Ghana's Agriculture, Food Security and Job Creation

Karl Pauw

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Overview

- What is agricultural economics about and how are we applying our skills to deal with the challenges we face?

- Reflections on agri-food system transformation in Ghana

- Planting for Food and Jobs (PFJ): the solution to agri-food system transformation and job creation?

What is agricultural economics?

"Agricultural economics ... used to deal with land usage, ... maximizing crop yield, while maintaining a good soil ecosystem.

Throughout the 20th century the scope became much broader ... now considerable overlap with conventional economics ... agricultural economists influence agricultural policy, food policy, development policy, and environmental policy..."

— Wikipedia

Two questions

1. Globally, the agricultural economics discipline has evolved, but is this true also in Ghana?

2. Does agricultural policy (or government structures) in Ghana reflect this evolution?

GAAE 2018 papers by theme
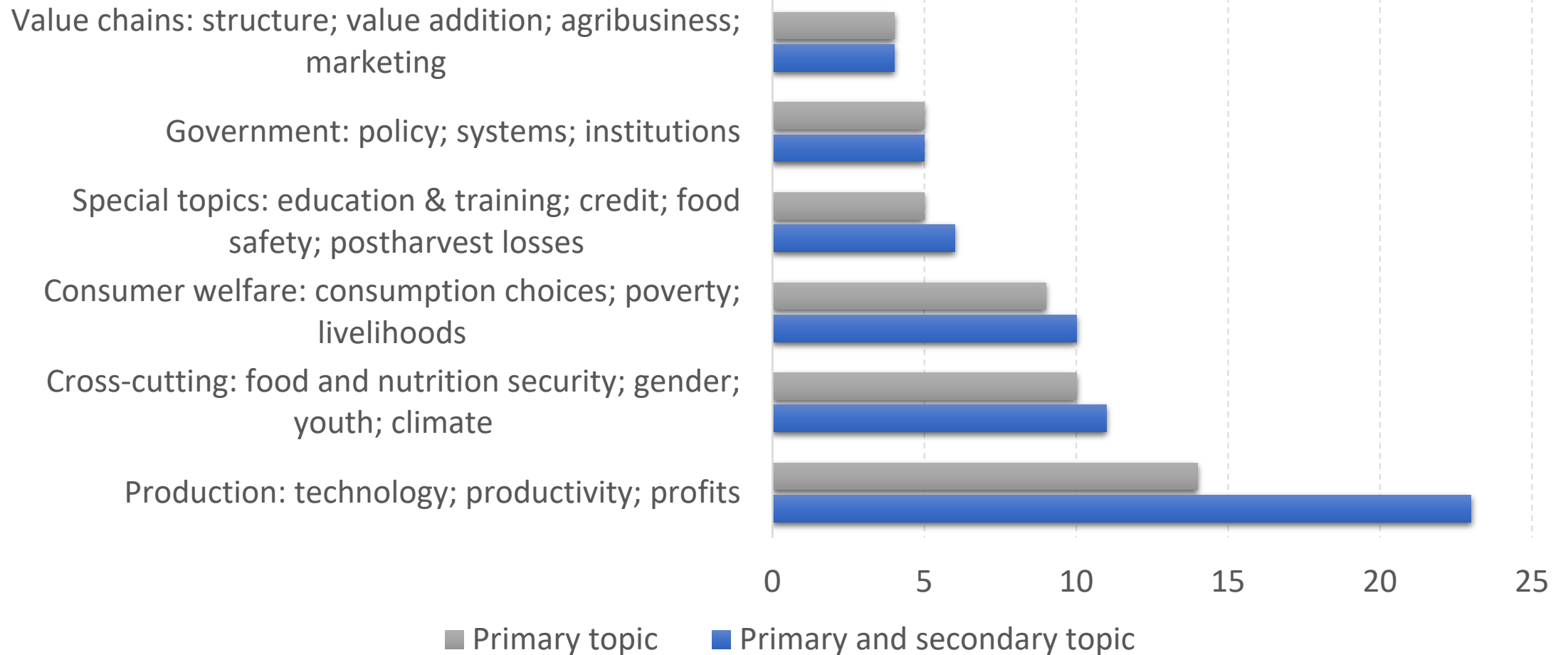
Ministry of Food and Agriculture

- MOFA remains largely concerned with primary production support
  - Technical Departments include Engineering, Extension, Crop Services, Plant Protection, Animal Production, Veterinary Services, etc.
  - Most major programs/projects emphasize inputs and production, e.g., FSP or AMSEC
- Some programs starting to adopt value chain approaches, which emphasize agribusiness and/or market access, e.g., GCAP, GASIP, MOAP, or PFJ
  - But the downstream aspects often neglected…
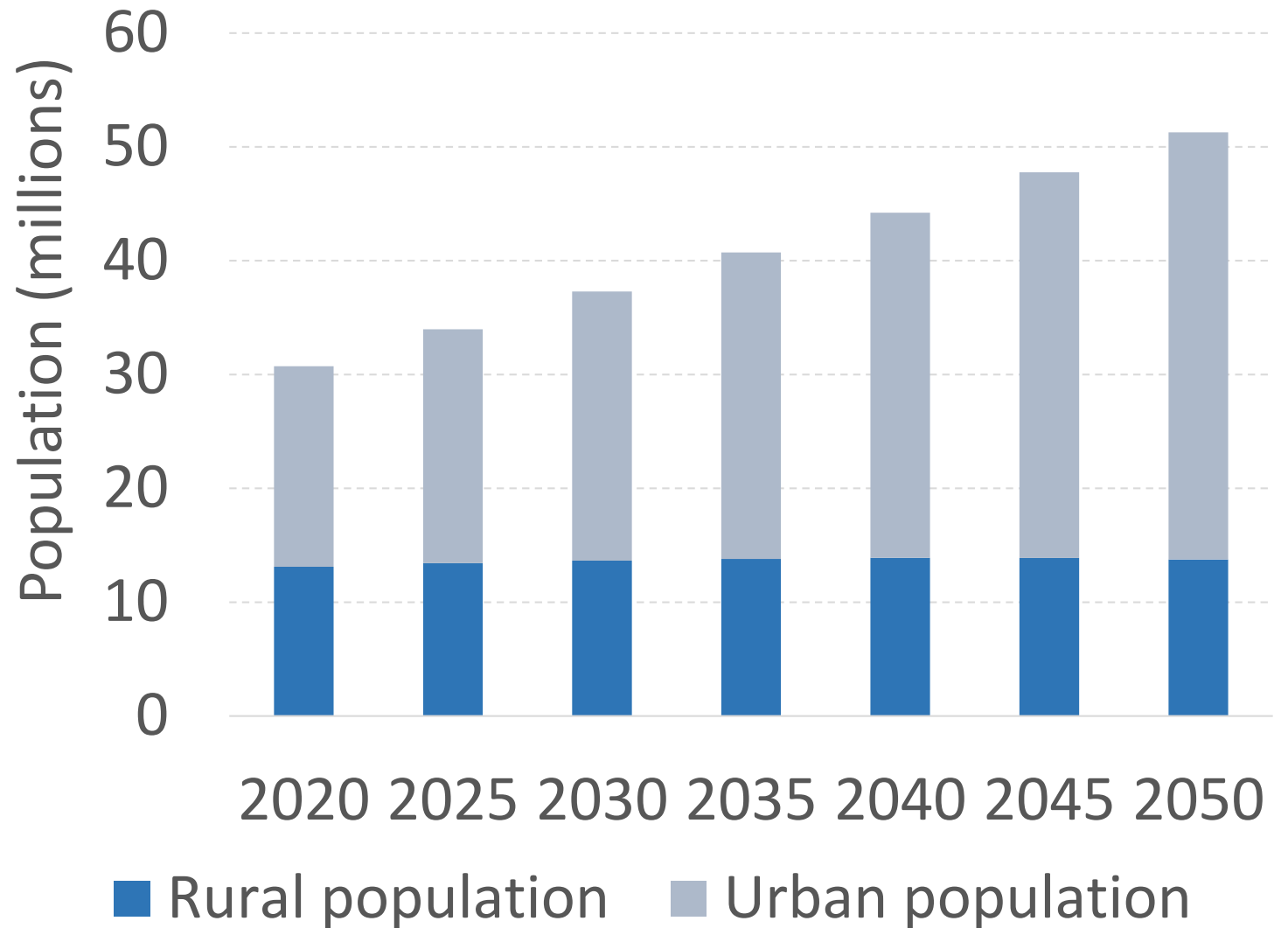
Agri-food system transformation

Demographics

- Ghana trends different from rest of Africa

- Pop. 30 million (2.2% growth but declining); 54.4% urban and median age of 20.5 years

- Rural population size already stable at 14 million (UNDESA 2018)

Population projections - Ghana

Rural population | Urban population

Migration and employment

- Rural labor moving into informal retail trade services characterized by low productivity and low wages (Diao et al. 2017a)
  - Economic growth was a result of a commodity boom rather growth-inducing structural change → clear need to create decent employment opportunities, in agroprocessing sectors perhaps?
- Rural households rapidly shifting primary employment from agriculture to non-agriculture (Diao et al. 2017b)
  - Especially women members of farm households reveal a preference for investing in food processing or trading activities (Lambert & Kramer 2017)
  - Service delivery implications: most farm households rank public roads, water infrastructure and education above subsidies or extension (Resnick 2018)

Agri-food sector performance

- Although AFS-GDP valued at 34% compared to 22% for "traditional" agriculture (Arndt & Hartley 2017), agroprocessing is relatively small (4%)

- In the face of significant consumption shifts towards processed foods, Ghana has developed a heavy reliance on imported foods:

  - Food imports tripled (GH¢ 1.5–4.5bn) during 2009–2013 (GSS 2014), with large amounts of forex spent on even basic food items

  - Imports make up ±10% of primary agricultural products and 47% of agroprocessing products (Arndt and Hartley 2017)

Why is the AFS not transforming?

- Urbanization, income growth, changes in consumption patterns, import substitution potential and low manufacturing base all suggest significant <u>scope for expansion and modernization</u> of the AFS

- But this has not happened in the last decade. **Why?**

- Production challenges linked to adoption & appropriateness of agricultural technologies (Van Asselt et al. 2018a,b; Houssou et al. 2017) → lack of competitiveness

- Market uncertainty facing producers and/or agroprocessing firms (Fafchamps 1992; Andam et al. 2017)

Why is the AFS not transforming? [cont.]

- Challenging business environment (Gelb et al. 2014; World Bank 2017) associated with high dropout rates and job losses among food processors (Andam & Asante 2018)

- Agricultural policy over-emphasizes production support rather than considering what the *market* demands and working backwards from there to remove bottlenecks along entire value chains

Planting for Food and Jobs

Planting for Food and Jobs

- Flagship agricultural transformation strategy
- Design: 50% fertilizer subsidy; 50% seed subsidy (new component); extension; marketing infrastructure & information; processing capacity; etc.
- Objective: boost agricultural production; facilitate market linkages; create jobs along value chains

  → But budget skewed

- Impacts (2017):
  – 200,000 farmers targeted
 – Agricultural produce valued at GH¢ 1.2bn (US$ 267m) and 745,000 jobs created (96% on-farm)

PFJ budget allocation
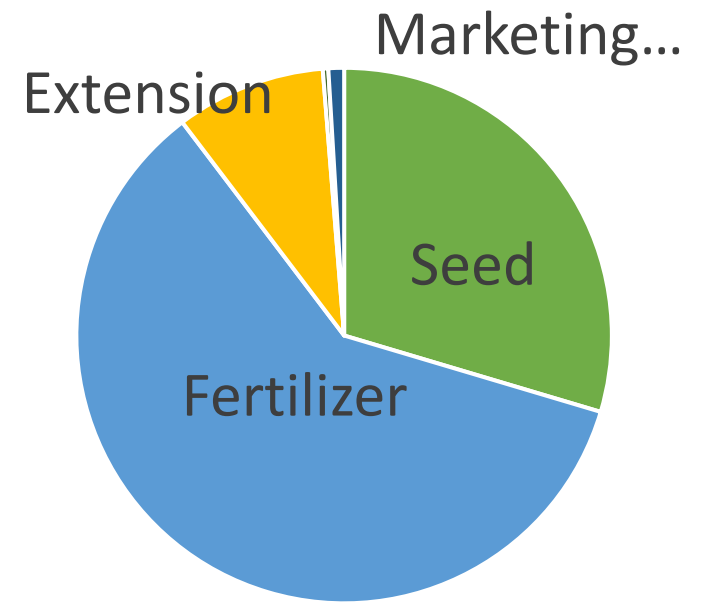
RIAPA model analysis

- Recursive-dynamic CGE model with detailed economic structure and resource constraints

- Specifically designed to capture impacts within agri-food system (AFS)

- Subsidy scenarios (FSP, PFJ) using "latent sector" approach
  - Input use efficiency
  - Downstream capacity to absorb output
  - Risk (global markets, weather, etc.)
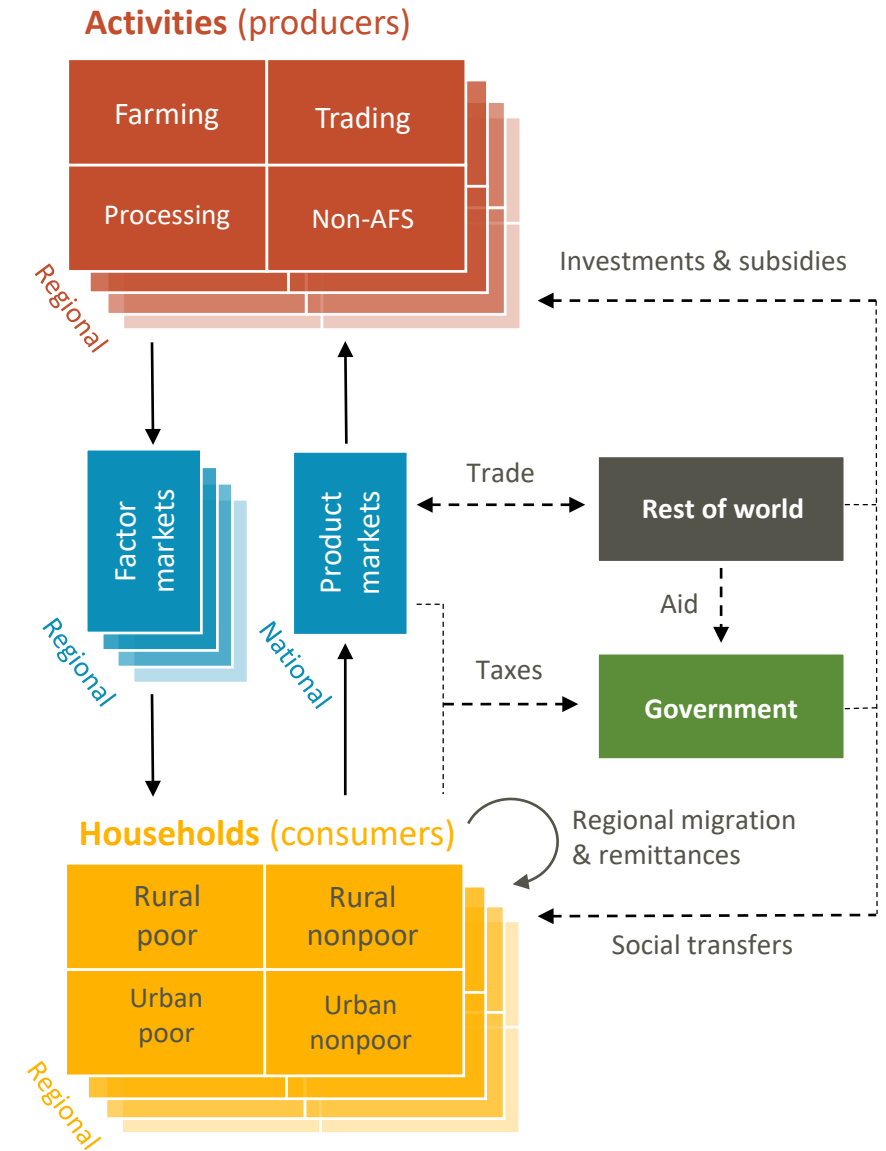
GDP gains ($ millions)
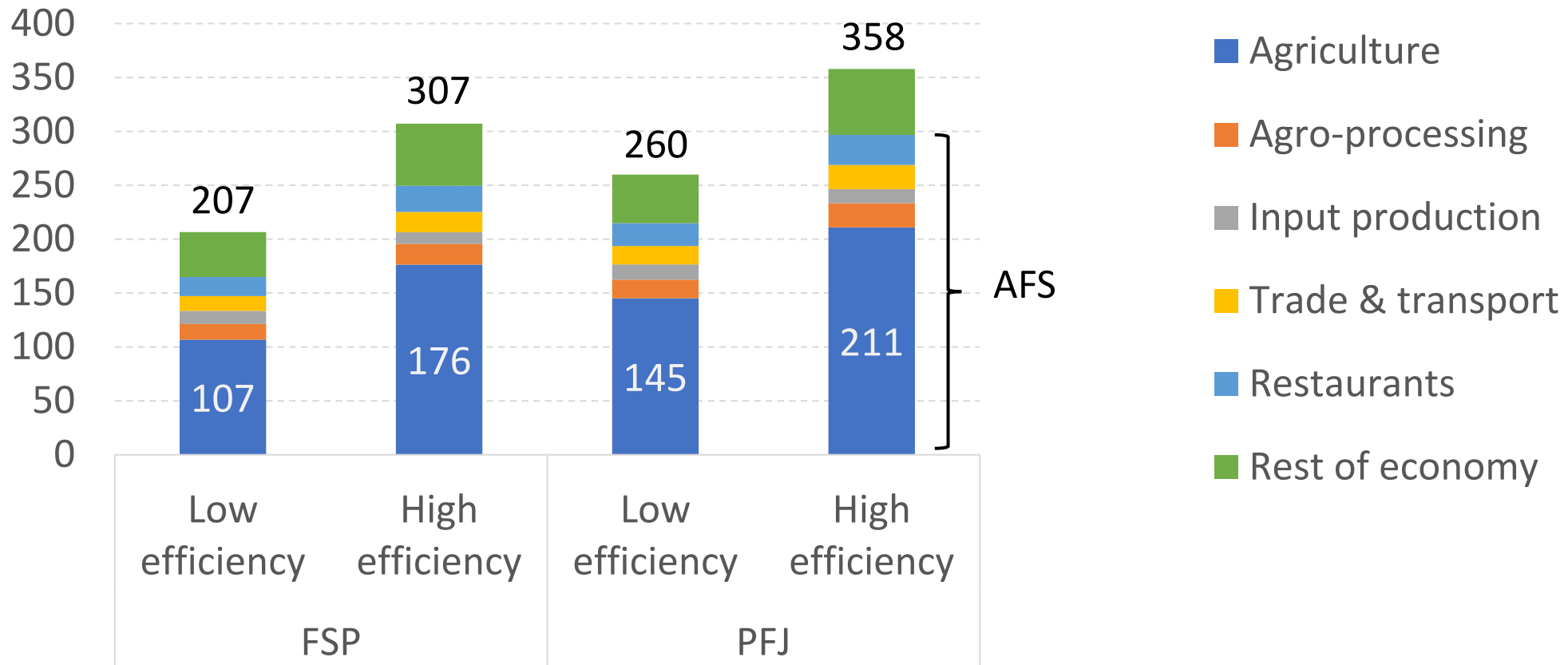
Employment changes ('000)
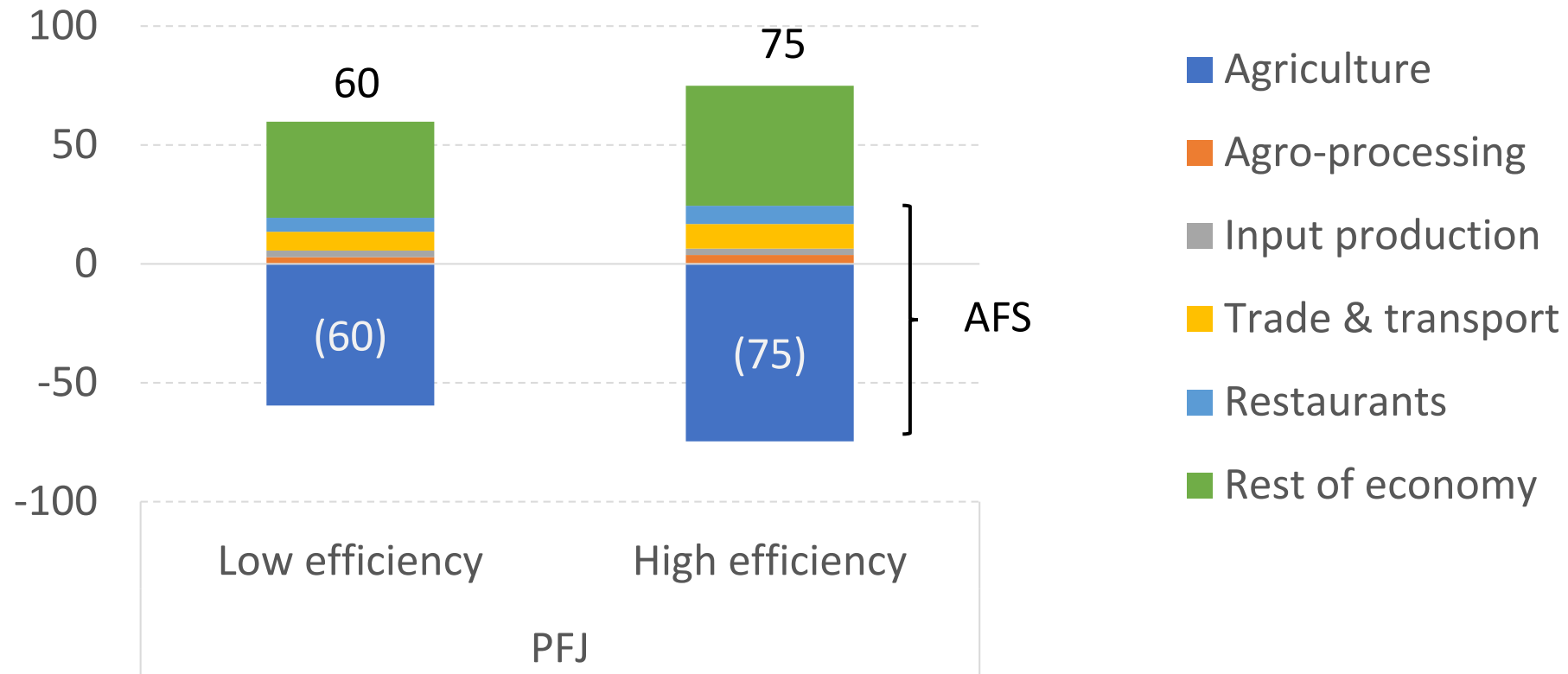
Policy conclusions

- Agriculture is (and will continue to be) an important source of employment and livelihoods, and inter-industry linkages are strong

- But perhaps this has led to *flawed reasoning* that production support creates jobs directly and indirectly

- PFJ has potential to improve food security and transfer benefits to farmers, but not necessarily a solution to job creation

Towards a research agenda

- Continue to support government in areas of agricultural input policies, mechanization, technologies, etc.
- Also emphasize other aspects of the agri-food system
  - Agricultural competitiveness, markets, and trade policy
  - Agroprocessing and value chain development
  - Consumer preferences, food quality and safety, diets and improved nutrition
  - Public investment strategies
  - Institutional analysis and governance

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