

# The Central Role of Agriculture in Myanmar's Economic Development

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# Outline

- Introducing each other
- Why is economic growth important?
- Why is agriculture important for growth?
- What is “agricultural transformation”?
- An example from Myanmar
- YAU graduates as “change agents”
- Why wearing a motorbike helmet is essential to your contribution to Myanmar’s development

# Getting to know each other.....

- Do your parents farm?
- Do you think of yourself as a future leader in the workplace or community?
- Do you know what job or occupation you want to pursue when you graduate from YAU?
- How many of you want to be farmers?
- Do you have a plan to achieve that job or occupation?
- Do you wear a helmet when you are on a motorcycle off campus (on a public road or highway)?
- Do you wear a helmet when you are on a motorcycle on campus?

# Why is Economic Growth Important?

- Development is all about *creating opportunities*, and *building people's capacities* to take advantage of those opportunities. Economic growth helps countries make progress in both of these areas.
- Economic growth is *both* an increase in *production*, and an increase in *incomes*. Economic growth means more jobs and higher income for individuals, families, and society.
- Economic growth is perhaps the single most powerful engine for broad-based development progress: growth leads to gains in health, education, poverty reduction and other dimensions of development.
- These relationships go both ways.
- The increases in income allow families and societies to eat more and better food, put more of their children in school, keep their families healthy, build better schools and clinics, invest in roads and communications facilities, and build more prosperous lives.

# Why is *Sustainable* Growth so Important?

- Growth must be sustained over years, decades, and generations in order to translate into broad-based development.
- Even modest growth – if sustained – can be a powerful engine for change. For example, with growth of 3% per capita, average income *doubles* every 23 years (basically every generation).
- Short spurts of growth (say, from exploiting natural resources for a few years) do *not* lead to long-term development.
- For growth to be sustained:
  - Governments must create stability and legitimacy, and invest in infrastructure and in people.
  - Individuals and businesses must believe that their own investments will pay off.
  - Natural resources must be managed to last a long time.

# Why is *Inclusive Growth* so important?

- What is inclusive growth? Inclusive growth is economic growth that includes the majority of a country's population. Inclusive growth creates new income opportunities for as many people as possible, especially the poor, minority groups, women, and isolated rural populations.
- Typically accompanied by broad-based (inclusive) investments in education, health, and infrastructure, alongside improvements in inclusive governance (with wide participation of, and consultation with, all groups in society).
- Why is inclusive growth important?
  - Creates an atmosphere of justice and fairness.
  - Builds the political legitimacy of the government.
  - Supports peace and reconciliation.
  - Encourages investment and cooperation, which helps to sustain growth over time.
- Inclusive growth is especially important in conflict and post-conflict environments.

# Why is Agriculture Central to Economic Development?

- Almost all developing countries that have achieved sustained and inclusive growth began with a strong focus on agriculture.
- Growth in agriculture:
  - Creates higher incomes for the rural poor (therefore, it is highly inclusive).
  - Reduces poverty rapidly.
  - Produces more food and related products for the entire country.
  - Eventually, allows some workers to shift from agriculture to processing and manufacturing.
    - As agricultural productivity grows, fewer workers can produce more food, so some workers shift to processing, manufacturing, services, other activities.
- A developing economy cannot diversify into other activities without first increasing agricultural productivity.

# Agriculture and Comparative Advantage

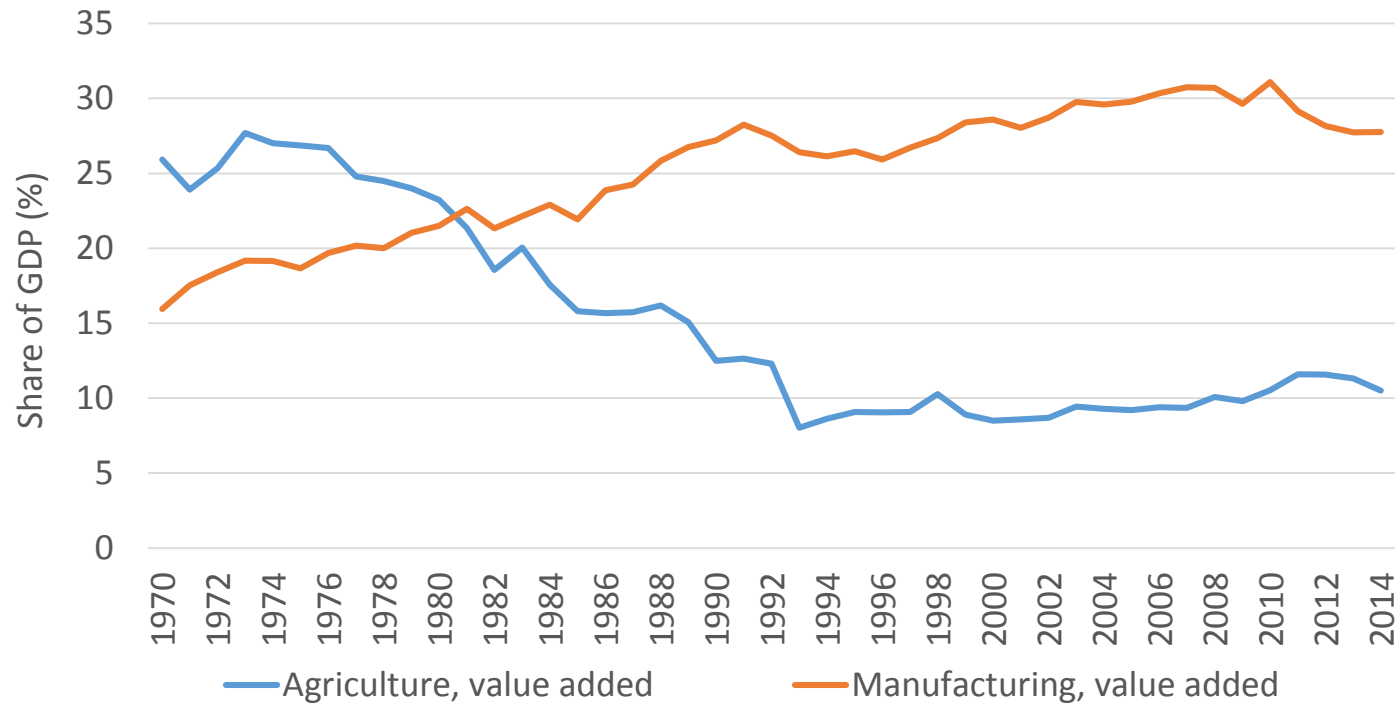
- Agriculture makes particular sense in countries with abundant fertile land and water (like Myanmar).
- These attributes give Myanmar a *comparative advantage* in agriculture: that is, it has a big advantage in producing agricultural goods compared to other goods (e.g., industrial goods).
- Export of agricultural products can be an important source of foreign exchange to pay for imported goods that Myanmar does not have a comparative advantage in (e.g., aeroplanes)
- Countries that have ignored this kind of comparative advantage (ignored agriculture) and tried to move too quickly to into industry have failed.
- Countries that have focused on their comparative advantage and used it fully have typically experienced more sustained and inclusive growth.



# As growth proceeds, production shifts to manufacturing and services

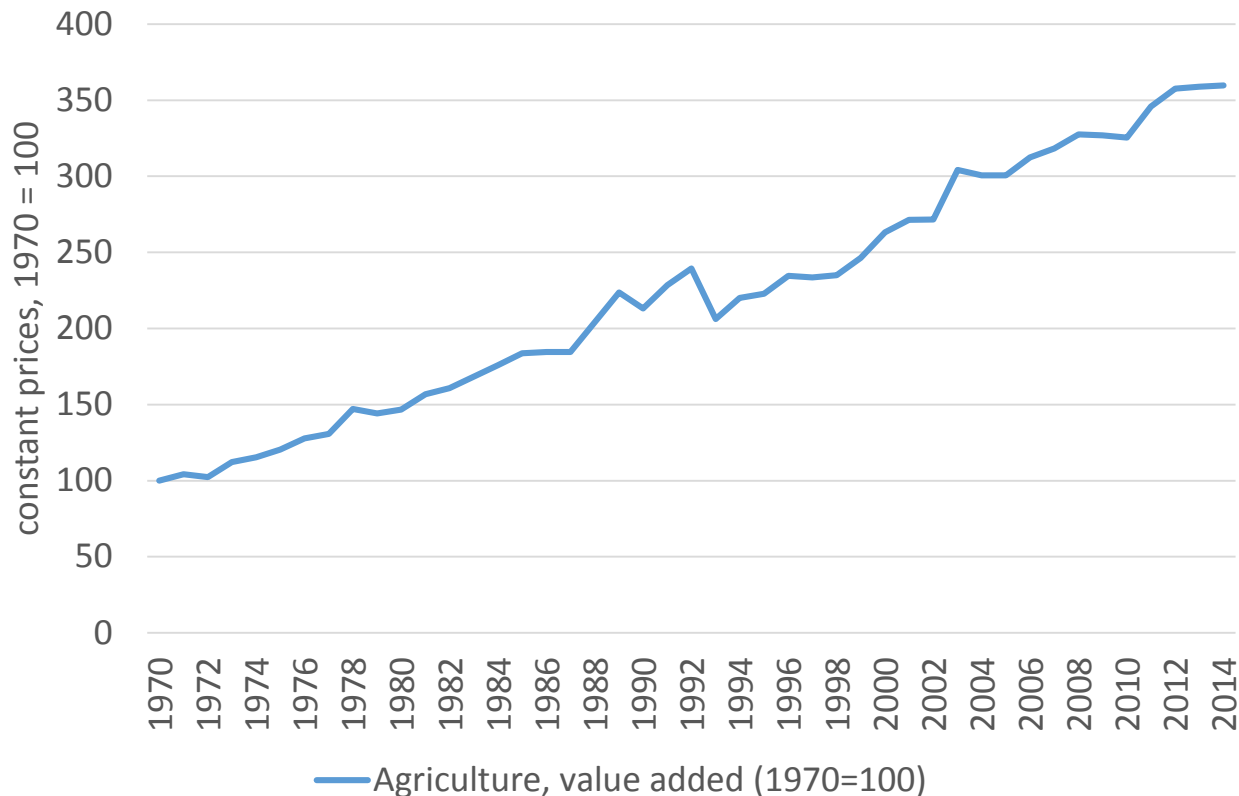
- Known as the “structural transformation.”
- The share of agriculture in total production (GDP) falls, while the share of manufacturing (including processing) and services rise.
- But in successful countries, during this process, agricultural production *continues to grow*.
- When the share of agriculture in GDP is falling, it does *not* mean that agriculture production is falling. It just means that manufacturing (and services) are growing faster.
- For example, in Thailand, since 1970:
  - Agriculture as a share of GDP has fallen from 25% to 10%.
  - At the same time, agricultural production has more than tripled.
  - (Note that processing of agricultural goods is part of manufacturing).

# Thailand: Agriculture and Manufacturing (shares of GDP)



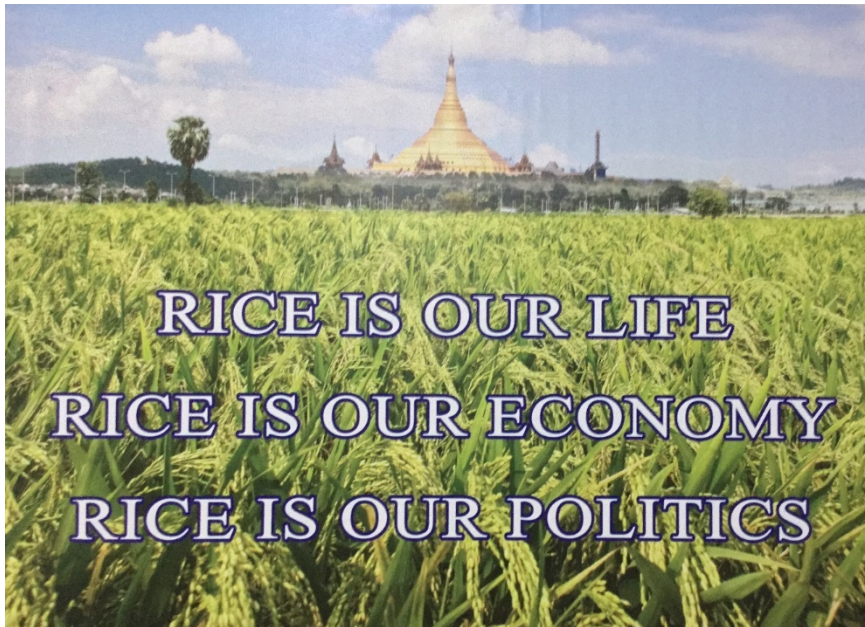
Note: Manufacturing includes agricultural processing and certain agricultural-related businesses

# Thailand: Agricultural Production (total value added, constant prices)



# What is agricultural transformation?

**YESTERDAY**



**TOMORROW ??**



# Transformation pathways....

## *From subsistence farmer to entrepreneur (business person)*

- Access to reliable, high value markets
  - Physical access (roads, secure storage, cold storage)
  - Quality requirements, SPS and traceability
  - Agro-processing to avoid perishable produce gluts
- Access to irrigation and land improvement
- Access to information on market prices and production techniques
  - Information on profitable enterprises and management practices
    - Aquaculture, fruits and vegetables, livestock and dairy,
- Access to production inputs and services
  - Market and ecology suited varieties or breeds
  - Fertilizers, pesticides, feeds, veterinary services and mechanization
- Access to finance
  - Seasonal inputs, marketing credit and equipment

# Agricultural transformation drives transformation of the rural economy?

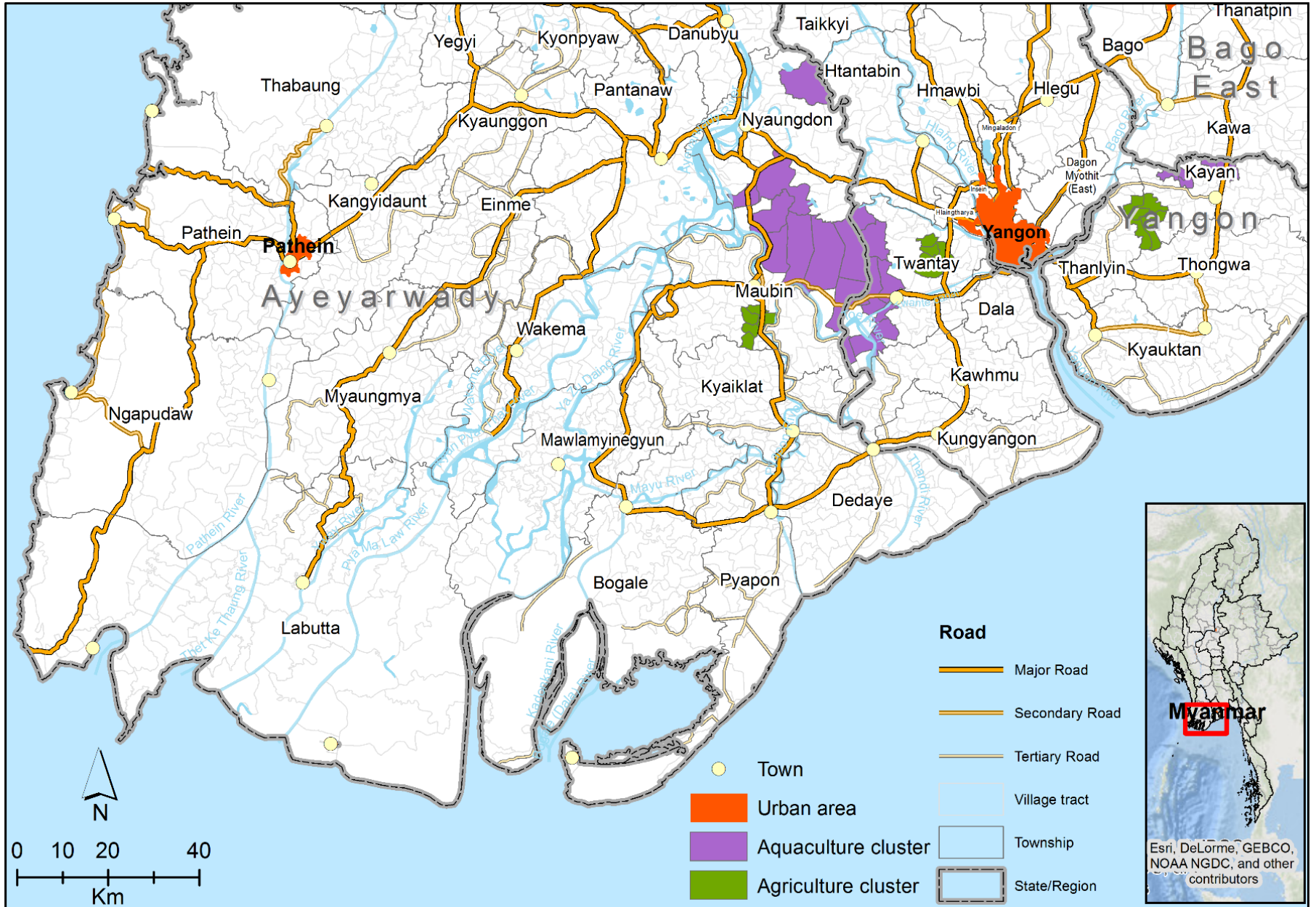
- Rural transformation refers to the process of growth and diversification of the rural economy, resulting in higher incomes from both farm and off-farm employment
- A large share of increased smallholder farm incomes are typically spent in the local economy, spurring growth in the rural non-farm economy (RNFE)
- The stronger the synergies between growth in the farm and growth in the non-farm components over time the more sustainable the transformation
- Public policies and investments have the potential to foster or hinder this virtual growth cycle -> hence need to know what is actually happening on the ground

# Myanmar Aquaculture Agriculture Survey (MAAS)

## Methodology

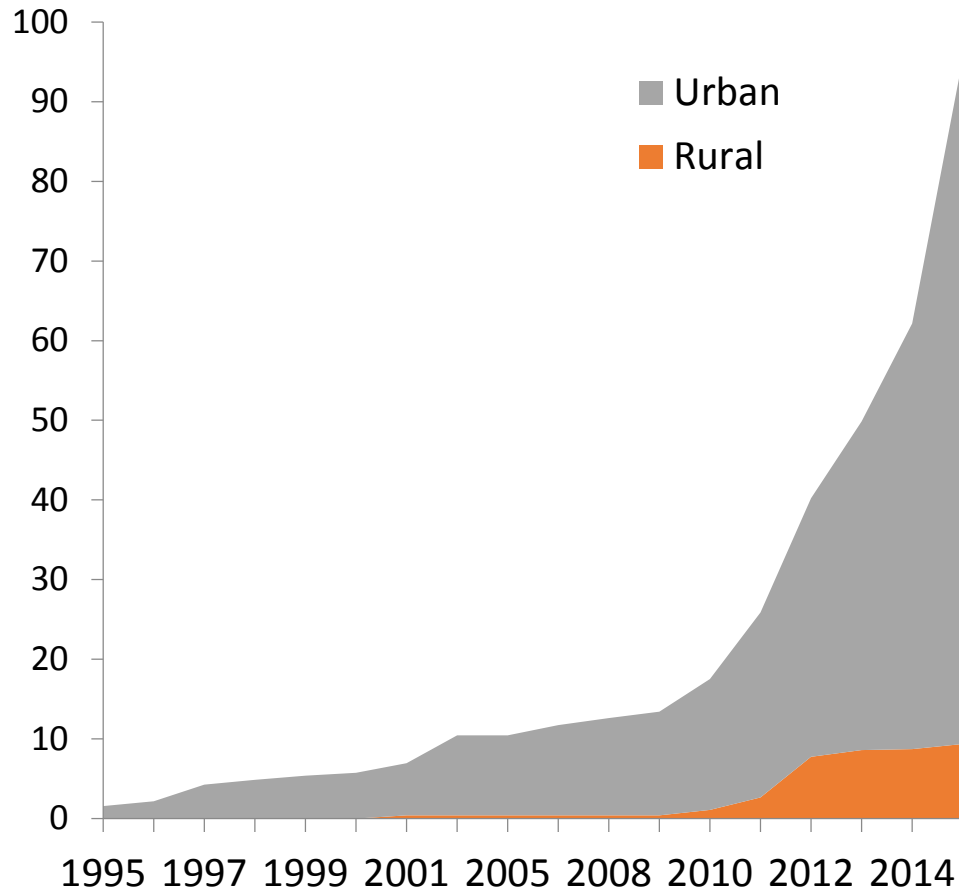
- Purposively selected 2 clusters of 'aquaculture' and 'agriculture' village tracts for comparison, based on spatial concentration of ponds and prevailing crop farming systems
- Randomly selected 'enumerations areas' and households to represent entire populations of both clusters (including non-farm households)
- Total sample = 1102 HHs in 40 village tracts, representing 37,390 HH

# Survey locations





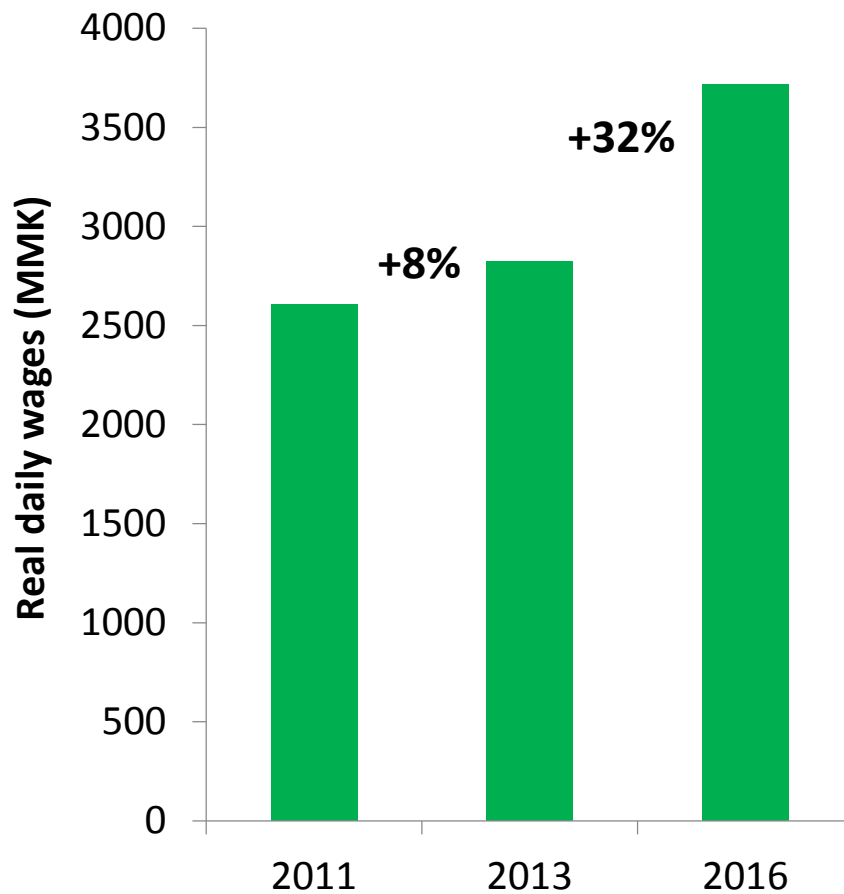
# Rapidly accelerating rural-urban migration post-2010



**The cumulative share of current migrants by year (%)**

- 16% of HH have migrants
- Average migrant age 20
- 55:45 male/female split
- 70% employed in manufacturing
- 8% international
- Some rural-rural migration from remoter areas for fulltime agricultural work (40% of permanent workers in aquaculture cluster)
- 80% of HH with migrants receive remittances

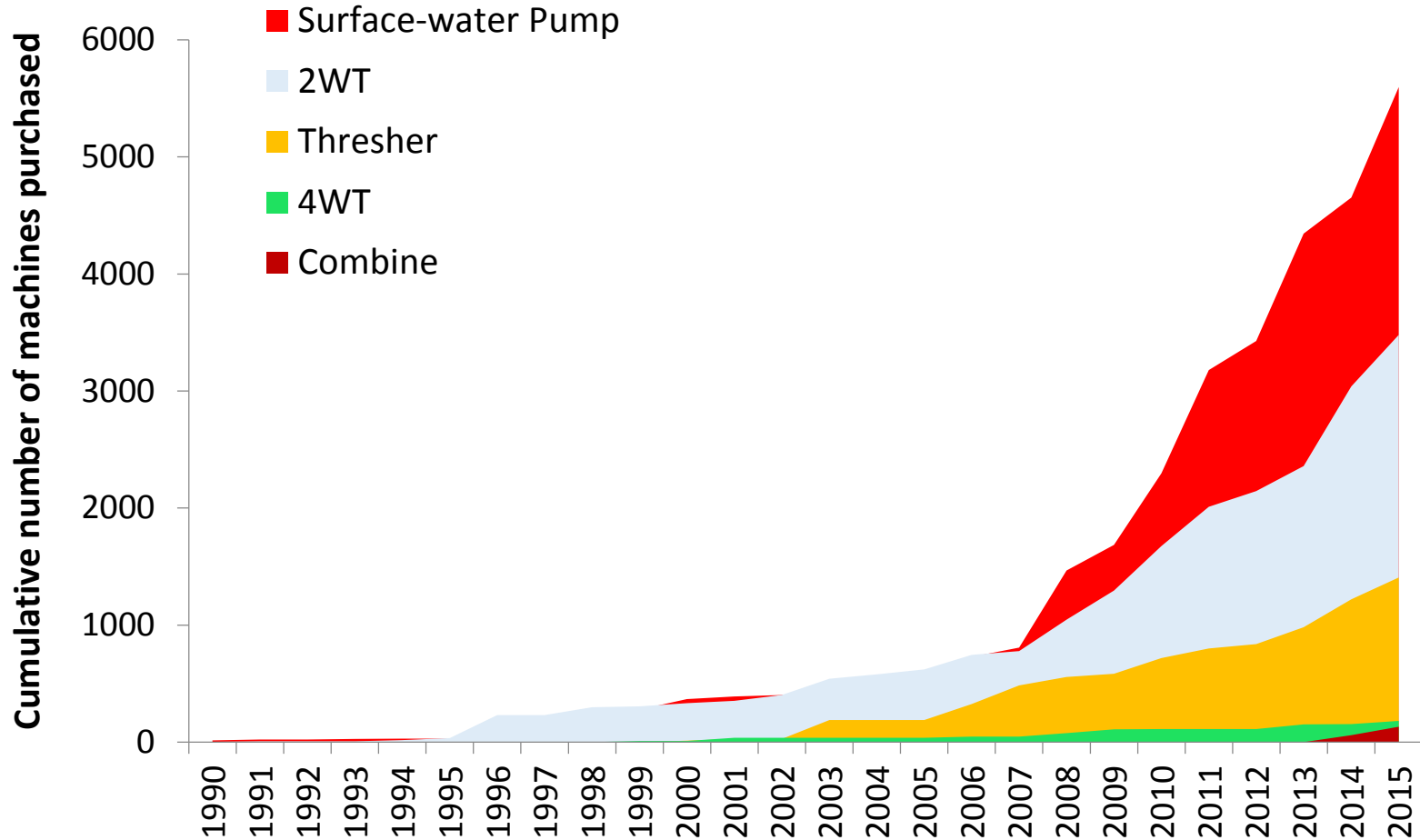
# Real wage increases



Main impact of migration is on rural labour supply and wage rates

**Average real daily wage for male agricultural labour (2011-2013)**

# Labor shortages & rising wages driving mechanization

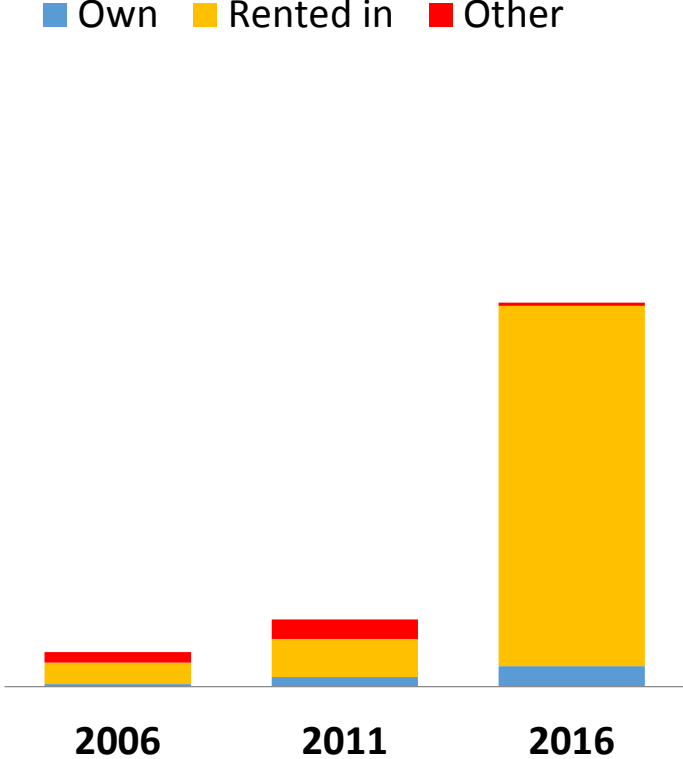
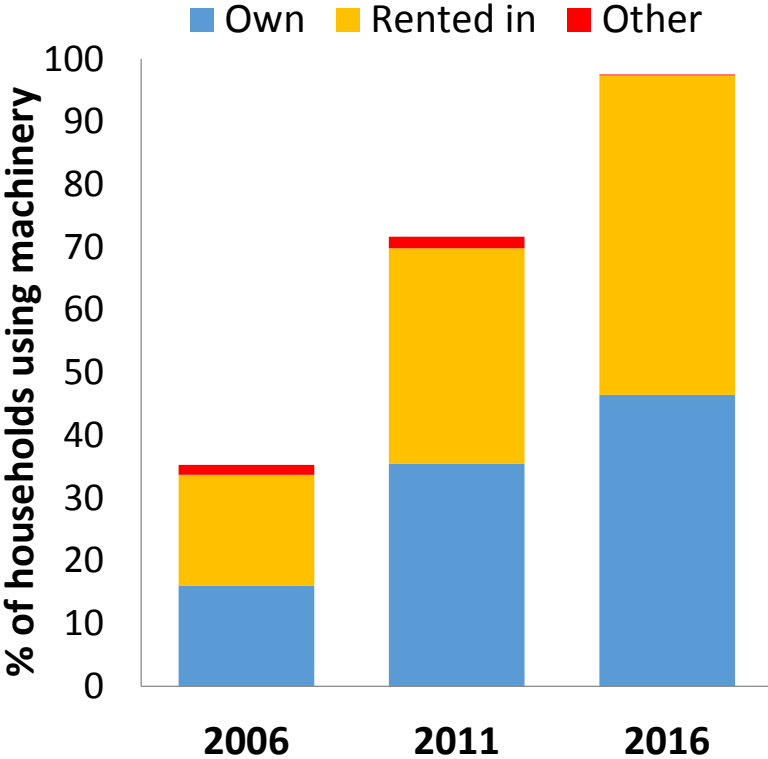


**Cumulative purchases of agricultural machinery, 1990-2015**

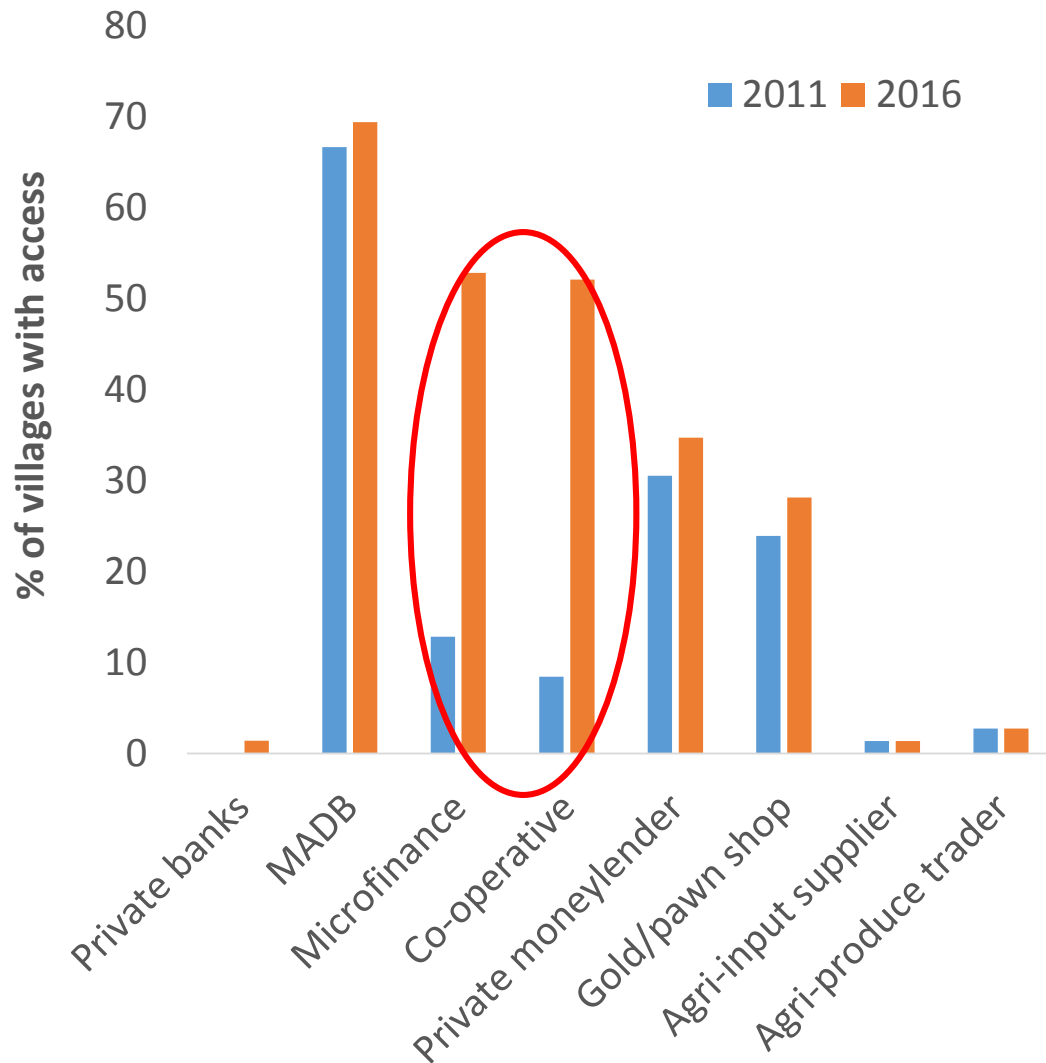
# Adoption supported by rental services

Machine Use for Land Preparation

Machine Use for Harvesting



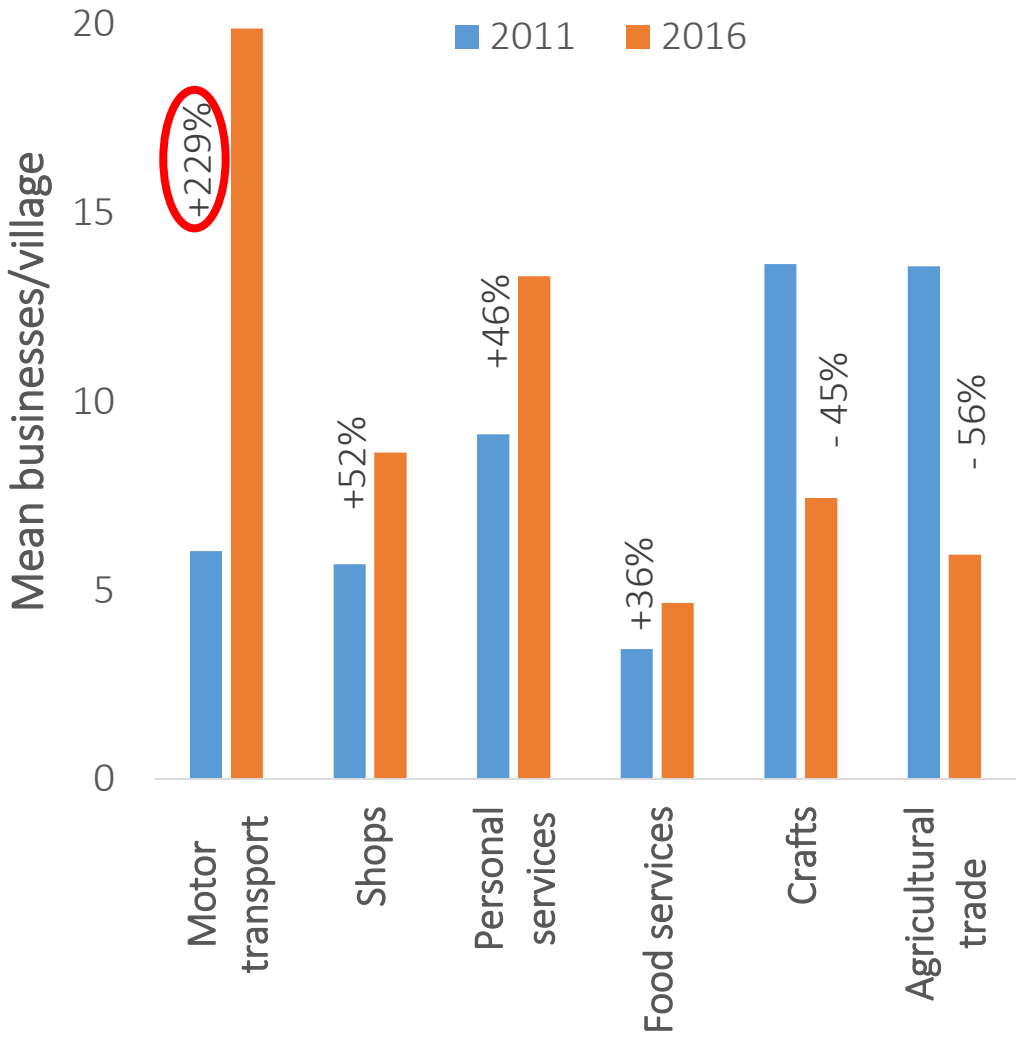
# Sources of credit diversifying



- Access to credit improving due to MFIs and cooperatives
- Average rates of interest paid on informal and semi-formal loans fell from 72% in 2011 to 60% in 2016.
- Very few output-tied agricultural loans

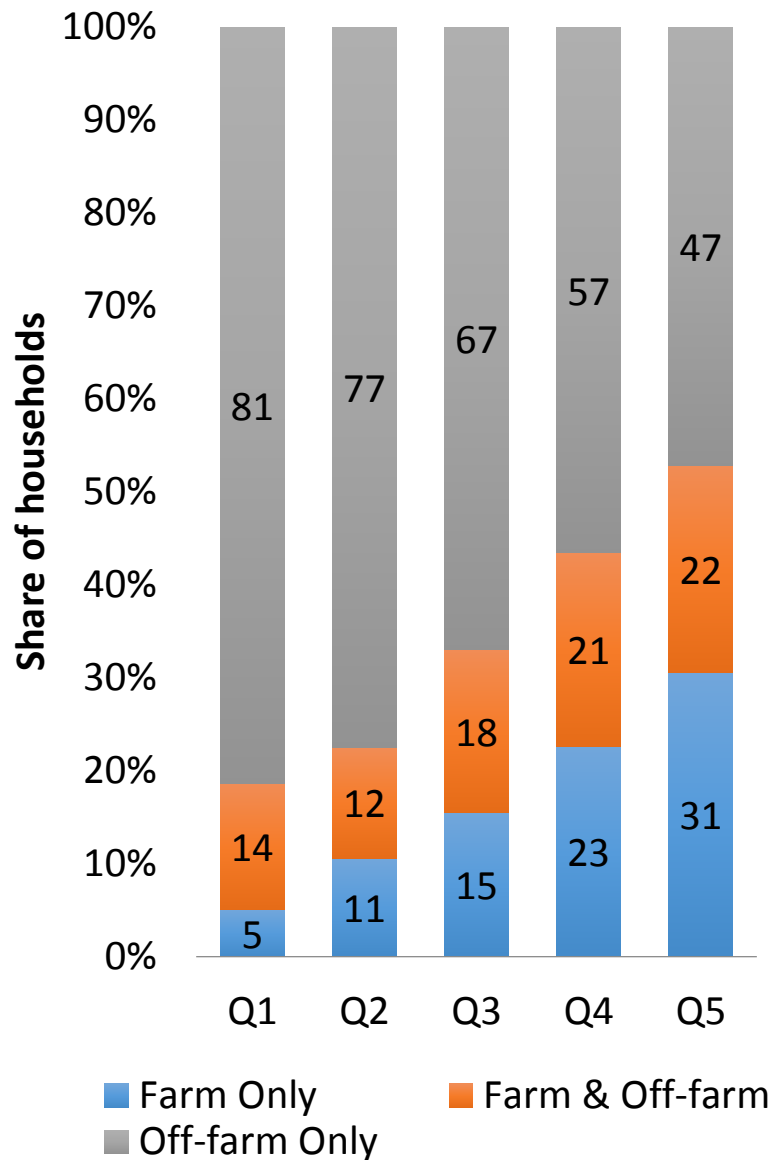
Share of villages with credit access by source (2011-2016)

# Rapid growth of non-farm enterprise



- From 2011-2016, motor vehicles replaced boats as main mode of transport: average journey times to fell 20-30%.
- Increasing mobility: 44% of workers in fulltime employment travel beyond local area but remain resident
- Village stores have attained almost total ubiquity (96% of villages)

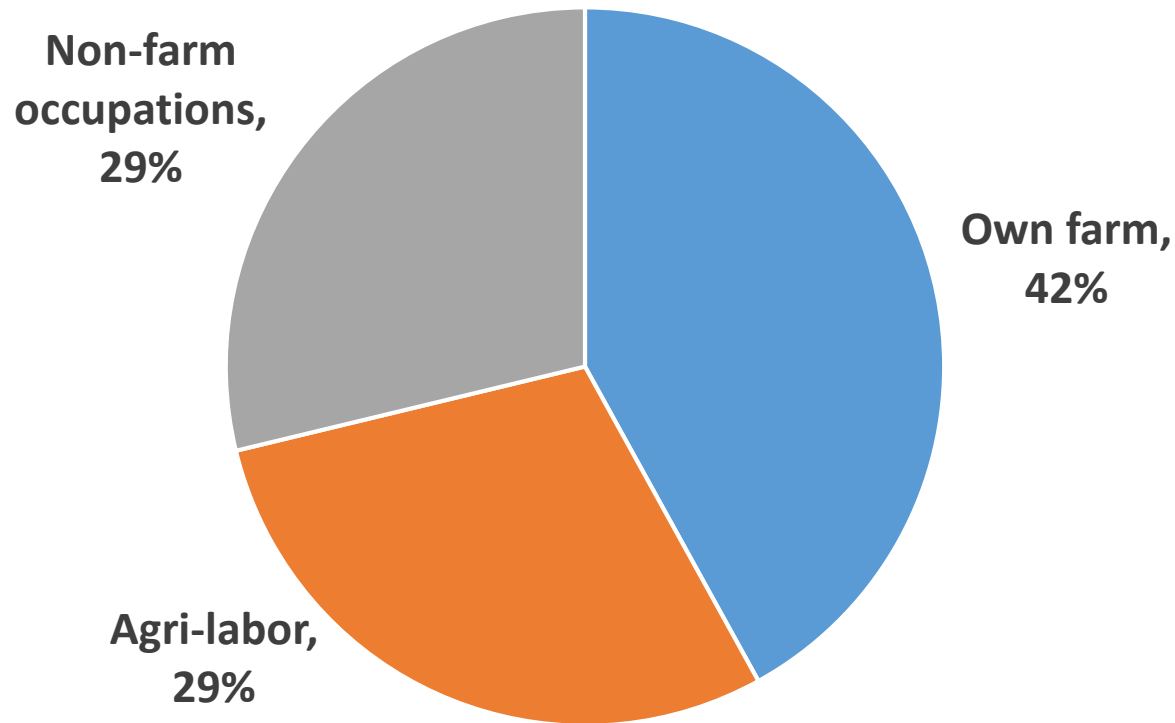
Change in average number of businesses per village, 2011-2016



Off-farm employment plays a major role in livelihoods for households in all income and landholdings groups

**Household participation in farm and off-farm employment**

# Agriculture still the major source of primary employment



Share of primary employment, by type

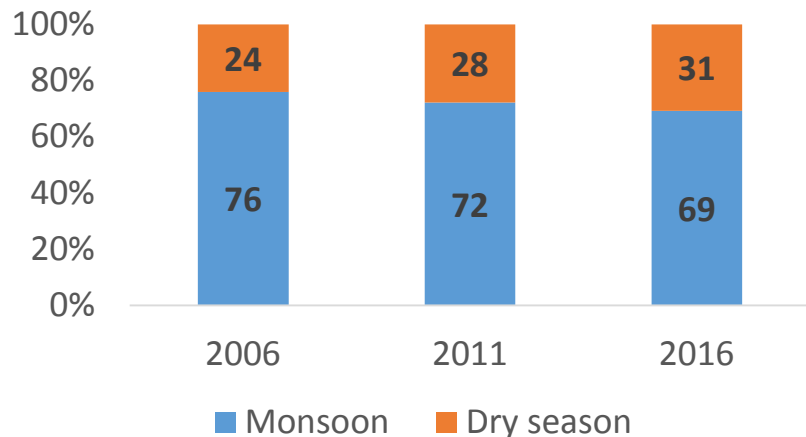
Agriculture directly provides >70% of primary employment (plus more in related value chains)

Non-farm employment, and off-farm agricultural work, contribute similar shares of primary employment

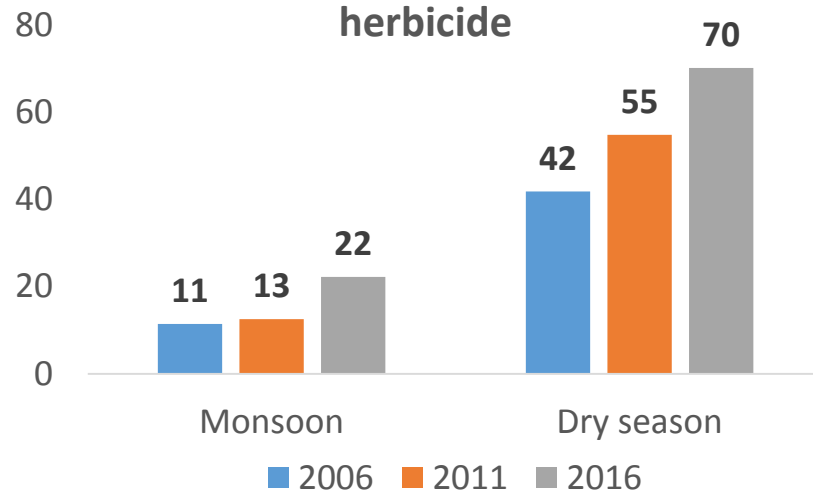


# Incipient agricultural intensification

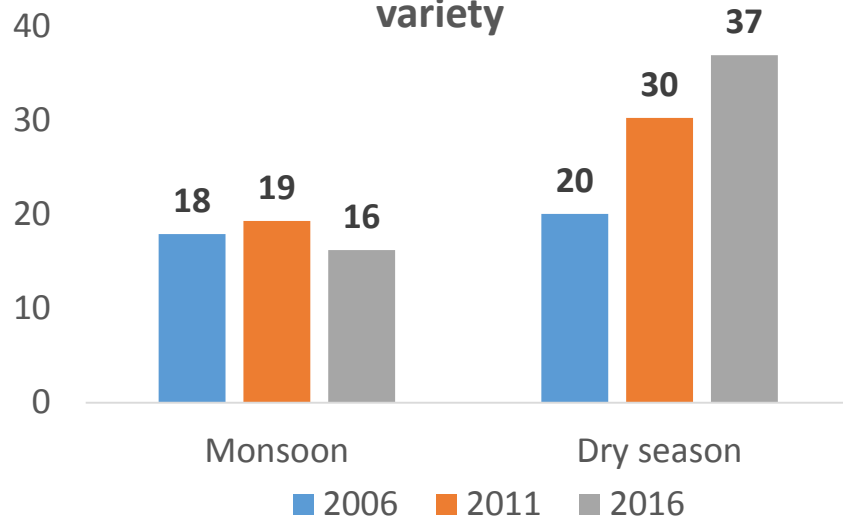
### Main paddy crop (% of HH reporting)



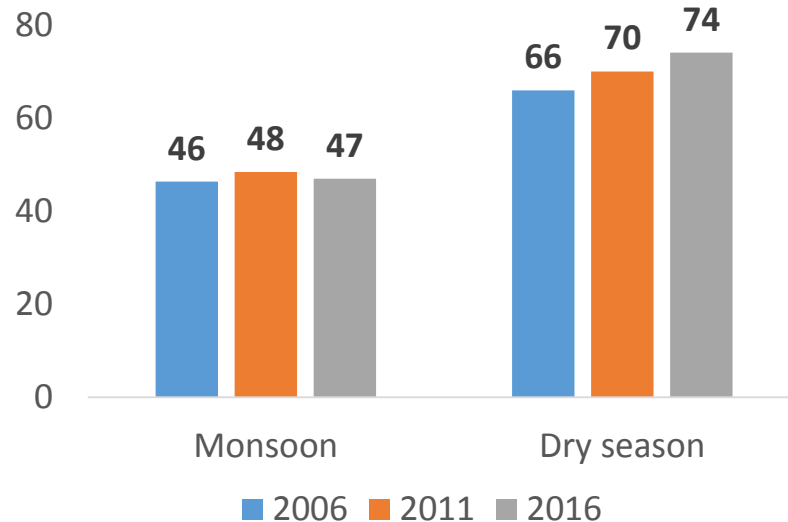
### % of paddy farms applying herbicide



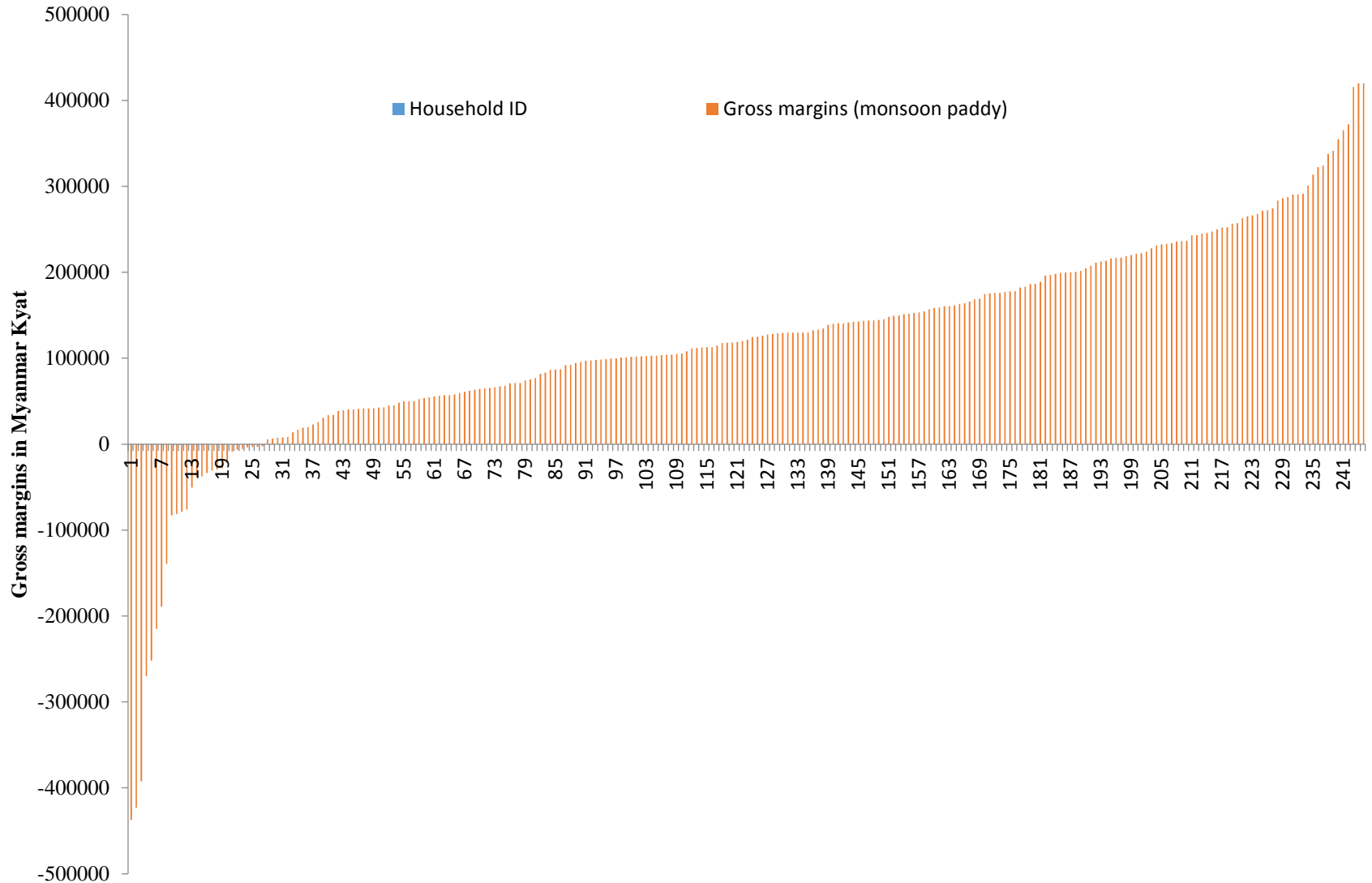
### % of HH planting improved rice variety



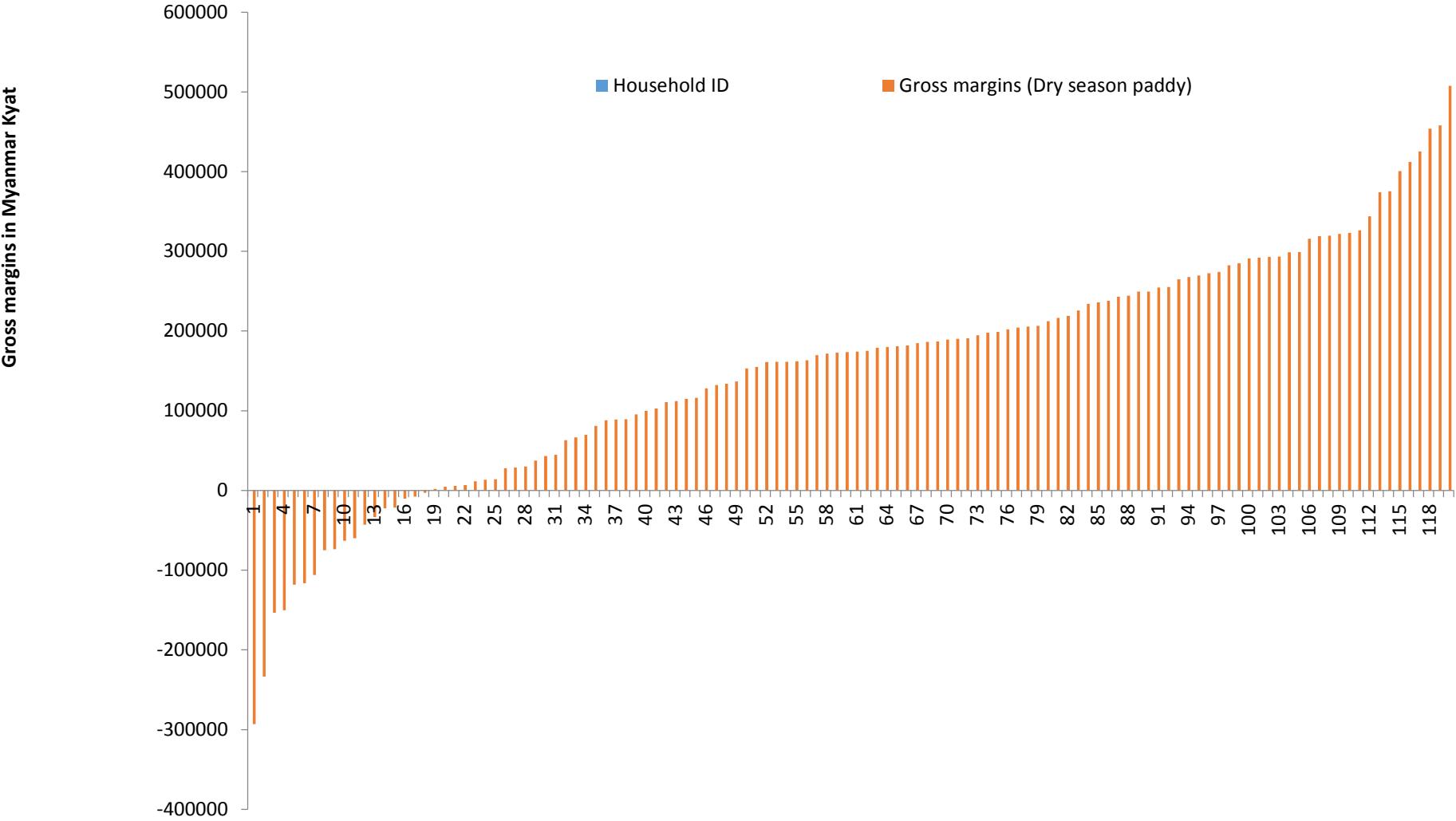
### Paddy yield (baskets/acre)



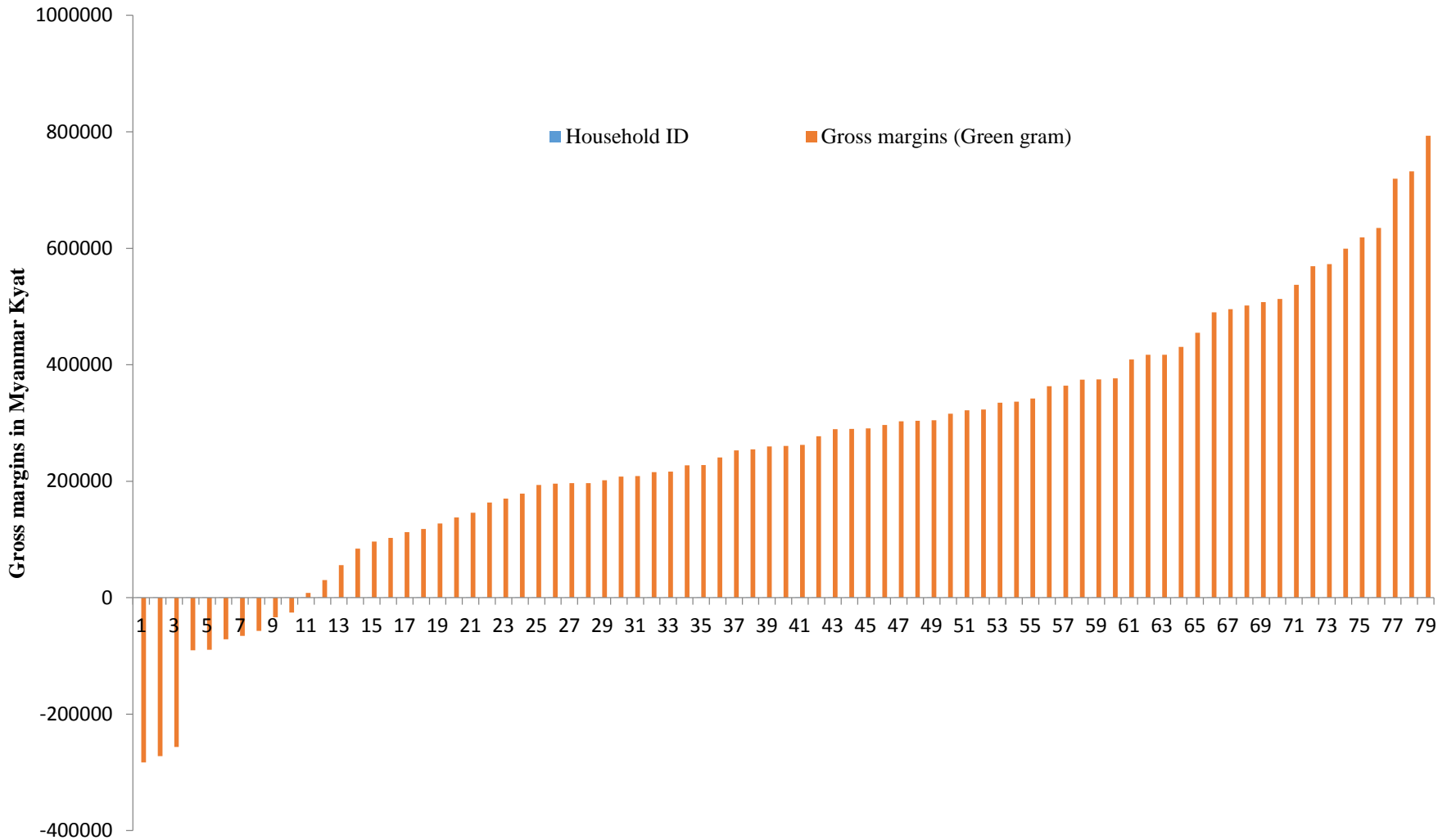
# Monsoon paddy: median gross margin 130,000 kyat / acre



# Dry season paddy median gross margin 175,000 kyat/acre



# Green gram median gross margin: 260,000 kyat per acre



# Conclusions

- Rapid transformation of the RNFE taking place close to Yangon, driven by migration
- Migration driven by urban growth & industrialization post 2012
- Leading to: Labor shortages, rising wages → mechanization of agriculture, growth of RNFE
- Growth of RNFE, supported by: Greater mobility (transport services), deeper market integration (labour, inputs, outputs), improving access to and terms of credit
- Mechanization supported by: Expansion of formal finance, falling machine costs, thriving rental markets, scale neutrality

# Conclusions

- Agricultural productivity and farm profitability appears to be growing more slowly than RNFE in the case study area
- Indicates need for more effective agricultural public investments and policies to assure sustainable rural economic growth dynamic, for example:
  - Access to improved varieties and information on improved crop management practices
  - Access to irrigation for expanded dry season crop production
  - Access to improved financial services for seasonal and medium-term credit as well as for savings
- New government agricultural policy and development strategy aims to improve profitability of farming
- YAU graduates have a key role as “change agents” (if you wear a motorbike helmet AT ALL TIMES)

**THANK YOU**

