



Agricultural Transformation in Malawi

A Call to Action

Ronald Mangani ^a

Thomas Jayne ^b

Michael Johnson ^c

Peter Hazell ^d

Milu Muyanga ^{b,e}

Sloans Chimatiro ^e

William J. Burke ^b

Institutional Affiliations:

a – University of Malawi

b – Michigan State University

c – Foundation for a Smoke-free World

d – IFPRI

e – MwAPATA Institute

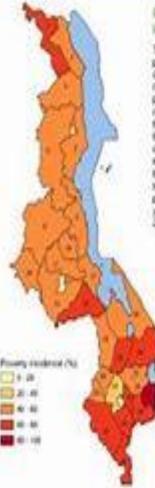


Three Key Questions



- **Why Is Decisive Action Necessary Today?**
- **What Economic Transformation Path Is Most Feasible?**
- **What Will It Take To Implement The Transformation Agenda?**

Poverty in Malawi 2016-2017



Poverty Incidence
The incidence of poverty at the district level is represented by the poverty headcount ratio, which shows the proportion of the population with consumption expenditure below the national poverty line (Mk 101 per person per year in January 2017 prices).

District	Poverty Headcount (%)	Number of Poor	Poverty Gap (%)
1. Chipa	75.8	94,488	85.2
2. Average	37.1	28,400	18.0
3. Mwanikye	37.7	162,402	32.4
4. Kuyuni	32.9	120,226	19.9
5. Mzimba	42.4	34,700	32.9
6. Likoma	11.6	1,408	8.4
7. Mwan City	8.7	13,768	1.6
8. Amurgo	35.0	49,539	14.9
9. Mzimba	32.4	214,236	19.4
10. Neno	34.3	149,758	12.1
11. Dowa	46.8	344,180	16.1
12. Salima	19.9	174,408	10.5
13. Lilongwe	47.9	710,800	13.8
14. Moriya	35.4	91,128	14.1
15. Dowa	39.1	478,200	28.2
16. Mzimba	34.1	526,400	17.6
17. Lilongwe City	14.0	201,200	4.3
18. Mzimba	39.1	375,400	19.0
19. Mzimba	73.4	458,800	24.9
20. Zomba	38.9	178,400	17.7
21. Chitwa	38.4	459,800	23.0
22. Mzimba	36.3	128,400	11.1
23. Mzimba	33.6	38,400	10.8
24. Thyolo	37.3	461,120	24.7
25. Mzimba	39.2	463,800	26.4
26. Phalombe	39.7	121,400	16.1
27. Chikwawa	39.2	396,800	26.4
28. Neno	34.3	174,200	24.4
29. Zomba	31.3	288,400	18.0
30. Neno	40.9	18,200	14.0
31. Zomba City	15.4	23,700	4.3
32. Zomba City	6.9	14,800	1.1
National	31.6	4,444,400	18.4

Poverty Gap and Distribution
The size of each district in the map corresponds to the number of poor people living in it. Each district is also shaded according to size of its poverty gap. This is the additional consumption expenditure that it would take to bring an average poor person up to the poverty line, expressed as a shortfall from the poverty line. The map thus shows the distribution and the depth of poverty throughout Malawi.



Why Is Decisive Action Necessary Today?



Economic Growth has been too slow

- Poverty, malnutrition, inequality & social exclusion are worse than the average levels for SS Africa

Period	1964-1979	1980-2002	2003-2014	2015-2018	1964-2018
GDP Per Capita	3.02	-0.40	2.90	0.45	1.46

Source: World Bank (2020)

- GDP per capita only grew by 1.5% p.a. since 1964
- GDP per capita was only 4% of world average in 2018
- GDP per capita was lower than 46 of 53 African countries in 2018

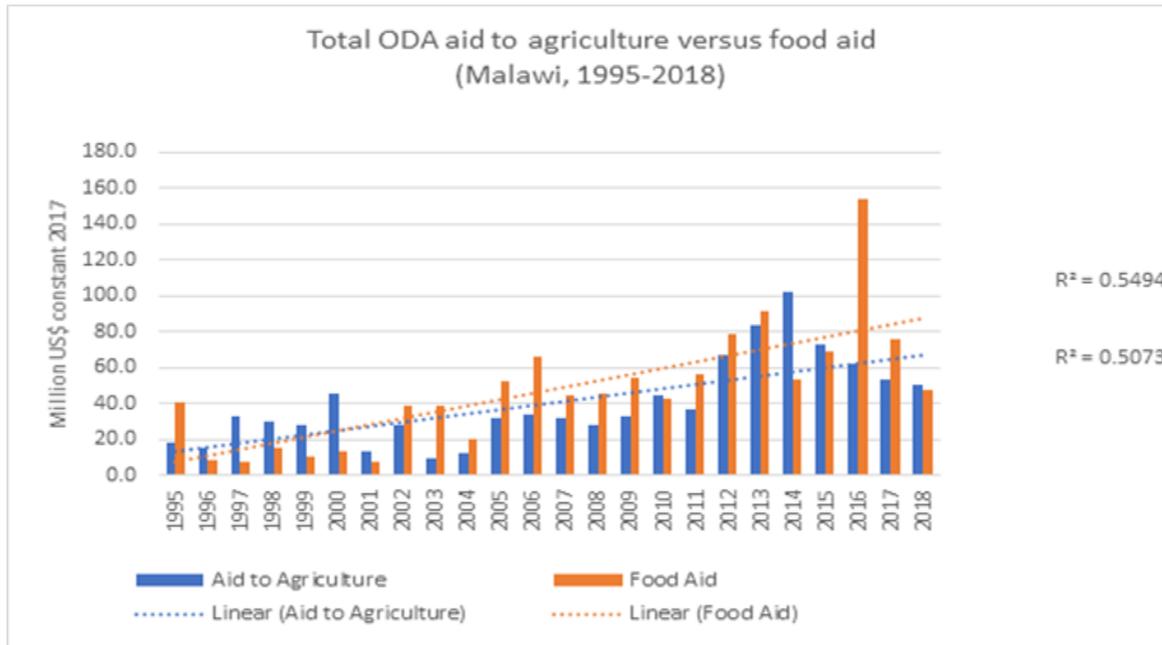
Malawi faces a daunting challenge of rapid population growth (UN, 2019; WB, 2020; Jumbe et al., 2016)

Growth Rates in Population (% p.a.)					
Period	1964-1979	1980-2002	2003-2014	2015-2018	1964-2018
Population	2.67	2.85	2.75	2.69	2.76

Source: World Bank (2020)

- Population is growing at 2.8% p.a. since 1964: 18.1 million in 2018; **44 million in 2050**
 - **Growth is more rapid than that of food production and incomes**
- Per capita arable land holding: 0.40 ha in 1971; 0.22 ha in 2016; **0.15 ha by 2050**
- Average farm size has shrunk by 50% since 1971
- Future households will not inherit sufficient land for a reasonable livelihood from farming alone

Malawi can't feed herself, even in a normal agricultural year



“Overall, 62.6 percent of the households reported that they experienced very low food security a week prior to the survey, ... and 9.9 percent experienced low food security”.
(NSO, 2020, IHS5 p. 191)

2.6 million people required humanitarian food assistance in 2020 (MVAC)

Climate change will further constrain growth of the largely rain-fed and hoe-based smallholder agricultural sector

Increasing dependence on food aid ⇒ declining amount of ODA for investment in agricultural and other development efforts (OECD, 2020)

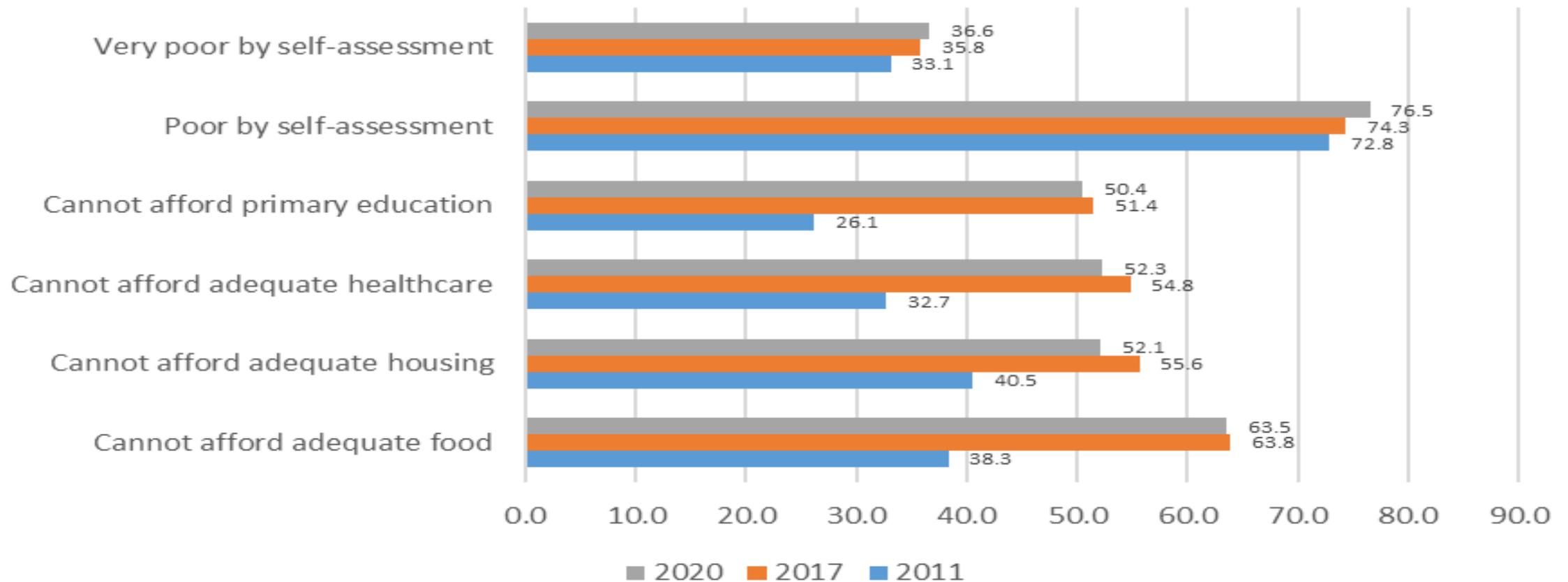
Non-farm employment opportunities are limited; earnings are too low

Shares of GDP and Employment per sector (World Bank, 2020)					
Year	Share of GDP			Share of Employment	
	1960	1975	2017	1991	2019
Agriculture	48.4%	34.8%	25.5%	77.7%	72.4%
Manufacturing		12.3%	9.4%	7.7%	7.7%
Services	38.3%	39.6%	52.4%	14.6%	19.9%

- Declining share of agriculture in GDP; increasing share of services in GDP
 - Services GDP growth \Rightarrow wholesaling and retailing of imports
 - Does not create local employment | Erodes foreign exchange | Distresses the trade balance
 - Agriculture still accounts for over 70% of employment
- Educational attainment provides limited scope for employment
 - Over 80% of successful secondary school leavers cannot be admitted to universities
 - 90% of university graduates cannot find formal jobs within 3 years of graduation

Poverty has deteriorated between IHS3 (2011) & HIS 5 (2020)

% of all Households



Poverty has deteriorated between IHS3 (2011) & HIS 5 (2020)

The World's Poorest Countries (By GDP/Capita, PPP)

Rank	2019*	2015**	2010***
10	Chad	Comoros	Afghanistan
9	Eritrea	Madagascar	CAR
8	Liberia	Eritrea	Sierra Leone
7	South Sudan	Mozambique	Eritrea
6	Mozambique	Malawi	Niger
5	Niger	Niger	Somalia
4	Malawi	Liberia	Burundi
3	D.R. Congo	DRC	Liberia
2	CAR	Burundi	DRC
1	Burundi	CAR	Zimbabwe

* <https://www.worldatlas.com/articles/the-poorest-countries-in-the-world>

** <https://data.worldbank.org/indicator/NY.GDP.PCAP.PP.CD>

*** <http://www.financialjesus.com/interesting-economics/top-10-poorest-countries-in-the-world-2010/#>

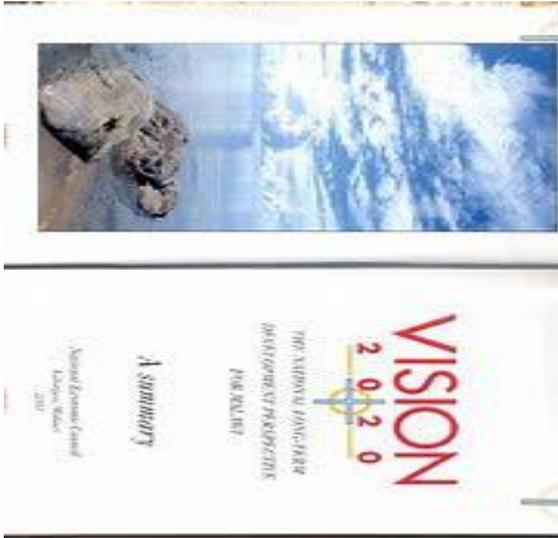
- A “business as usual” approach to economic management is unsustainable
- A reversal of the trends sooner rather than later may avert a political and social turmoil

A “business as usual” approach to economic management is unsustainable

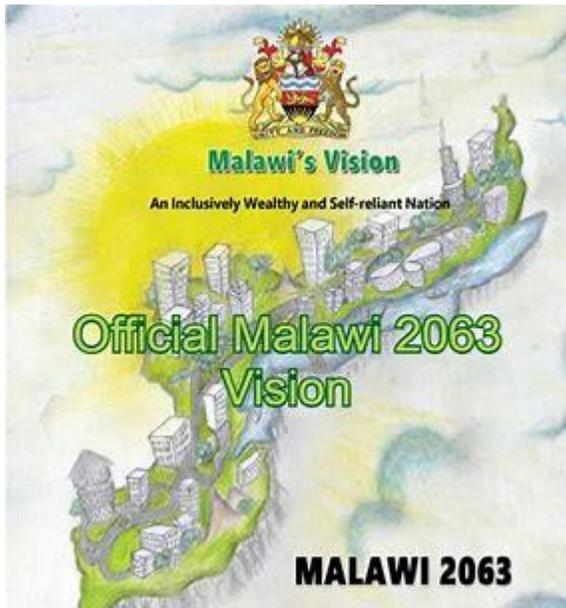


A reversal of the trends sooner rather than later may avert a political and social turmoil





What Economic Transformation Path Is Most Feasible?



Agricultural Transformation – A Driver Of Economic Transformation

The agriculture offers best immediate option for furthering Malawi's economic transformation

How does agricultural growth catalyse economic transformation? (Mellor, 1976; Timmer, 1988; Christiaensen & Demery, 2007; AGRA, 2017; Yaron et al., 2011)

- Increases demand for many services along agricultural value chains
- Provides key inputs for the agro-industry
- Higher agro-incomes grow demand for locally supplied consumer goods and services
- Is generally pro-poor and employment-intensive
- Creates opportunities for small and medium-sized enterprises

How much agricultural growth is required? (Benin et al., 2012; Benson & Hartley 2020)

- At least 6% p.a.
- Productivity improvements in services & industrial sectors also required

Agricultural Transformation – A Driver Of Economic Transformation

Malawi's agricultural sector has good prospects

- Population growth, rising middle incomes and urbanization
⇒ increased demand for its products
- High potential to move beyond the traditional farming systems.
- Promising opportunities exist for
 - Raising crop yields
 - Expanding the irrigated area,
 - Developing new agricultural value chains
- Integrated natural resource management needed to manage the interactions between soils, water and human interventions systematically

Agricultural Transformation – A Driver Of Economic Transformation

Action Point: Malawi should exploit opportunities for increasing yields and total factor productivity



- Average cereal yields increased from 1.0 to 1.9 ton/ha during 1961 – 2017 (FAO, 2020)
- From experimental stations in the country, yields of 5 ton/ha of maize are quite feasible
- Extension programs to improve crop management can produce dramatic benefits
- Improving the productivity of livestock and horticultural products could offer major improvements to total factor productivity

Agricultural Transformation – A Driver Of Economic Transformation

Action Point: Malawi should exploit its water resources to increase irrigated land



- Only 3.3% of Malawi's rural households benefit from smallholder irrigation schemes
- Only 4% of Malawi's crop land is currently irrigated
- Land and water resources are sufficient to more than double irrigable land (GoM, 2016).
- Irrigation has the potential to quadruple yields (GoM, 2015)
- The Shire Valley Transformation Project (SVTP) in 2018 addresses part of the need; should be supplemented by other large irrigation investments to realise full potential

Agricultural Transformation – A Driver Of Economic Transformation

Action Point: Malawi should exploit opportunities for developing new value chains

- Growing national demand for livestock, horticultural products, oilseeds, fish, processed foods
⇒ opportunities for new VCs
- New efficient VCs could
 - Reduce smallholders' reliance on tobacco
 - Enhance substitution of domestic for imported foods
 - Create spillover benefits: agricultural growth = additional value-added & employment within the food system
- But challenge exist
 - Need to increase productivity along key VCs,
 - Need to remove barriers to private sector expansion.
 - Farmers need access to modern inputs, markets & competitive prices (local & foreign)

Agricultural Transformation – A Driver Of Economic Transformation

Action Point: Malawi should formulate & implement a strategy to graduate from tobacco

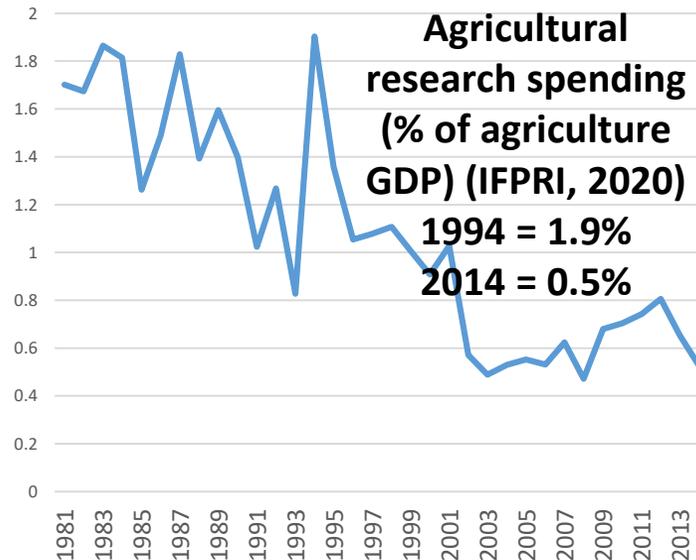
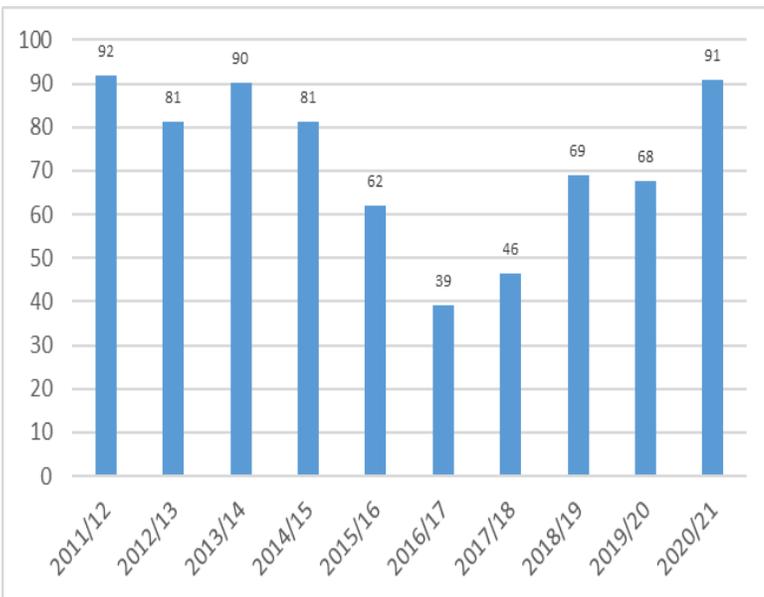
International Tobacco Producer Prices (FAO, 2020)



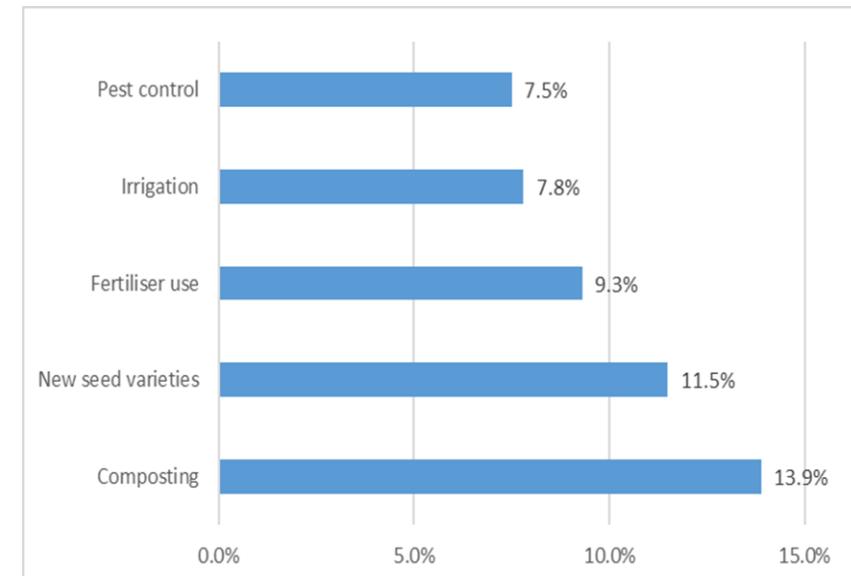
- Tobacco still accounts for over 50% of forex (Trade Map, 2020)
- International tobacco demand is declining
- Smallholder farmers are being forced out of tobacco by buyers, moving to other crops (legumes, maize)
- Prices for tobacco are plunging, reverting to pre-2009; still better than other crops
- Tobacco will always be a buyer's market
- Government guidance is required

Action Point: Government should increase expenditures on agricultural R&D, extension services, agricultural infrastructure & other public goods to support new value chains

FISP/AIP expenditure (% of Agriculture ORT)



Farmers accessing various extension services (NSO, 2020, IHS5)



- Farm input expenditures crowd-out the ministry's other key responsibilities: R&D, extension services, agricultural infrastructure
- Input subsidy \Rightarrow resource waste when climate is unfavorable for rain-fed agriculture, e.g. 2016
- Critical investments are also required in public goods (roads, rural electrification, education, etc)



**What Will It Take To
implement The
Transformation Agenda?**

The significance of agriculture is well recognized in Malawi's national policies

- All national development strategies/policies identify agriculture as the foremost priority sector
- Challenges affecting the agricultural sector are recognized, so are most of their solutions
- Government expenditure on agriculture far exceeds CAADP's 10% goal
- Still, Malawi's agricultural sector performance remains poor because of
 - An unpredictable policy environment
 - Failure to implement policy reforms
 - Lack of proper coordination among stakeholders
 - Overspending on input subsidies at the expense productivity-enhancing investments such as research extension, irrigation or the promotion of crop diversification;
 - Environmental degradation
- Addressing these challenges is necessary to create an enabling environment for inclusive, broad-based, and sustained agricultural sector growth.

Political will, political will, political will!!!!

- **Leadership** = most crucial ingredient to achieving the required transformation
 - Signals what structure of institutions and incentives should evolve
- Leadership = broad-based & inclusive economic transformations in Rwanda and Ethiopia
 - Both with Malawi's the challenges: land-lockedness, high population densities, environmental and resource degradation, and climate change
 - But Malawi has had the added advantage of lasting peace
- Able Leadership will create & rely on a **"Coalition of the Willing"**
 - Involving Parliamentarian, public, private, donor and NGO interests
 - To mobilize and sustain support for the transformation agenda over election cycles

Can a young democracy sustain developmental leadership?

The key role of evidence-based policy analysis

- **Leadership + Coalition of the Willing** should be supported by **evidence-based policy analysis**
 - Malawi needs to build a home-grown institution capable of generating new knowledge
 - MwAPATA Institute has the potential to assume this important role in Malawi
- MwAPATA Institute's Malawi Agriculture Policy Reform Mechanism (MAREM)
 - Common platform to facilitate the coherent visioning, development, adoption and implementation of the necessary reforms in the wider agriculture sector in Malawi
 - This reform process is long overdue, and ought not be delayed any further.

Thank You