



Agricultural Innovations and Technologies for the Attainment of Malawi 2063

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Some of the Attributes of the Malawi we Want by 2063

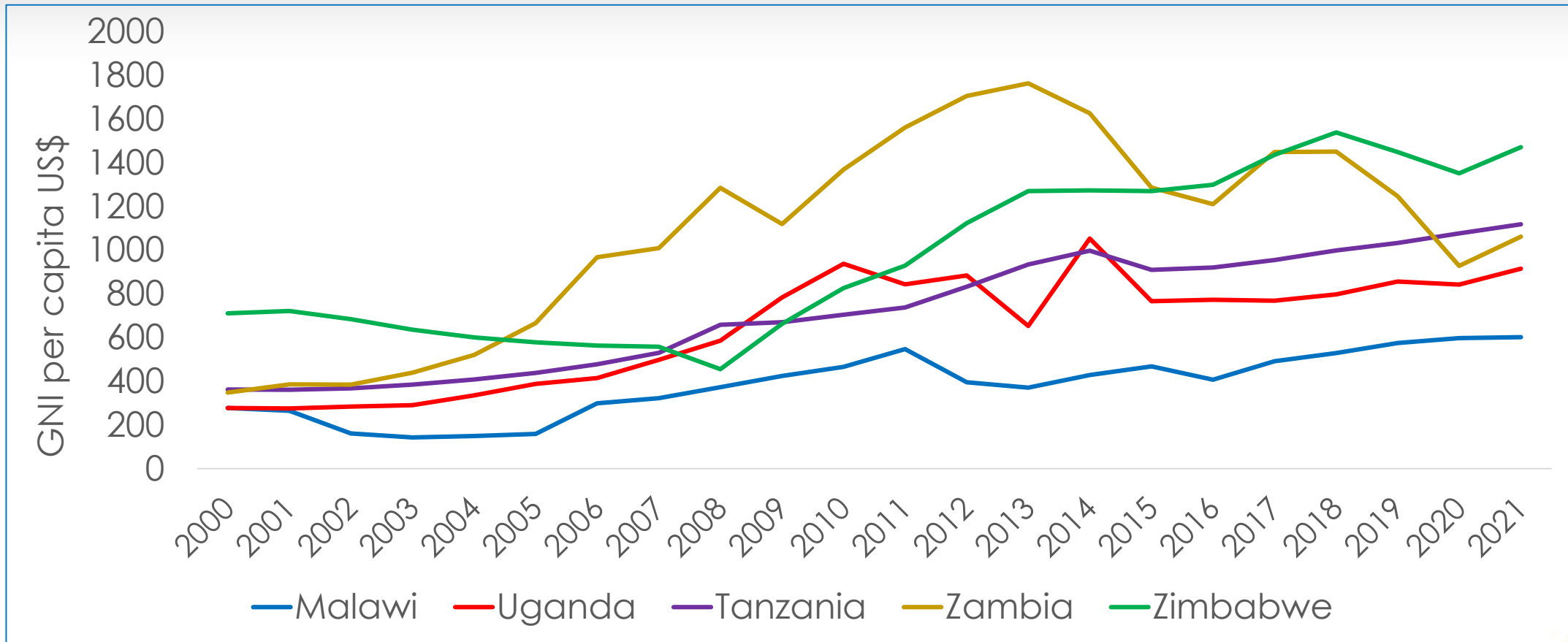
An inclusively wealthy and self-reliant industrialized upper middle-income country

A vibrant knowledge-based economy with a strong and competitive manufacturing industry that is driven by a productive and commercially vibrant agriculture and mining sector

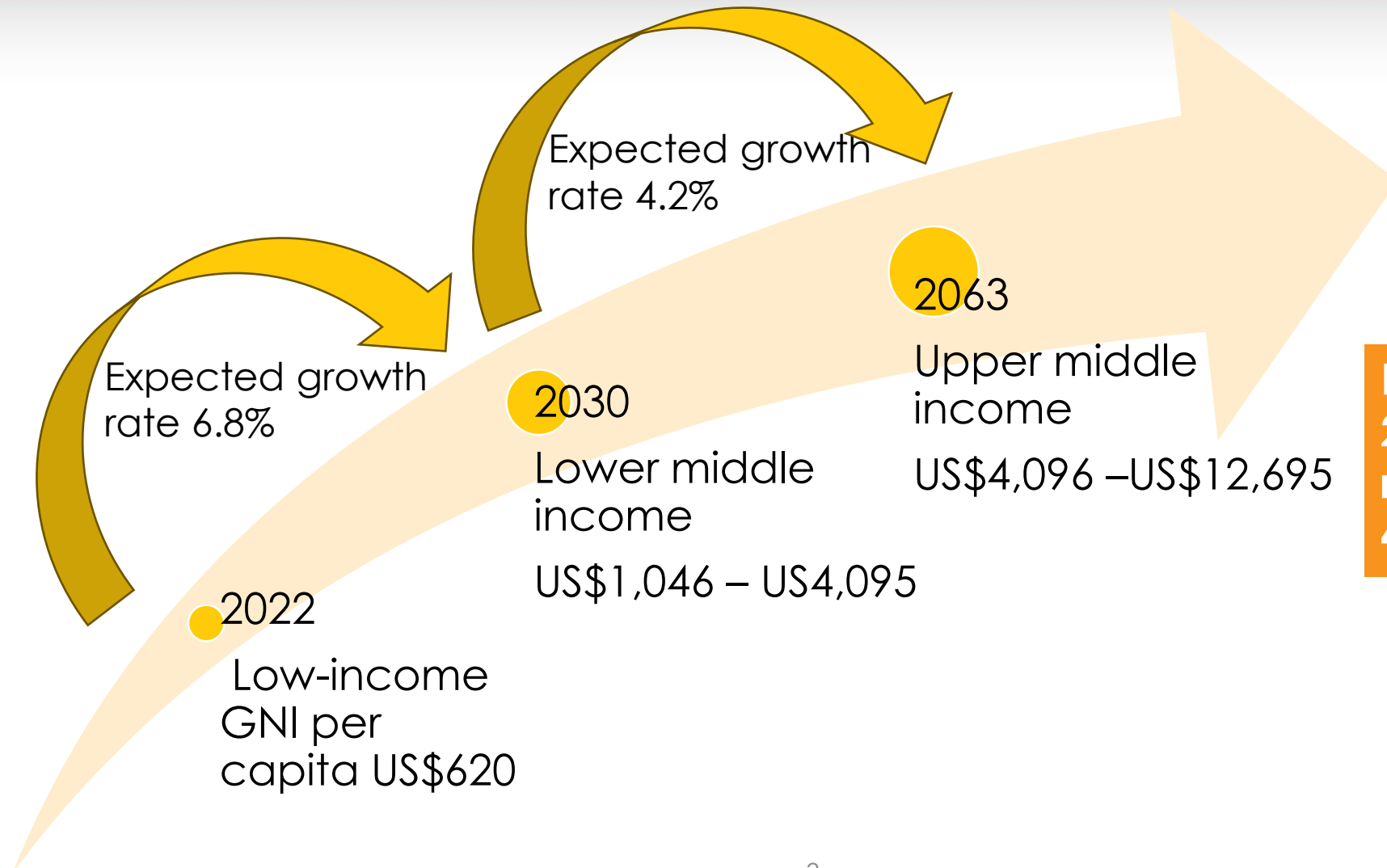
A dynamic and vibrant private sector

An environmentally sustainable economy

GNI been very low



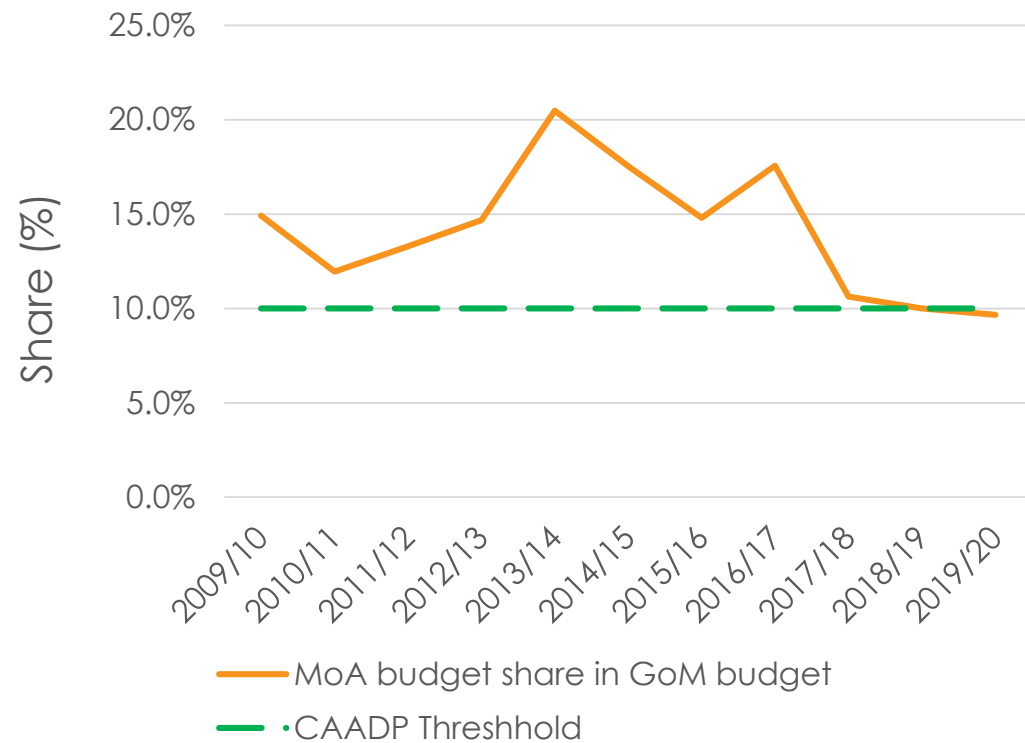
The road to an upper middle-income country



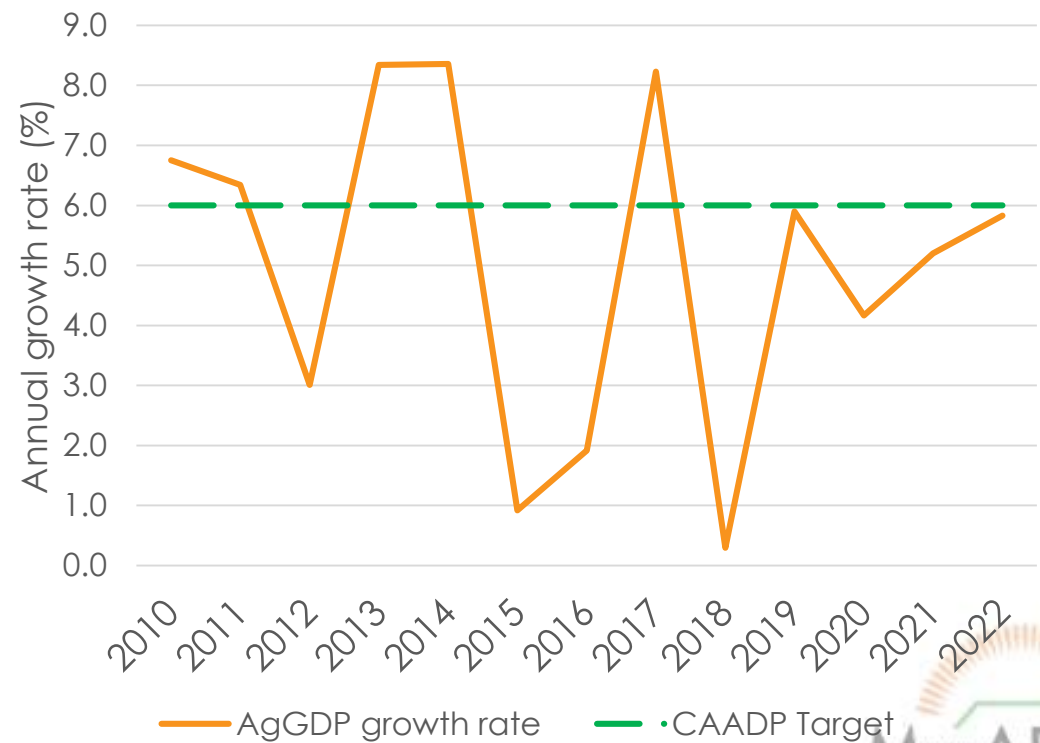
Between 2017 and 2021 GNI growth rate averaged 4.1% per year

Poor agricultural performance is partly to blame for poor economic performance

Budgetary allocation meets CAADP targets

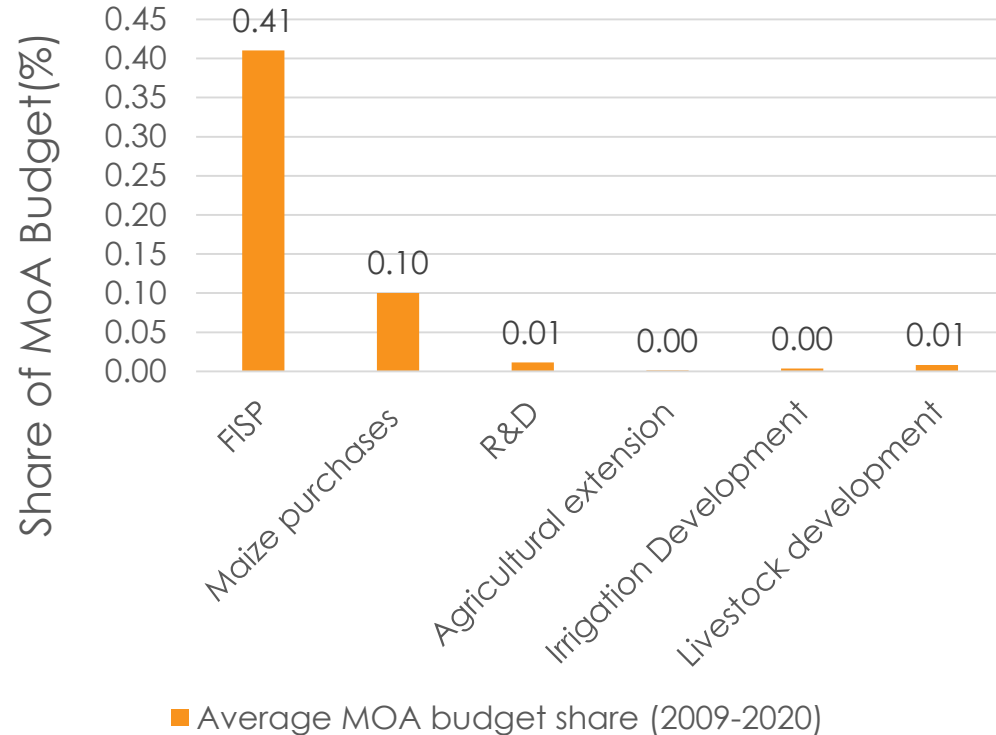


But growth rate in Agricultural GDP has not been consistently above CAADP target

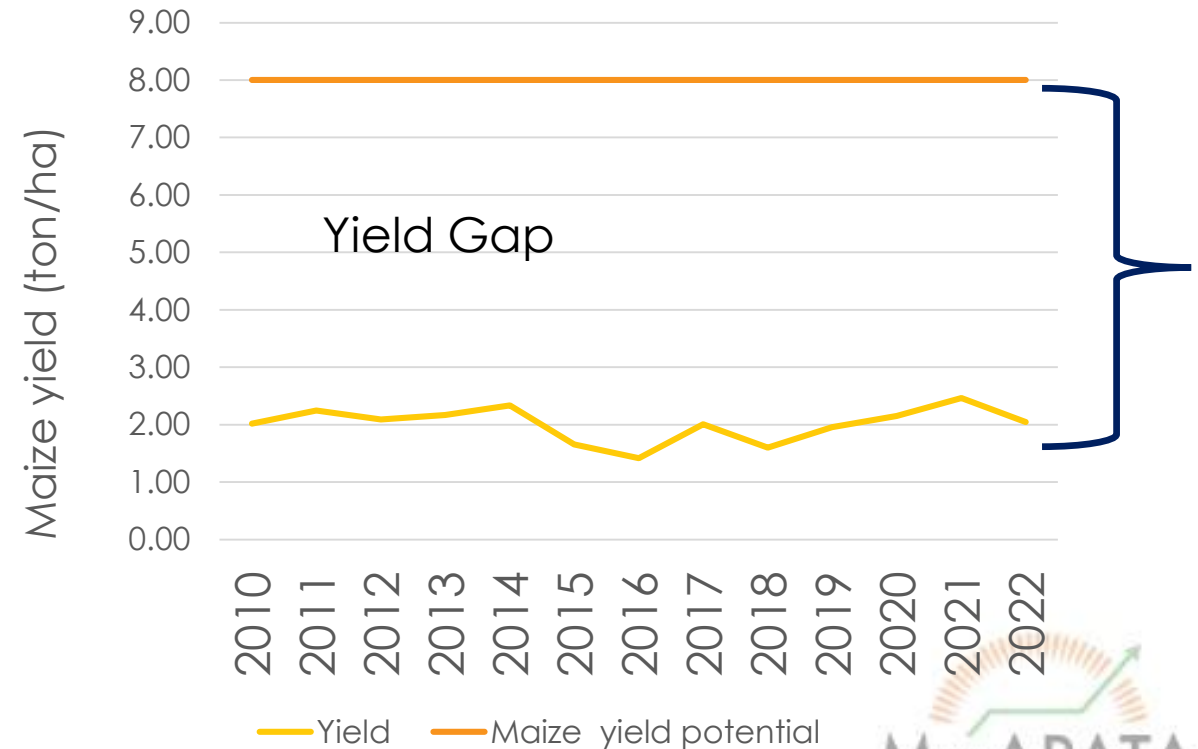


Poor agricultural performance is partly to blame for poor economic performance

We are largely spending on maize

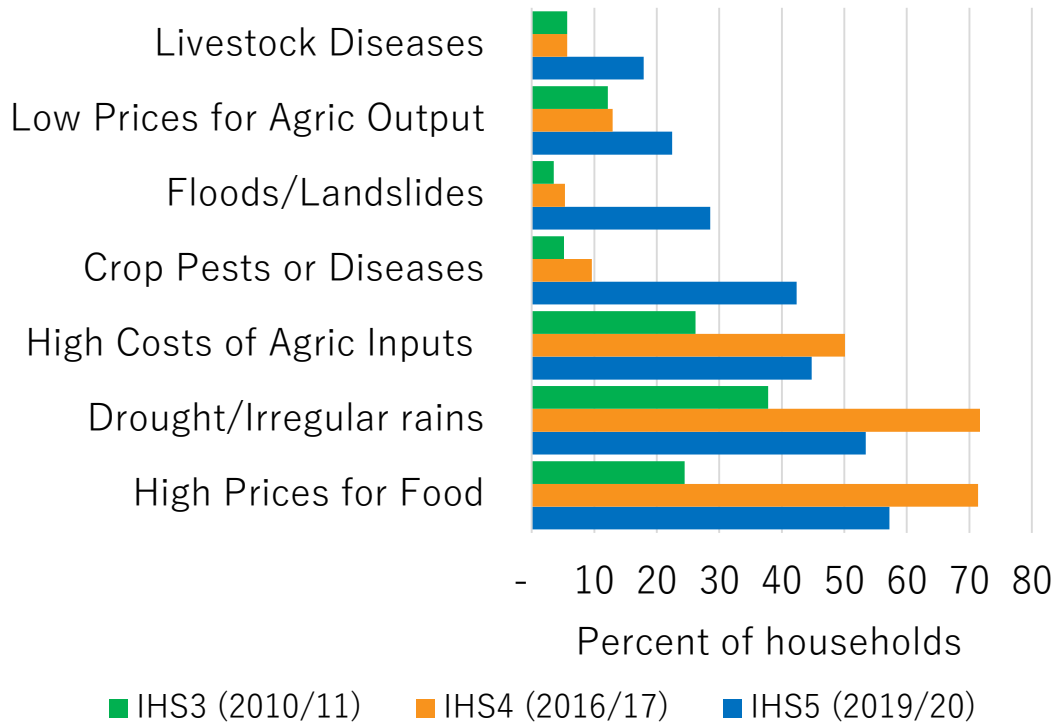


But maize productivity has been below potential

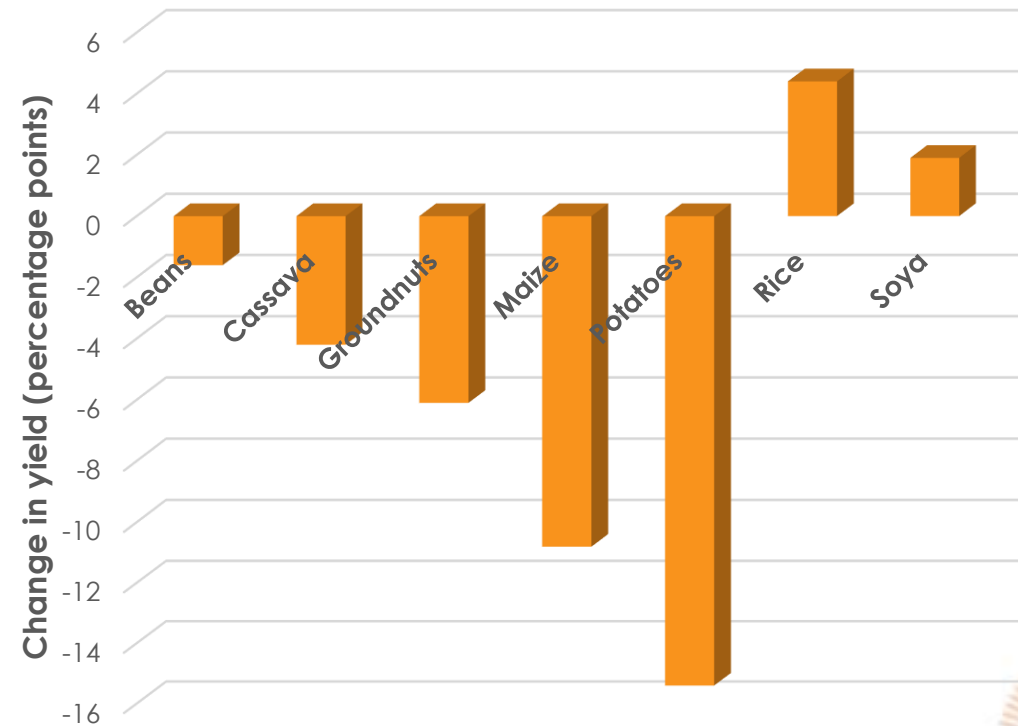


Poor agricultural performance is partly to blame for poor economic performance

The incidence of shocks has increased in frequency and magnitude due to climate change



Climate Change is projected to impact yields



Agricultural technologies and innovations to transform the economy

- 🌅 Identify high-potential value chains
- 🌅 Improve productivity of the value chains
- 🌅 Reduce post-harvest losses in the value chains
- 🌅 Add value to agricultural products
- 🌅 Improve access to structured markets
- 🌅 Improve resilience to climate change impacts

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Prioritize value chains to attain meaningful diversification

Value Chain	Market Led	Ag Transformation	Inclusive Growth	VC Scans	Climate	Final Ranking
Mangoes	3	1	10	3	3	1
Macadamias	1	12	4	10	7	2
Bananas	7	6	12	9	1	3
Soybeans	12	17	1	1	5	4
Sweet Potatoes	9	7	5	12	2	5
Pigeon Peas	4	14	8	5	4	6
Sugar	10	3	13	6	6	7
Aquaculture	13	4	2	7	15	8
Poultry	8	2	17	4	8	9
Groundnuts	5	9	15	2	11	10
Beans	6	13	9	13	9	11
Rice	16	11	3	8	13	12
Pigs	2	5	14	14	16	13
Tobacco	11	15	6	16	12	14
Cotton	17	16	7	11	10	15
Maize	15	10	11	17	14	16
Goats	14	8	16	15	17	17

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Invest in irrigation

- ☀️ Malawi's irrigable land is estimated at 408,000 ha
- ☀️ Only about a third of this (118,833 ha) is currently irrigated
- ☀️ Developing irrigation on all irrigable land would improve agricultural performance

Estimated impacts of irrigations

Outcome Variable	Percent Increase (Impact)
Maize yield	32%
Total crop productivity	72%
Maize revenue	103%
Vegetable revenue	159%

Source: AfDB, 2020

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Invest in soil health

- Input subsidy has increased fertilizer use
- Crop response rates to nitrogen (N) fertilizer declined from 18kgs/ 1kg of N in 1980s to < 5kgs/ 1kg N in 2020
- Low soil pH and organic carbon constraint crop response rates to inorganic fertilizer
- Organic fertilizer has been shown in many studies and contexts to increase yield to at least 4 tons per hectare
- Promote soil testing and blending of area-specific fertilizers

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Promote Access to Structured Markets

- ☀️ Structured markets
 - Stabilizes volumes and prices
 - Protect producers and consumers
- ☀️ Improve the following
 - Commodity exchanges
 - Contract farming (Anchor farm)
 - Aggregation centers

Promote Agro-Processing

- ☀️ Agro-processing technologies should aim at
 - Adding value to primary commodities
 - Reduce post-harvest losses

Concluding Remarks

- ☀️ **Attainment of the upper middle-income status in 2063 via lower middle income in 2030 remains our aspiration**
- ☀️ **Whether this will be realized or not depends on the actions we take now.**
- ☀️ **Innovations to help in attaining these aspirations should address all the six key issues highlighted in this presentation**
- ☀️ **Government should invest in promoting the technologies through investment in extension services**
- ☀️ **This calls for reorientation of the Ministry of Agriculture budget**

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