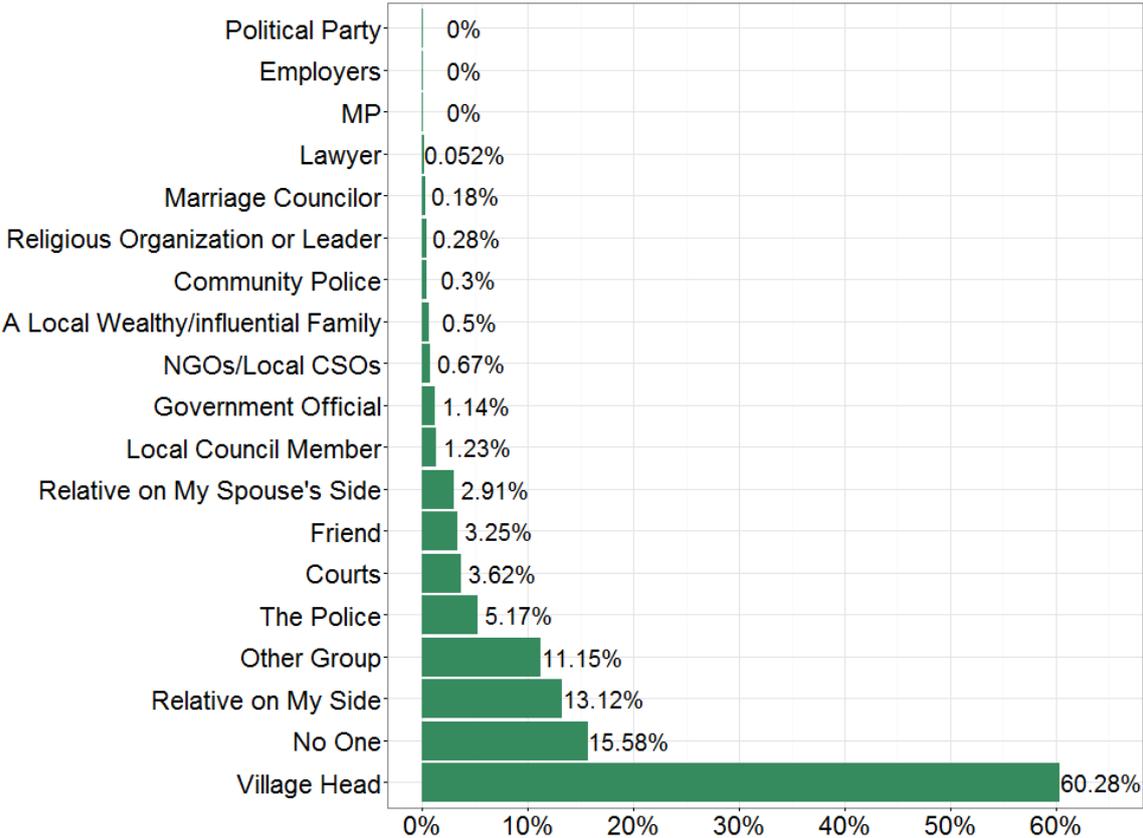


Figure 7. To whom did you turn when you had a land dispute?

We find some differences in urban and rural areas with regard to who people turn to for help in resolving disputes. Both rural (62 percent) and urban (65 percent) most frequently sought help of the village head or neighborhood block leader; however, Malawians in urban areas are more inclined to turn to officials such as police and courts, while rural residents more often turned to relatives to solve disputes. Ten percent of Malawians living in urban area went to the police, compared to only 3 percent of those from a rural area; and 8 percent of those in urban areas sought help at a court, compared to 3 percent of those living in rural areas. On the other hand, 14 percent of rural residents went to a relative on their side of the family to resolve the dispute,

while 9 percent of the urban residents did the same; and 4 percent of Malawians living in rural areas went to a friend for help, compared to only 0.4% of those in an urban district. Overall, urban residents sought help more often than those in rural areas, with only 11 percent of those in urban areas responding that they went to ‘no one’ for help, compared to 16 percent of those living in urban areas.

The most common reason for contacting other persons for help in a land dispute was “just because this person is in this position, you had no previous connection with this person” (61 percent). Nineteen percent stated that they chose the person because he or she was a member of their ethnic group or tribe, and 14 percent because it was “someone they knew from previous connections (e.g., a friend or someone from church, mosque, business, association, etc.). Sixty percent knew the person who helped them in a land dispute personally, outside of his or her work, perhaps reflecting the tendency for individuals to turn to others in their village in order to solve land disputes.

About two-thirds (64 percent) of the Malawians who had been in a land dispute and sought help felt that their problem was resolved. Sixty-two percent were “very satisfied” with the response they got when seeking resolution to a land dispute. Twenty-two percent were “very dissatisfied with the response.” Nine percent were “somewhat satisfied,” and 7 percent “somewhat dissatisfied.” There is some evidence that the older you are, the less satisfied you are with the response; 30 percent of Malawians between 45 and 65 and 25 percent of Malawians over 65 reported that they were “very dissatisfied” with the response; in comparison, only 15 percent of Malawians under 25 and 22 percent of those 25–45 were “very dissatisfied” with the response. Malawians living in rural areas also tend to consider their problem to be solved significantly more frequently than Malawians in urban areas: 65 percent of the Malawians who have been in a land dispute and live in rural areas report that their problem was solved when they sought help, compared to 53 percent of those living in urban areas.

Respondents were nearly equally split between believing that they were *not* helped when seeking assistance in a land dispute because the person “did not have the ability to solve it” (39 percent) and was “unwilling to help” (34 percent). Over half of the men (52 percent) thought the reason was that the person “did not have the ability to solve it,” while 25 percent of the female respondents thought the same. The most frequently cited reason among the females (36 percent)

was that the person was “unwilling to help.” However, 38 percent of the women choose “neither.”

7. Decision-Making

In 45 percent of the cases (53 percent of male-headed households, 40 percent of female-headed households, and 36 percent of joint-headship households), the head of the household alone makes the decisions regarding use and management of the land.⁵⁴ The household head is more likely to make all decisions regarding the land in patrilineal systems (64 percent) than in matrilineal systems (52 percent). (See Figure 8.)

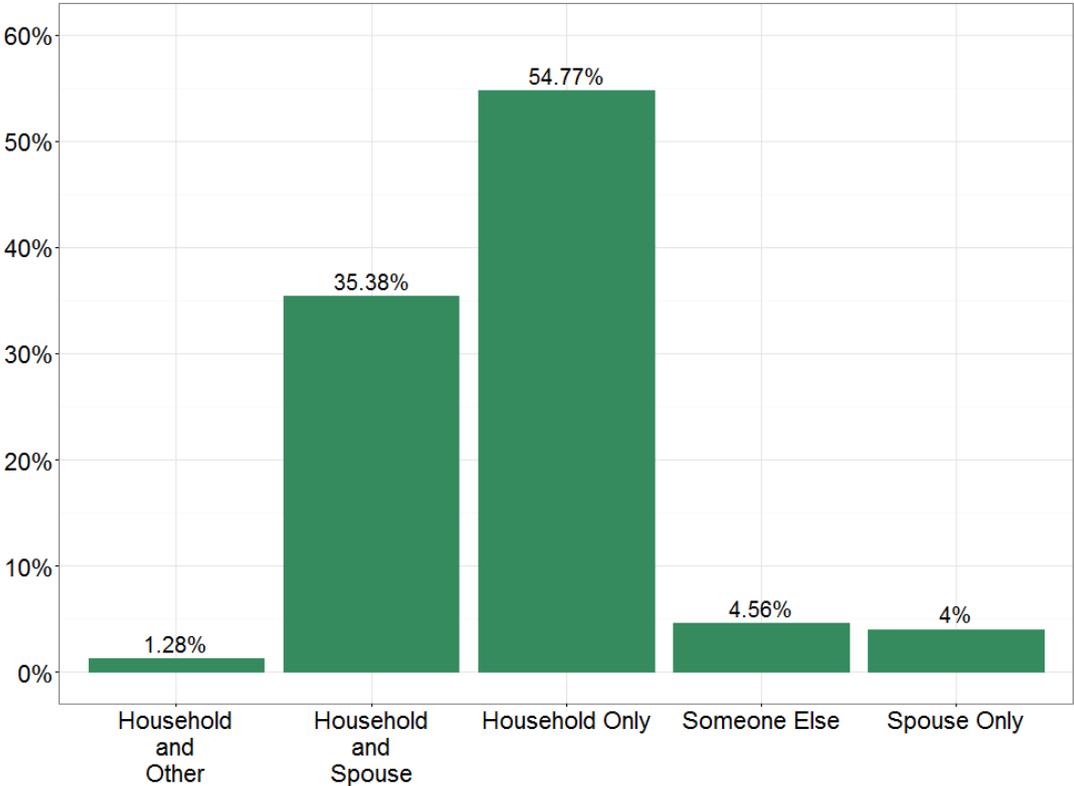


Figure 8. Who Makes the Decisions regarding the Use and Management of the Land?

A significant portion (35 percent) of households report that the head of the household and the spouse make joint decisions regarding their land⁵⁵—39 percent of male-headed households and 42 percent of female-headed households. In matrilineal systems, 36 percent of the households report

⁵⁴ This is not statistically significant in a multivariate analysis.

⁵⁵ This is not statistically significant in a multivariate analysis.

that decisions are made by the head of the household and spouse together; in patrilineal systems, 31 percent of the households report the same. The spouse of the head of the household makes the decisions about the land in only 4 percent of the households. This was more common among female-headed households (10 percent) than male (2 percent).⁵⁶ (See Figure 9.)

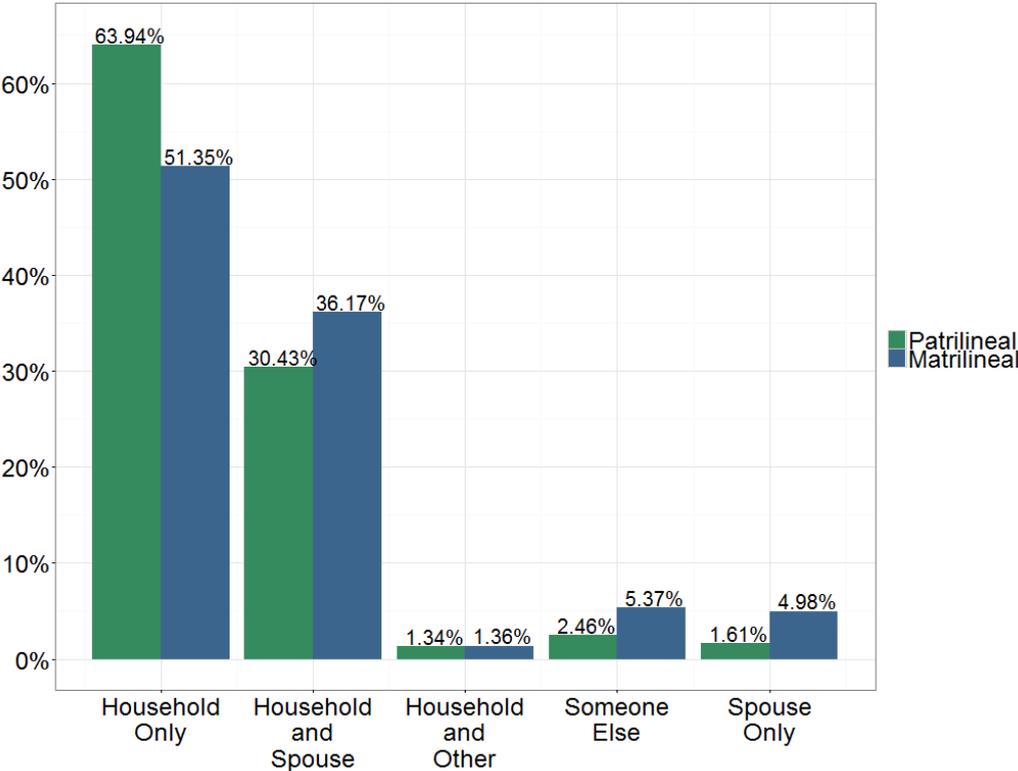


Figure 9. Who makes decision regarding the use and management of the land? By matrilineal and patrilineal households.

There are also interesting differences in land management practices in rural and urban areas. In rural areas, 59 percent of the heads of the household took the decisions over land alone, compared to a significantly lower percentage (35%) of the households in urban areas. The household head and spouse made decisions jointly in 32 percent of rural households, compared to 56 percent of urban ones.

⁵⁶ This is not statistically significant in a multivariate analysis.

8. Improvements

The vast majority (88 percent) of households have made improvements on their land in the last two years. In the past two years, 69 percent of the households have used fertilizers on their land, 61 percent have planted hybrid maize (used improved seeds), and 29 percent have planted trees. Not surprisingly, capital investments are more rare: in the past two years 12 percent of the households had built some structures on their land, 8 percent had renovated or improved their house, and 4 percent had built or improved an irrigation system. Overall, there was no difference when looking at the investments between male- and female-headed households. (See Figure 12.)

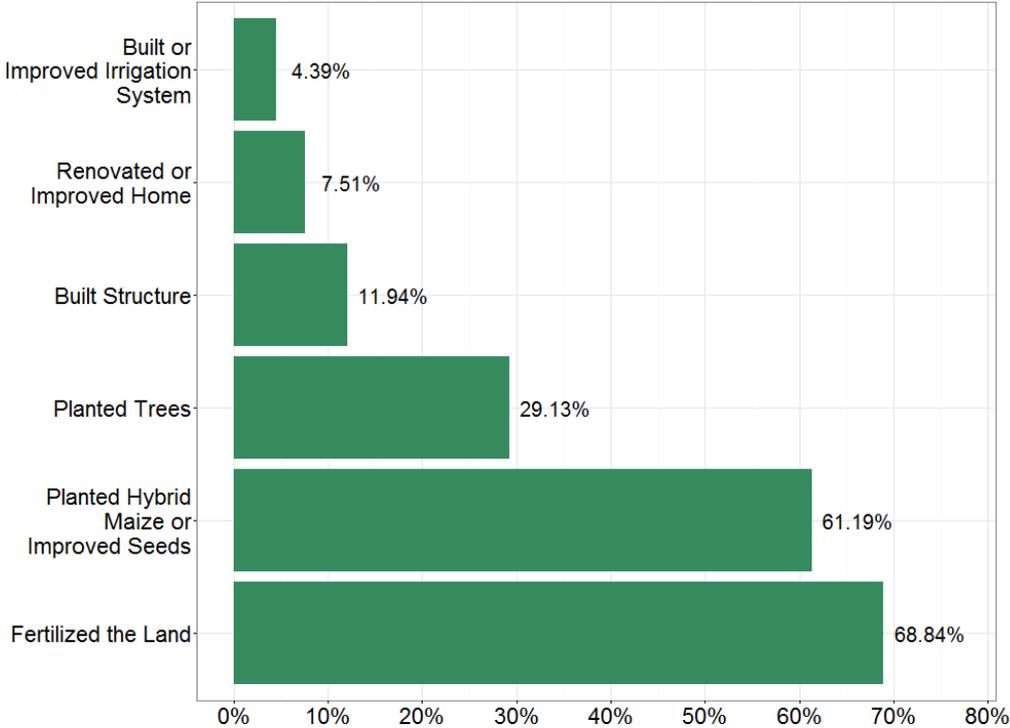


Figure 10. Have you done any of the following improvements on your land in the past two years?

However, education and income seem to have an effect whether a household makes improvements on the land (see figures 13 and 14). Seventy-eight percent of the Malawians in the highest wealth quartile reported that they had fertilized their land in the past two years, compared to 62 percent of the Malawians in the lowest income quartile.

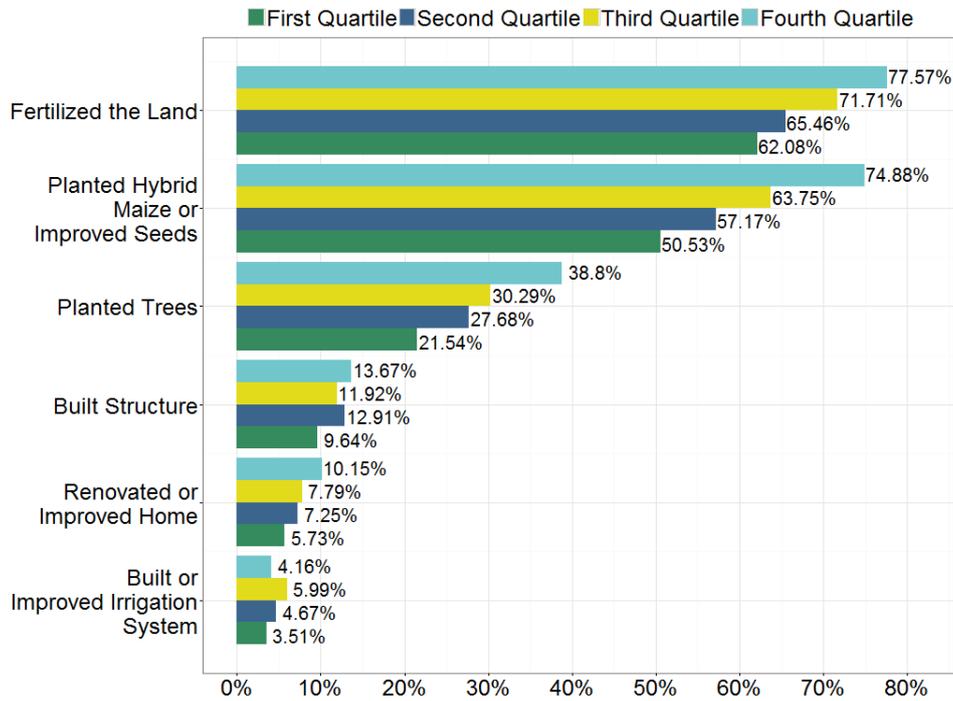


Figure 11. Have you done any of the following improvements on your land for the past two years? By wealth quartiles.

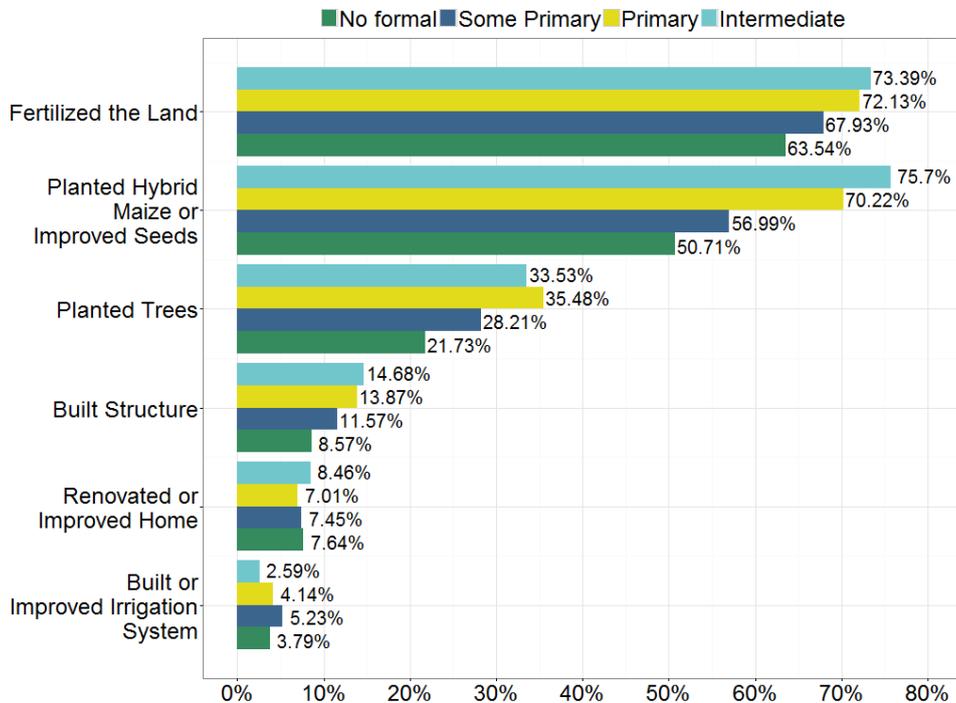


Figure 12. Have you done any of the following improvements on your land for the past two years? By education.

There is quite a big difference among the districts when it comes to using fertilizers. In particular, some of the southern districts —Mulanje, Nsanje and Chikwawa—are using fewer fertilizers than are others.

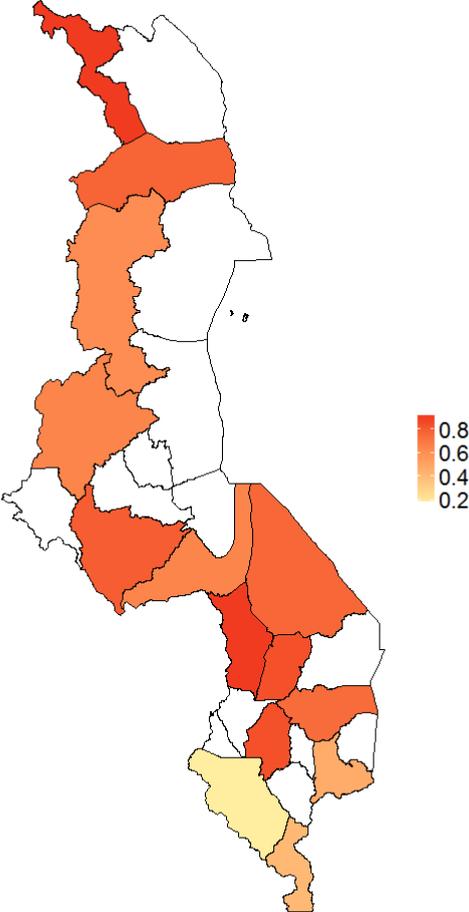


Figure 13. The average use of fertilizers, by district.

We find notable differences between urban and rural areas with regard to land improvement practices. In rural areas, 79 percent of those living in urban areas had fertilized their land in the last two years, compared to the significantly lower 66 percent of the households in rural areas. Households in urban areas also were more likely to have planted trees on their land: 36 percent of those in urban areas did so, compared to 28 percent in rural areas. Rural households are more likely to build additional structures and irrigation systems than those in urban areas, however. Thirteen percent of the rural households reported that they built a structure on their land in the past two years, compared 10 percent of the urban households. Similarly, 5 percent of the rural households built or improved an irrigation system, compared to 1 percent of the urban

households. There was no significant difference when it comes to improving or renovating the home in the past two years; 8 percent of the rural households and 7 percent of the urban households did so. Overall, rural households were significantly more likely than urban households to report that they made no improvements in their land in the past two years: 14 percent of rural households reported no improvements, compared to only 4 percent of the households in urban areas.

9. Government subsidies

Findings from the LGPI show that there is a perception that government subsidies (e.g., fertilizers) are being unfairly distributed. Sixty-two percent of respondents feel that they are eligible for government subsidies but have been unable to obtain them. They also believe that people who do not need subsidies receive them instead.

Men and women are equally likely to say that they were eligible for government subsidies but unable to obtain them. There is a slight difference between male- and female-headed households: 69 percent of the male-headed households stated that they have been unable to obtain government subsidies, compared to 57 percent of the female-headed households.

There is also a relationship between income and feeling that one is being wrongfully denied subsidies. Of Malawians in the lowest wealth quartile, 69 percent feel they are not able to obtain subsidies despite being eligible for them; of those in the highest wealth quartile, 49 percent felt the same way. It is possible that those with more assets are less likely to be (and see themselves as being) eligible for the subsidy.

There is a similar relationship between education and subsidies. Forty-four percent of Malawians with intermediate or higher education said they felt like they were unable to get subsidies, compared to 68 percent of those with no formal education.

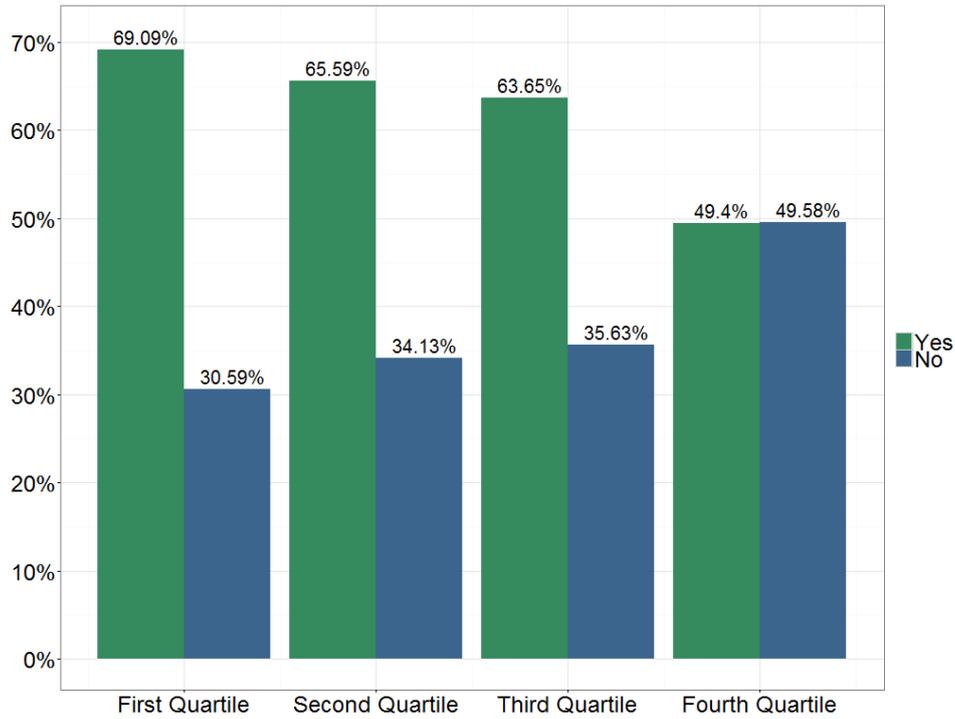


Figure 14. Do you feel that you are eligible for government subsidies but have been unable to obtain them? By wealth quartiles.

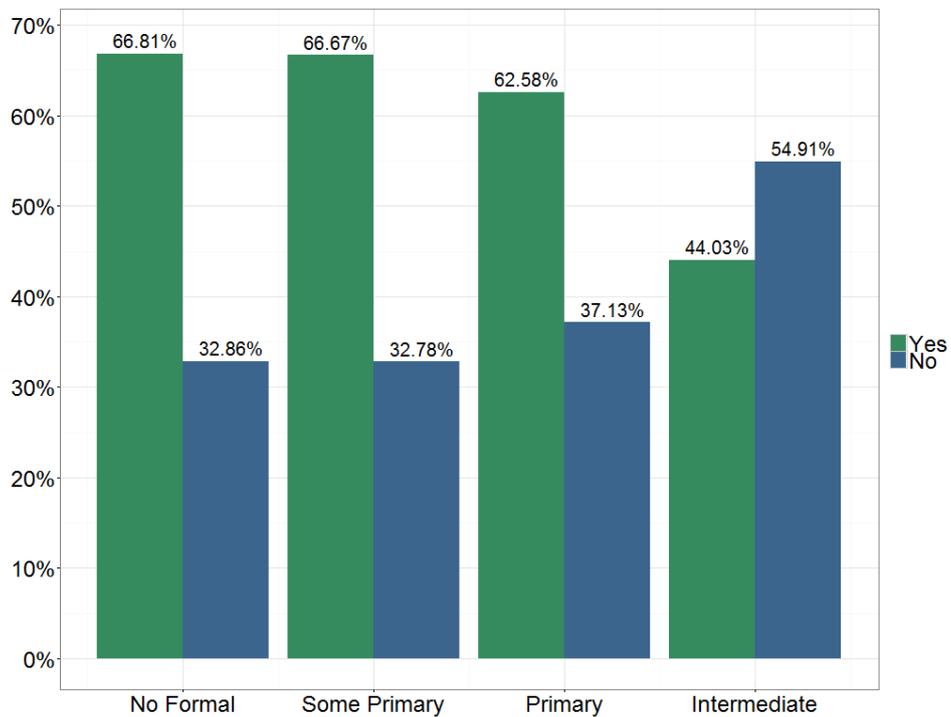


Figure 15. Do you feel that you are eligible for government subsidies but have been unable to obtain them? By education.

When asked to say whether there are none, a few, or many families eligible for government subsidies in their village or neighborhood but have been unable to obtain them, 67 percent said “many,” 17 percent said “a few,” and 9 percent said “none.” When asked if the respondent thought there are “many,” “a few,” or “none” households that receive subsidies (i.e., fertilizers) but that are not poor, 43 percent responded “many,” 30 percent said “a few,” and 20 percent said “none.” Eight percent didn’t know or refused to answer. (See Figure 19.)

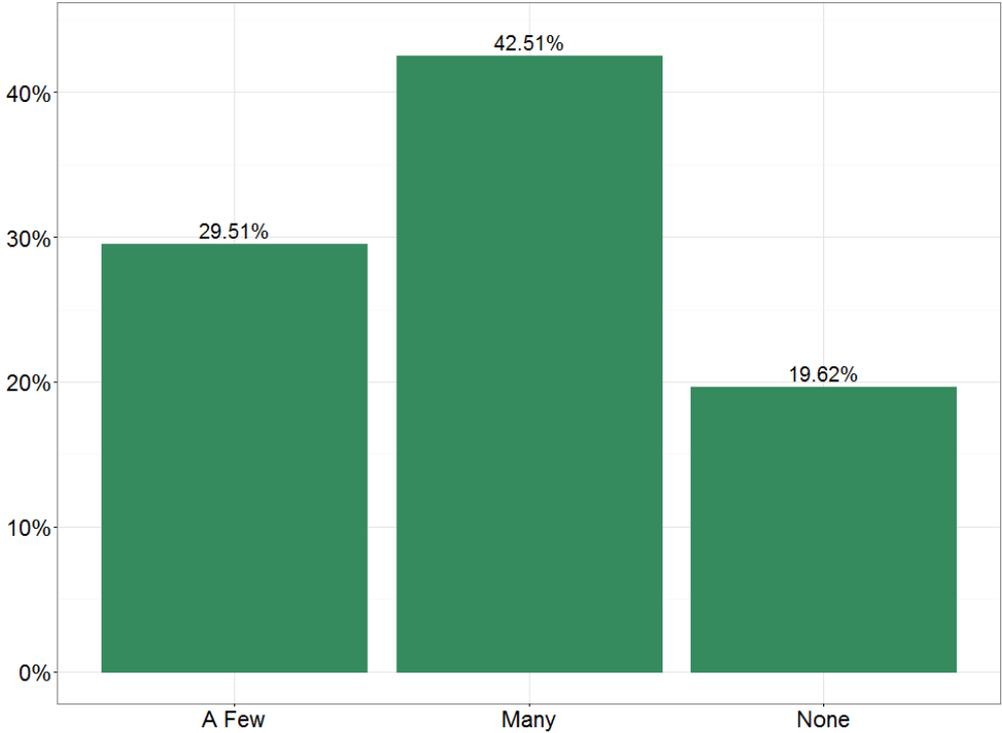


Figure 16. Are there none, a few, or many families eligible for government subsidies in your village/neighborhood but have been unable to obtain them?

10. Conclusion and Implications

Land is extremely important in Malawi. Eighty-six percent of Malawians farm, often on small, subsistence-oriented landholdings owned and managed by the head of the household. Only a minority of landowners hold a government-issued title, and this is higher in the urban areas than in rural ones. Many people appear to view local actors—and particularly the village head—as the actor most responsible for, and capable of, resolving land disputes. Indeed, we find that large numbers of Malawians have been involved in a land dispute in the past 12 months, the vast

majority of those who are engaged in disputes seek help in resolving them, and turn to others within their village to resolve the conflict.

Many Malawians, particularly in the rural areas, do not view the government as being primarily responsible for land security, but they do view it as having a central role in providing subsidies. Unfortunately, however, the demand for subsidies appears to far outstrip their provision. More than two-thirds of Malawians report that many families in their village or neighborhood are eligible for government subsidies but unable to obtain them. There is also a relatively widespread perception that subsidies are distributed on the basis of considerations that are unrelated to need. Nearly half of Malawians report that “many” households that get government subsidies are not poor. In general, there is a widespread feeling that government subsidies are being unfairly distributed.

The results paint a picture of the high salience of land, but also heightened insecurity. If the government is to address issues of land insecurity, it needs not only to make land titles more easily available but also to strengthen the role of government actors in solving land-related conflicts. Similarly, if the government wants to ease the consequences of the climatic shocks that plague Malawi’s agricultural sector and to increase agricultural output through subsidies, it needs to ensure proper implementation. As long as Malawians’ livelihoods remain so closely linked to agriculture, such changes are key to improving the livelihoods for millions of people.

Appendix

Table numbers correspond to Figure numbers.

Figure 1. Average percentage of households that farm, by district

National average: Mean = 0.8625285 Std.Error = 0.0202689 CI1 = 0.8201053 CI2 = 0.9049518

District	Mean	Std.E	CI1	CI2	In Comparison with National Mean
Chitipa	0.9965757	0.0014462	0.9935487	0.9996027	Higher
Ntcheu	0.9953954	0.0005251	0.9942963	0.9964944	Higher
Zomba	0.993614	0.0020402	0.9893437	0.9978842	Higher
Chikwawa	0.9861346	0.0090509	0.9671909	1.005078	Higher
Balaka	0.9842863	0.0027119	0.9786102	0.9899624	Higher
Mangochi	0.9784943	0.0035969	0.9709659	0.9860227	Higher
Dedza	0.9660469	0.0194973	0.9252387	1.006855	Higher
Mulanje	0.9653069	0.0069843	0.9506887	0.9799252	Higher
Rumphi	0.9638919	0.0124101	0.9379172	0.9898666	Higher
Kasungu	0.95834	0.006349	0.9450513	0.9716287	Higher
Nkhatabay	0.9062382	0.0170587	0.870534	0.9419424	Not Significantly Different
Nsanje	0.8889488	0.0287701	0.8287323	0.9491653	Not Significantly Different
Blantyre	0.8879852	0.042916	0.798161	0.9778094	Not Significantly Different
Mzimba	0.7280724	0.1500702	0.4139718	1.042173	Not Significantly Different
Lilongwe	0.5304447	0.0524911	0.4205795	0.64031	Lower

Figure 2. How did the household acquire any of its land?

How Acquired	Percentage (weighted)
Mother	47.59
Father	37.68
Head of Household	7.82
Rented	16.43
Community	0.91

Survey question:

q561_1. Please tell me whether or not the household acquired any of its land in the following ways:

The mother's side of the family owns the land

(0) No; (1) Yes; (98) Don't Know/Refuse to answer

q561_2. The father's side of the family owns the land

(0) No; (1) Yes; (98) Don't Know/Refuse to answer

q561_3. It was purchased by the head of the household

(0) No; (1) Yes; (98) Don't Know/Refuse to answer

q561_4. The land is rented

(0) No; (1) Yes; (98) Don't Know/Refuse to answer

q561_5. It was acquired through the Community-Based Rural Land Development Project (CBRDLP), which helped people relocate in order to acquire land

(0) No; (1) Yes; (98) Don't Know/Refuse to answer

Figure 3. Who owns the land?

Owner of the Land	Percentage (weighted)
Head of Household	78.45
Jointly	6.50
Someone Else	16.96
Collective	0.55
Chief	0.80

Survey question:

q560. Which of the following best describes your household

- (1) The head of household owns the land we farm, solely
- (2) The head of household owns the land we farm, jointly
- (3) We farm land that is owned by someone else
- (4) The land is owned collectively by the village
- (5) The land is owned by the Chief
- (9) Don't Know/Refuse

Figure 4. Does the head of household have any document that proves he/she owns the land? By education.

Education	Own a Document	Percentage (weighted)
No Formal	No	91.11
	Yes	6.71
Some Primary	No	85.75
	Yes	12.63
Primary	No	79.54
	Yes	17.01
Intermediate	No	76.13
	Yes	17.35

Survey questions:

q562. Does the head of household have a document that proves s/he owns the land?

(0) No; (1) Yes; (98) Don't Know/Refuse to Answer

educat. (Education categorical variable)

(1) No formal schooling; (2) Some primary schooling; (3) Primary school completed; (4) Intermediate to Postgraduate; (98) Don't Know/Refuse to Answer

Figure 5. Does the head of household have any document that proves he/she owns the land? By wealth quartile.

Asset Index	Own a Document	Percentage (weighted)
First Quartile	No	89.60
	Yes	8.68
Second Quartile	No	85.39
	Yes	12.54
Third Quartile	No	84.76
	Yes	12.89
Fourth Quartile	No	75.83
	Yes	19.22

Survey questions:

q562. Does the head of household have a document that proves s/he owns the land?

(0) No; (1) Yes; (98) Don't Know/Refuse to Answer

items_MCA1d_quartile. (Asset Index)

(1) Lowest Quartile; (2) Second Quartile; (3) Third Quartile; (4) Highest Quartile

Figure 6. Reasons why people have disputes

Reasons	Percentage (weighted)
Land	25.8100
Water	2.2600
Contract	0.3700
Divorce	1.3000
Child	1.3700
Domestic	14.8300
Money	5.1400
Drunken	8.9200
Theft	4.2100
Armed Robbery	0.0660
Beatings/Assaults	1.6100
Domestic Violence	2.0900
Murder	0.0093
Kidnapping	0.0060
Other	21.1400

Survey question:

q75. People often have disputes or conflicts that can require assistance to resolve. What is the most important reason people in this village/neighborhood have disputes that involve more than one household?

(1) Land; (2) Water; (3) Contract dispute (i.e. with employer/landlord/tenant); (4) Divorce battle; (5) Child custody battle; (6) Domestic disputes/infidelity (non-violent disputes); (7) Money issues; (8) Drunkenness; (9) Theft or burglary; (10) Armed robbery; (11) Car theft or carjacking; (12) Beatings/Assaults; (13) Beatings/Assaults within a single home (domestic violence); (14) Murder; (15) Kidnapping; (16) Other; (98) Don't Know/Refuse to Answer

Figure 7. To whom did you turn when you had a land dispute?

Person/Institution	Percentage (weighted)
Government Official	1.140
NGOs/Local CSOs	0.670
MP	0.000
Relative on My Spouse's Side	2.910
Relative on My Side	13.120
Local Council Member	1.230
Village Head	60.280
Religious Organization or Leader	0.280
A Local Wealthy/influential Family	0.500
The Police	5.170
Courts	3.620
Employers	0.000
Friend	3.250
Lawyer	0.052
Community Police	0.300
Political Party	0.000
Marriage Councilor	0.180
Other Group	11.150
No One	15.580

Survey questions:

q514_1. Who was the first person, group or institution you asked for help?

q523. Who else did you ask regarding the land dispute?

(1) Government official; (2) NGOs/Local CSOs; (3) Member of Parliament; (4) Relative on my spouse's side; (5) Relative on my side; (6) Local council member; (7) Village head; (8) Religious organization or leader; (9) A local wealthy/influential family; (10) The police; (11) Courts; (12) My employers; (13) A Friend; (14) Lawyer; (15) Community police; (16) Political parties; (17) Marriage councilor; (18) Other group; (19) No one; (98) Don't Know/Refuse to Answer

Figure 8. Who makes the Decisions Regarding the Use and Management of the Land

Decision maker	Percentage (weighted)
Head of Household Only	54.77
Head of Household and Spouse	35.38
Spouse Only	4.00
Head of Household and Other	1.28
Someone Else	4.56

Survey questions:

q564. Who makes the decisions regarding the use and management of the land?

(1) The head of household only; (2) The head of household and spouse jointly; (6) The spouse of the head of household; (3) The head of household and another person (not the spouse); (4) Someone other than the head of household only (specify); (98) Don't Know/Refuse to Answer

Figure 9. Who makes decision regarding the use and management of the land? By matrilineal and patrilineal households.

Decision maker	Patri-/Matrilineal	Percentage (weighted)
Head of Household and Other	Matrilineal	1.36
	Patrilineal	1.34
Head of Household and Spouse	Matrilineal	36.17
	Patrilineal	30.43
Head of Household Only	Matrilineal	51.35
	Patrilineal	63.94
Someone Else	Matrilineal	5.37
	Patrilineal	2.46
Spouse Only	Matrilineal	4.98
	Patrilineal	1.61

Survey questions:

q564. Who makes the decisions regarding the use and management of the land?

(1) The head of household only; (2) The head of household and spouse jointly; (6) The spouse of the head of household; (3) The head of household and another person (not the spouse); (4) Someone other than the head of household only (specify); (98) Don't Know/Refuse to Answer

q76. If you have children, would your children belong to the mother's side or the father's side?

(0) Mother's side; (1) Father's side; (2) Both; (3) Neither; (98) Don't Know/Refuse to Answer

Figure 10. Have you done any of the following improvements on your land in the past two years?

Action	Percentage (weighted)
Built Structure	11.94
Fertilized the Land	68.84
Renovated or Improved Home	7.51
Planted Hybrid Maize or Improved Seeds	61.19
Built or Improved Irrigation System	4.39
Planted Trees	29.13

Survey question:

q565. In the past 2 years has anyone in the household done any of the following?

(1) Built any structures on the land; (2) Fertilized the land; (3) Renovated or improved your home; (4) Planted hybrid maize (used improved seeds); (5) Built or improved an irrigation system for the land; (6) Planted trees; (7) None of the above; (8) Don't Know/Refuse

Figure 11. Have you done any of the following improvements on your land for the past two years? By wealth quartiles.

Asset Index	Improvements	Percentage (weighted)
First Quartile	Built Structure	9.64
	Fertilized the Land	62.08
	Renovated or Improved Home	5.73
	Planted Hybrid maize or improved Seeds	50.53
	Built or improved Irrigation System	3.51
	Planted Trees	21.54
Second Quartile	Built Structure	12.91
	Fertilized the Land	65.46
	Renovated or Improved Home	7.25
	Planted Hybrid maize or improved Seeds	57.17
	Built or improved Irrigation System	4.67
	Planted Trees	27.68
Third Quartile	Built Structure	11.92
	Fertilized the Land	71.71
	Renovated or Improved Home	7.79
	Planted Hybrid maize or improved Seeds	63.75
	Built or improved Irrigation System	5.99
	Planted Trees	30.29
Fourth Quartile	Built Structure	13.67
	Fertilized the Land	77.57
	Renovated or Improved Home	10.15
	Planted Hybrid maize or improved Seeds	74.88
	Built or improved Irrigation System	4.16
	Planted Trees	38.80

Survey questions:

q565. In the past 2 years has anyone in the household done any of the following?

(1) Built any structures on the land; (2) Fertilized the land; (3) Renovated or improved your home; (4) Planted hybrid maize (used improved seeds); (5) Built or improved an irrigation system for the land; (6) Planted trees; (7) None of the above; (8) Don't Know/Refuse

items_MCA1d_quartile. (Asset Index)

(1) Lowest Quartile; (2) Second Quartile; (3) Third Quartile; (4) Highest Quartile

Figure 12. Have you done any of the following improvements on your land for the past two years? By education.

Education	Improvements	Percentage (weighted)
Intermediate	Built Structure	14.68
	Fertilized the Land	73.39
	Renovated or Improved Home	8.46
	Planted Hybrid Maize or Improved Seeds	75.70
	Built or Improved Irrigation System	2.59
	Planted Trees	33.53
No Formal	Built Structure	8.57
	Fertilized the Land	63.54
	Renovated or Improved Home	7.64
	Planted Hybrid Maize or Improved Seeds	50.71
	Built or Improved Irrigation System	3.79
	Planted Trees	21.73
Primary	Built Structure	13.87
	Fertilized the Land	72.13
	Renovated or Improved Home	7.01
	Planted Hybrid Maize or Improved Seeds	70.22
	Built or Improved Irrigation System	4.14
	Planted Trees	35.48
Some Primary	Built Structure	11.57
	Fertilized the Land	67.93
	Renovated or Improved Home	7.45
	Planted Hybrid Maize or Improved Seeds	56.99
	Built or Improved Irrigation System	5.23
	Planted Trees	28.21

Survey questions:

q565. In the past 2 years has anyone in the household done any of the following?

(1) Built any structures on the land; (2) Fertilized the land; (3) Renovated or improved your home; (4) Planted hybrid maize (used improved seeds); (5) Built or improved an irrigation system for the land; (6) Planted trees; (7) None of the above; (8) Don't Know/Refuse

educat. (Education categorical variable)

(1) No formal schooling; (2) Some primary schooling; (3) Primary school completed; (4) Intermediate to Postgraduate; (98) Don't Know/Refuse to Answer

Figure 13. The average use of fertilizers, by district

National average: Mean = 0.6883904 Std.Error = 0.0256748 CI1 = 0.6346526 CI2 = 0.7421283

District	Mean	Std.E	CI1	CI2	In Comparison with National Mean
Chitipa	0.9138431	0.0122262	0.8882534	0.9394329	Higher
Ntcheu	0.9125263	0.0075464	0.8967316	0.928321	Higher
Blantyre	0.8461883	0.0165209	0.8116096	0.880767	Higher
Balaka	0.8461069	0.0128753	0.8191586	0.8730552	Higher
Lilongwe	0.8049525	0.0186792	0.7658566	0.8440485	Higher
Rumphi	0.779135	0.0234491	0.7300555	0.8282146	Not Significantly Different
Mangochi	0.7670212	0.0090048	0.7481738	0.7858685	Higher
Zomba	0.7473612	0.0284662	0.6877809	0.8069415	Not Significantly Different
Kasungu	0.6429713	0.0160169	0.6094475	0.6764951	Not Significantly Different
Dedza	0.6424876	0.0633283	0.5099399	0.7750352	Not Significantly Different
Mzimba	0.6070311	0.0237826	0.5572535	0.6568087	Not Significantly Different
Nkhatabay	0.5755537	0.0245581	0.5241529	0.6269545	Lower
Mulanje	0.4640385	0.0221889	0.4175966	0.5104804	Lower
Nsanje	0.4040414	0.0346571	0.3315032	0.4765796	Lower
Chikwawa	0.1566231	0.033476	0.086557	0.2266892	Lower

Figure 14. Do you feel that you are eligible for government subsidies but have been unable to obtain them? By wealth quartiles

Asset Index	Unable to Obtain Subsidies	Percentage (weighted)
First Quartile	No	30.59
	Yes	69.09
Second Quartile	No	34.13
	Yes	65.59
Third Quartile	No	35.63
	Yes	63.65
Fourth Quartile	No	49.58
	Yes	49.40

Survey questions:

q551. Do you personally feel you are eligible for government subsidies (i.e. fertilizer) but have been unable to obtain them?

(0) No; (1) Yes; (98) Don't Know/Refuse to Answer

items_MCA1d_quartile. (Asset Index)

(1) Lowest Quartile; (2) Second Quartile; (3) Third Quartile; (4) Highest Quartile

Figure 15. Do you feel that you are eligible for government subsidies but have been unable to obtain them? By education.

Education	Unable to Obtain Subsidies	Percentage (weighted)
No Formal	No	32.86
	Yes	66.81
Some Primary	No	32.78
	Yes	66.67
Primary	No	37.13
	Yes	62.58
Intermediate	No	54.91
	Yes	44.03

Survey questions:

q551. Do you personally feel you are eligible for government subsidies (i.e. fertilizer) but have been unable to obtain them?

(0) No; (1) Yes; (98) Don't Know/Refuse to Answer

educat. (Education categorical variable)

(1) No formal schooling; (2) Some primary schooling; (3) Primary school completed; (4) Intermediate to Postgraduate; (98) Don't Know/Refuse to Answer

Figure 16. Are there none, a few, or many families eligible for government subsidies in your village/neighborhood but have been unable to obtain them?

How Many	Percentage (weighted)
None	19.62
A Few	29.51
Many	42.51

Survey question:

q553. Do you believe that there are households that receive subsidies (i.e. fertilizer) but who are not poor? Would you say there are none, a few, or many such cases?

(1) None; (2) A few; (3) Many; (98) Don't Know/Refuse to Answer