

Perspectives for rice production in Africa

Implications for Asian Exports

F. Rösner, N. Amengor

agri benchmark Cash Crop, CSIR-CRI Kumasi



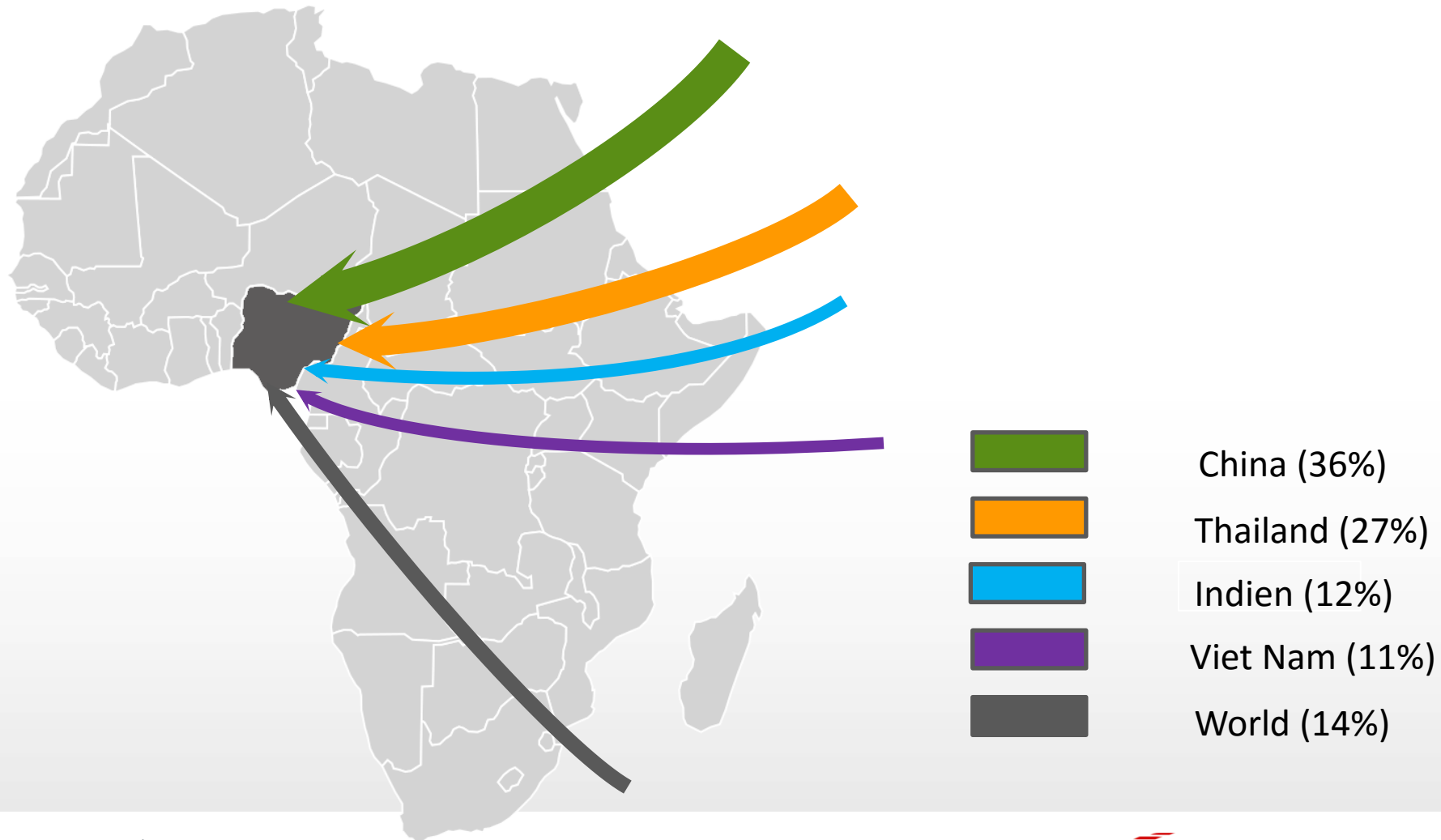
Overview

- 1. Introduction – Africa and Rice**
- 2. Rice in Ghana**
- 3. Economic performance of rice producers in Ghana, Burkina Faso and Nigeria**
- 4. Perspectives for rice Thai exports to West Africa**

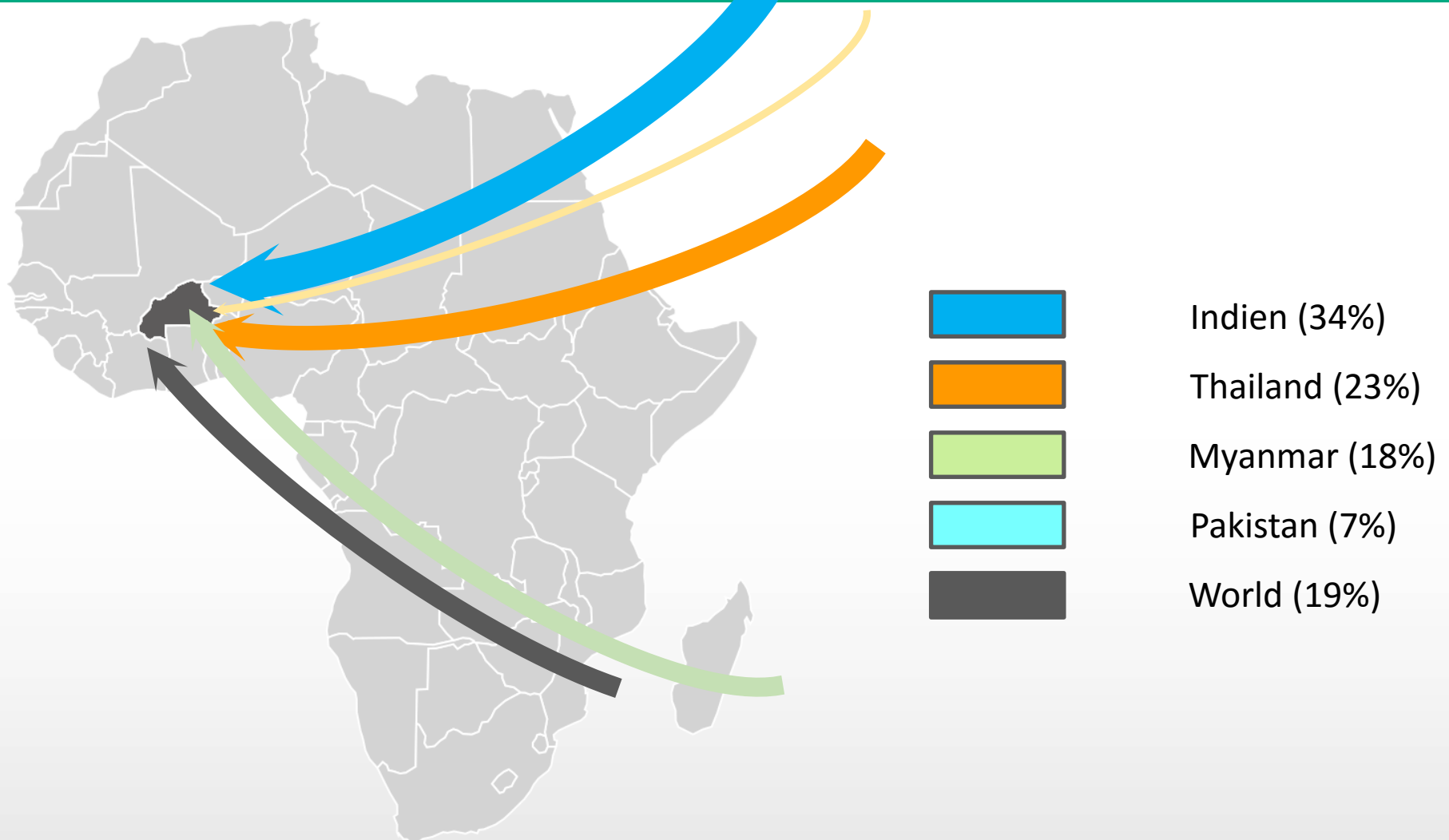
Import situation

The largest rice-importing region in the world is Sub-Saharan Africa, but the bulk of its imports are supplied by low-priced Asian exporters. (USDA, 2014)

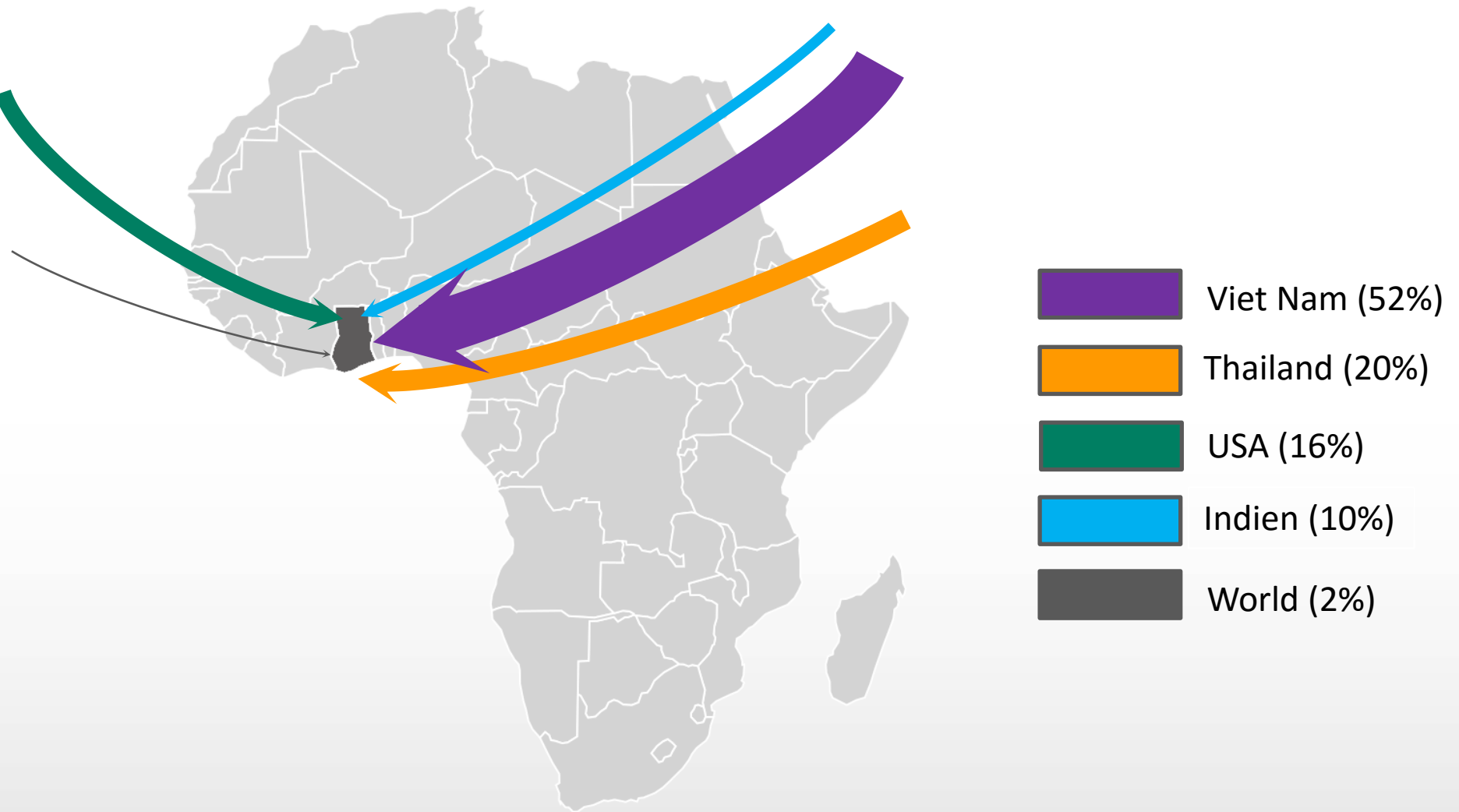
Rice imported by Nigeria 2013 (t)



Rice imported by Burkina Faso 2013 (t)



Rice imported by Ghana 2013 (t)



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What would have to happen for that picture to change?

Insights into Ghanaian rice

Natson Amengor – CSIR Kumasi



Background: Ghana

26 million people

Area: 238,538 km²

- Arable land: 58%

Share of agriculture in GDP: 22%

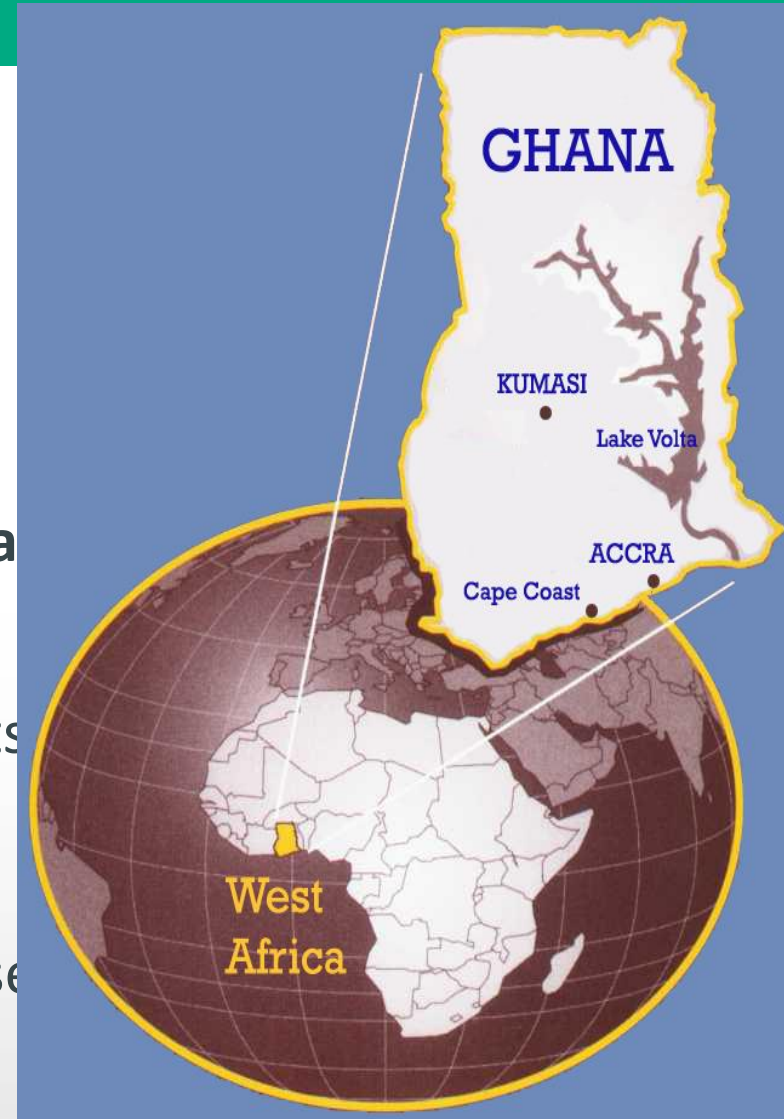
Employs 45% the active workforce (smallholder)

Agricultural Exports

- Cocoa, Timber, Horticultural Products
Wildlife

Mineral Resources

- Petroleum, Gold, Bauxite, Manganese



Rice in Ghana

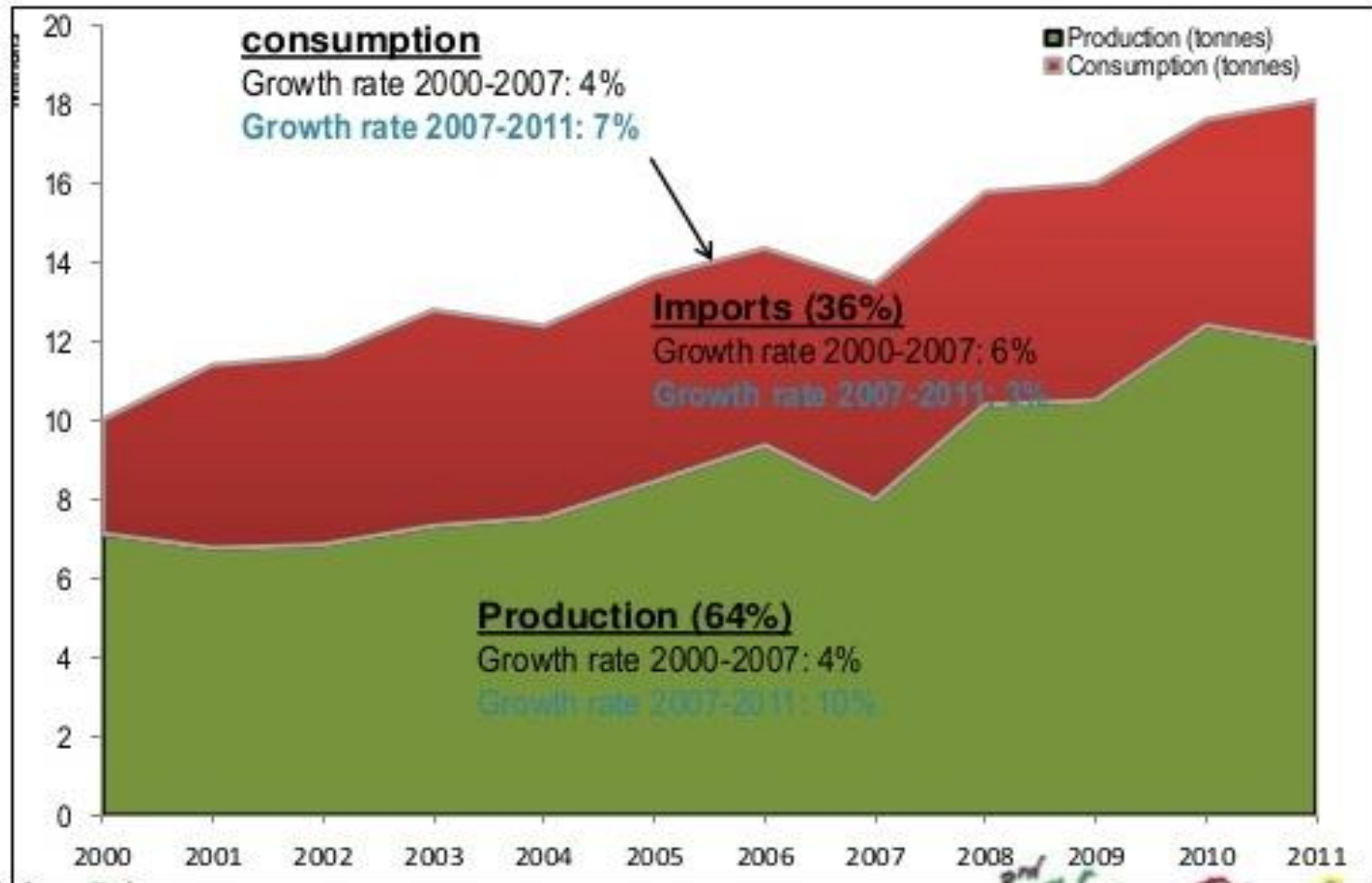
Rice is the second most important cereal after maize in Ghana.

National and agricultural development plans and strategies for increased rice production:

- Ghana Poverty Reduction Strategy (GPRS I), Growth and Poverty Reduction Strategy (GPRS II),
- Food and Agricultural Sector Development Policy (FASDEP) I & II,
- Medium Term Agriculture Sector Investment Plan (METASIP),
- Accelerated Agricultural Growth and Development Strategy (AAGDS)

Research Interventions: Upland Rice Project, Rice Sector Support Programme/ GM Rice (NUE & NEWEST)

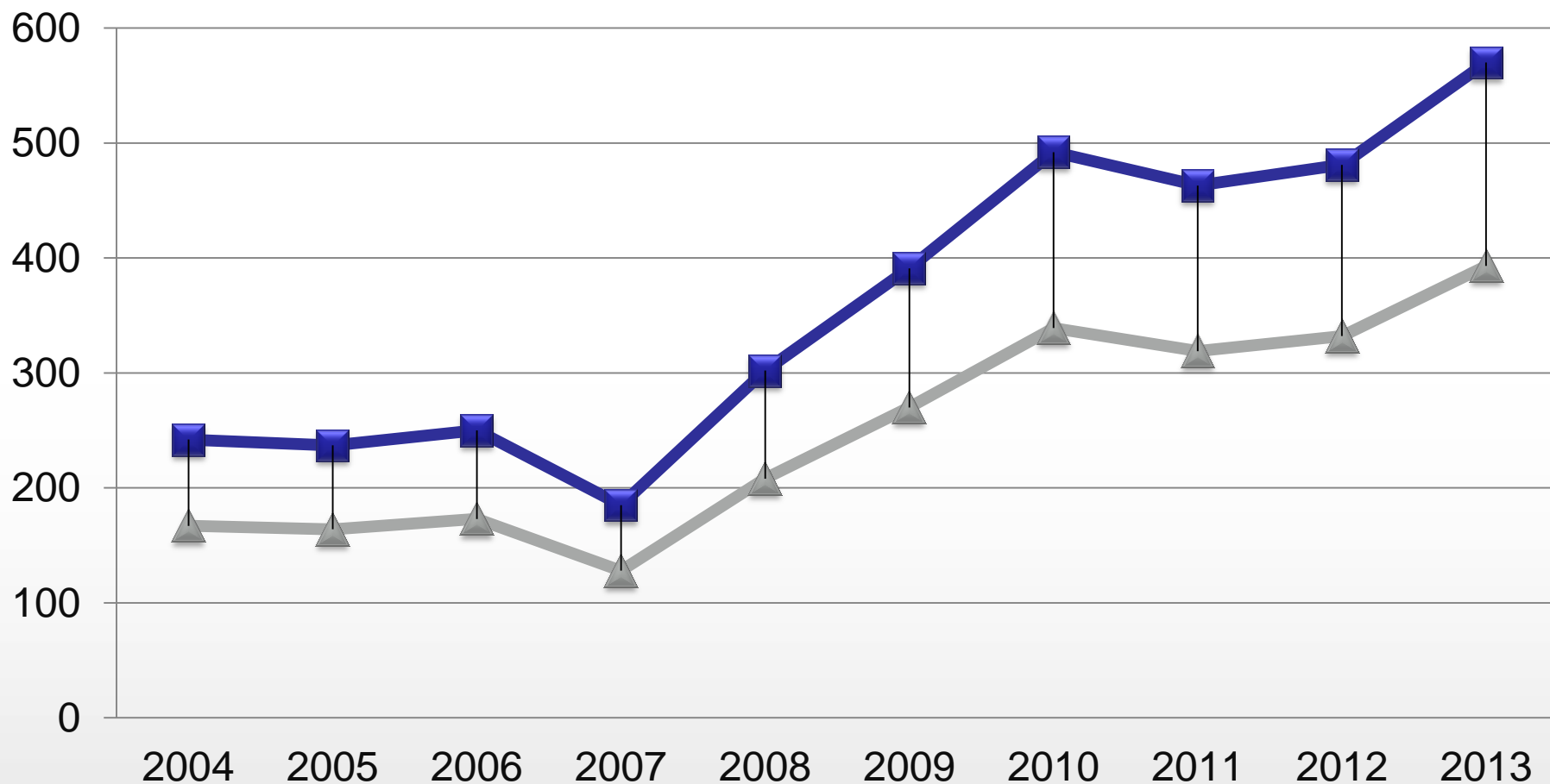
Imported rice and rice production in West Africa (2000-2011)



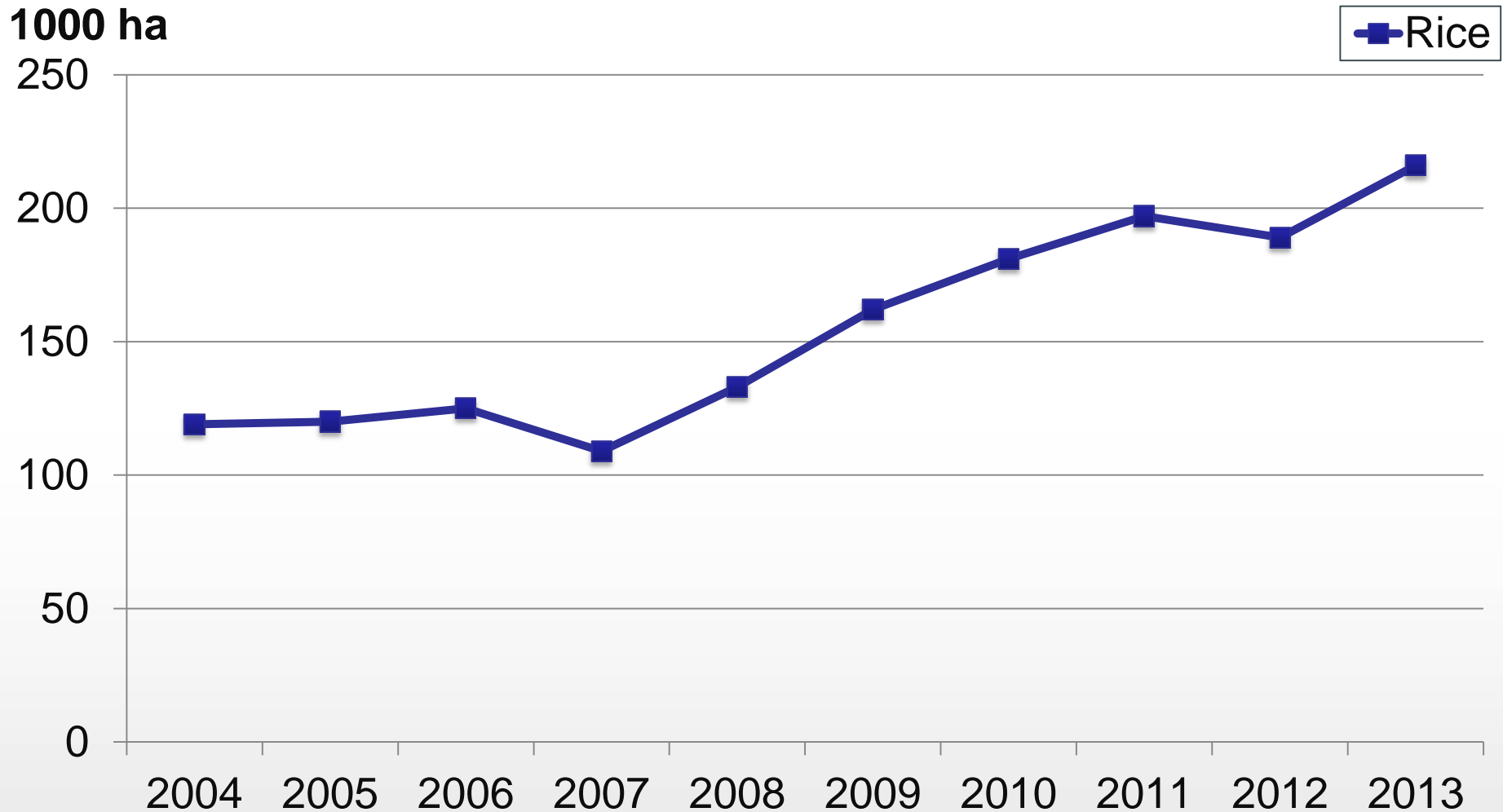
Evolution of national rice production

1000 tons

■ Rice (paddy) ▲ Rice (milled)



Evolution of total rice acreage (2004 -2013)



Domestic demand

VARIABLES	STATISTICS
Per Capita consumption	58.0 kg (per annum)
Population	26 million people
Total demand	950,000 tons
Current production milled rice	400,000 Tons
Deficit	550,000 tons
Current Self sufficiency ratio	42%
Source: SRID-MOFA, 2014/ GSS, 2014	

Productivity

Redeeming the deficit:

1. Importation of milled rice
2. Increase area of production
3. **Increase productivity per unit area**

AVERAGE YLD T/HA	ACHIEVABLE YLD T/HA	% OF ACHIEVABLE YIELD
2.6	6.5	40

Rice growing systems

Upland **5%**

Rainfed lowland **85%**

- Favourable
- Unfavourable

Irrigated **10% of total area**

IRRIGATED RICE SITE IN GHANA

Location	Potential area (ha)	Developed area (ha)
Ashiaman	155	135
Dawhenya	450	191
Kpong	3,028	1,400
Weta	880	880
Aveyime	280	60
Okyereko	100	40
Nobewam	150	120
Bontanga	450	450
Golinga	40	26
Kikam	27	27
Tono	2,400	2,400
Vea	1,000	1,000











Looking into the future

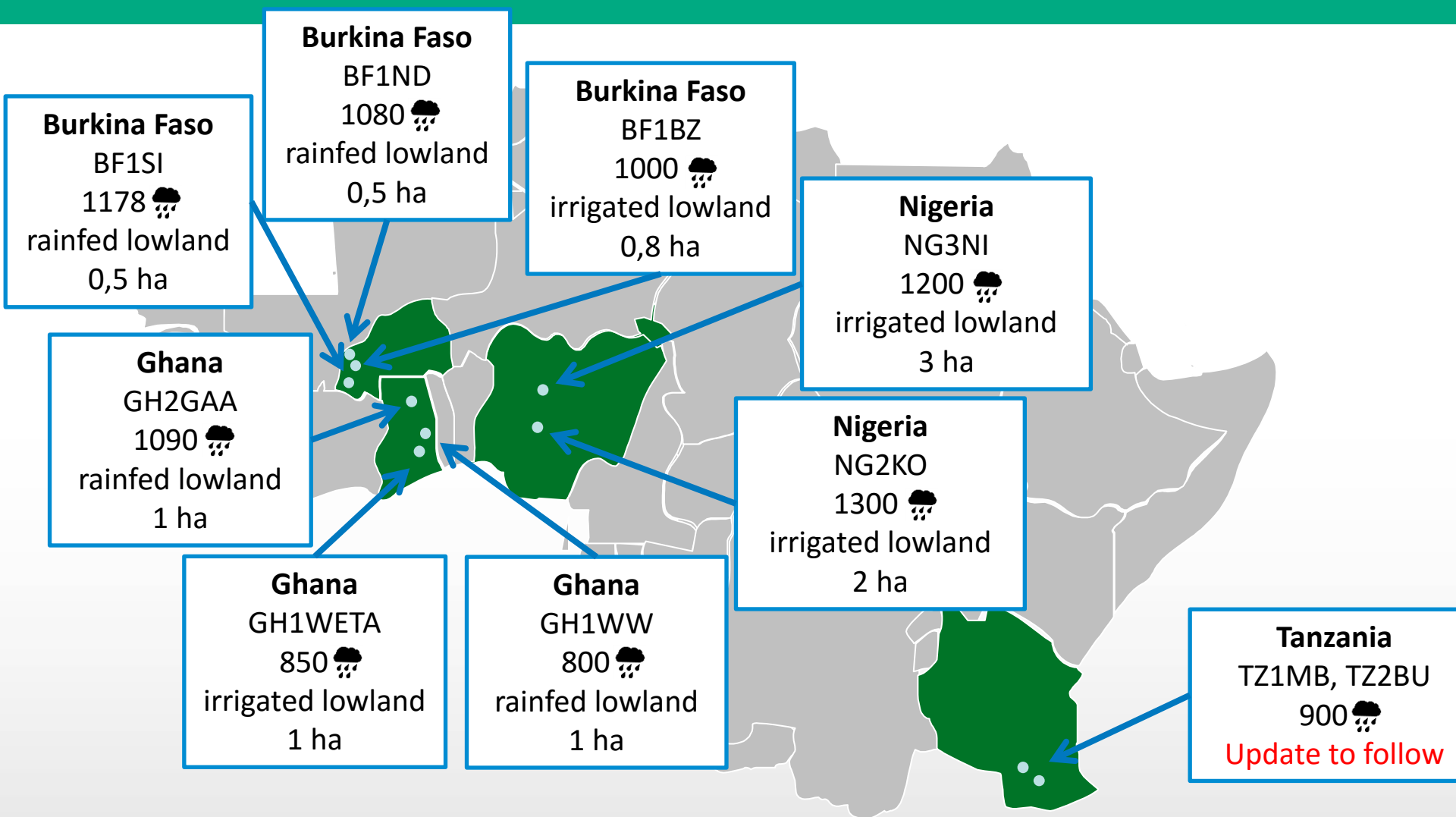
- **Intensive farm mechanization to increase area cultivated.**
- **Modern processing plant to improve quality of milled rice.**
- **System of rice intensification to increase productivity per unit area.**
- **Full utilization of irrigation schemes will boost production.**



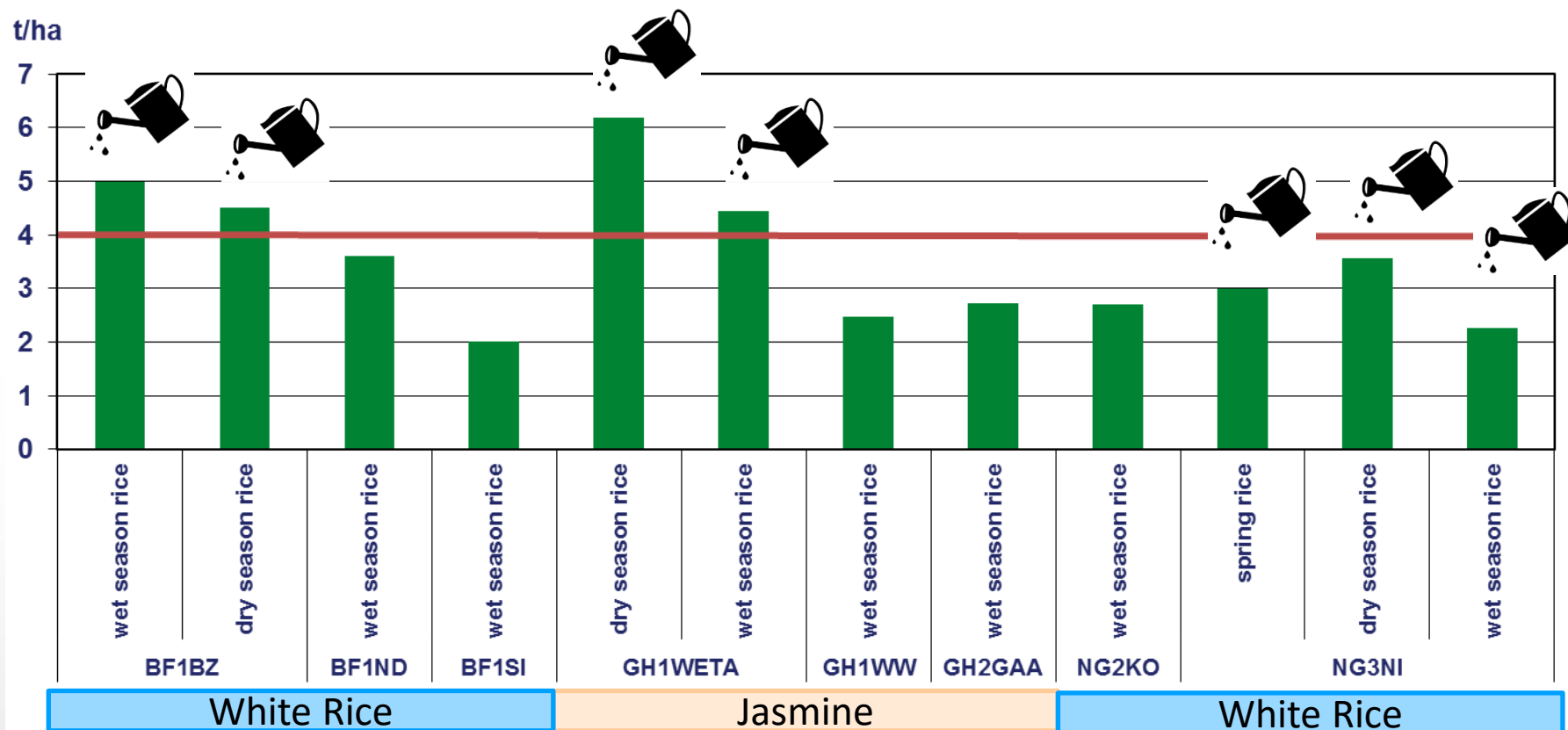
THANK YOU



agri benchmark rice partners in Africa



Yields 2015



Nursery and planting operations



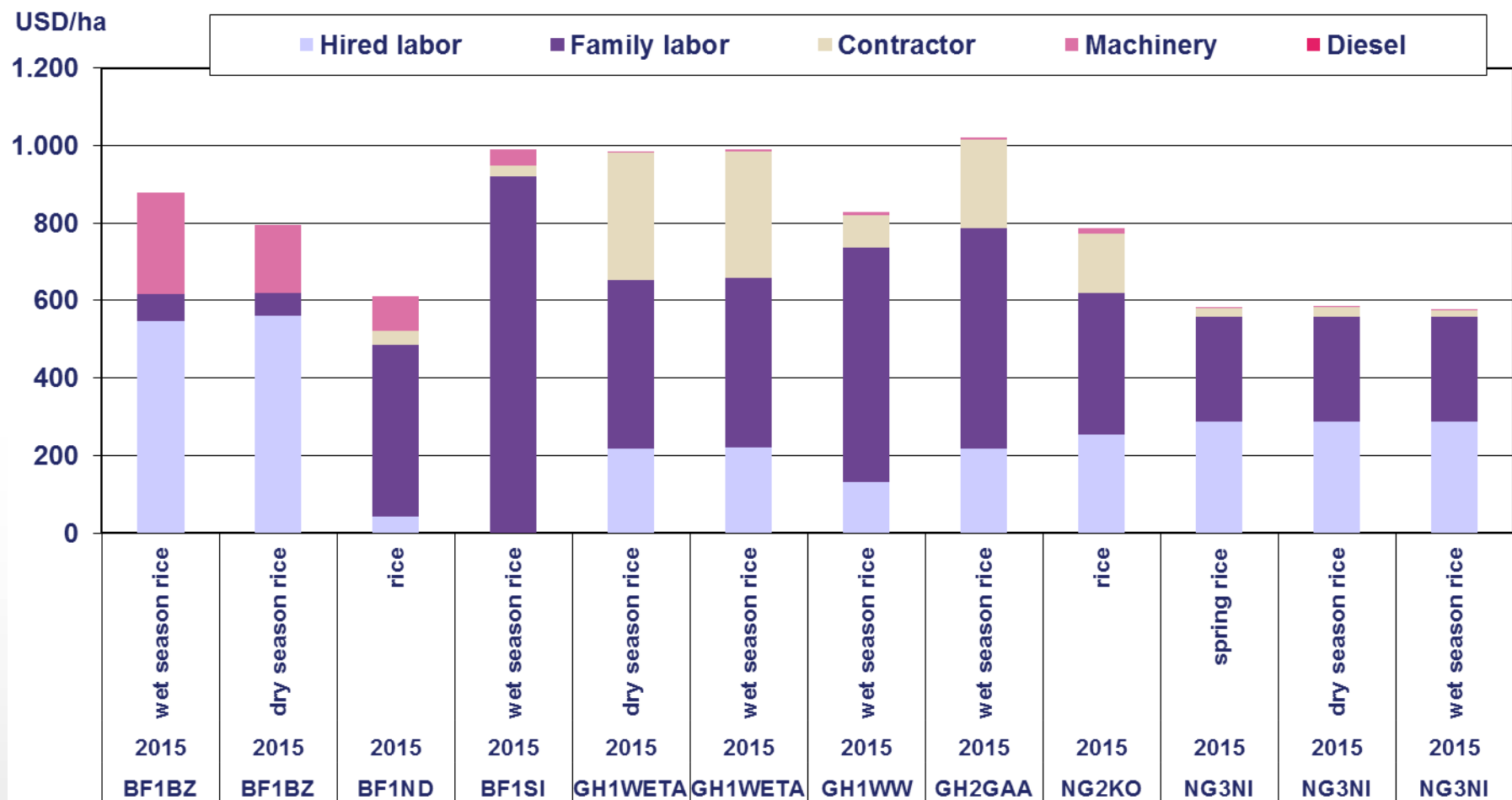
Mechanization



Drying



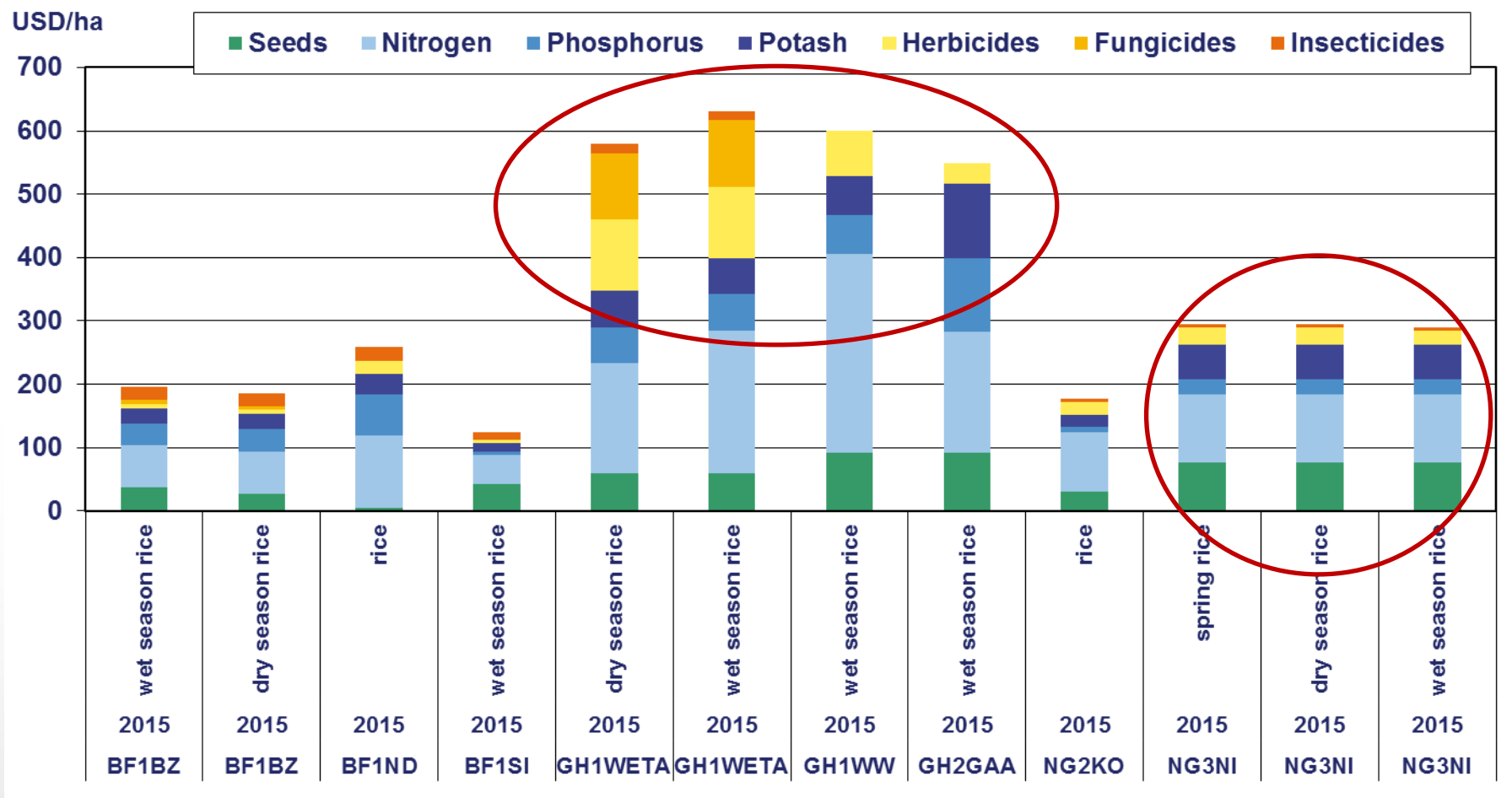
Operating costs per ha 2015



Take home lesson I

Highly labor intensive systems that depend on manual labour for operations like transplanting, ploughing or threshing.

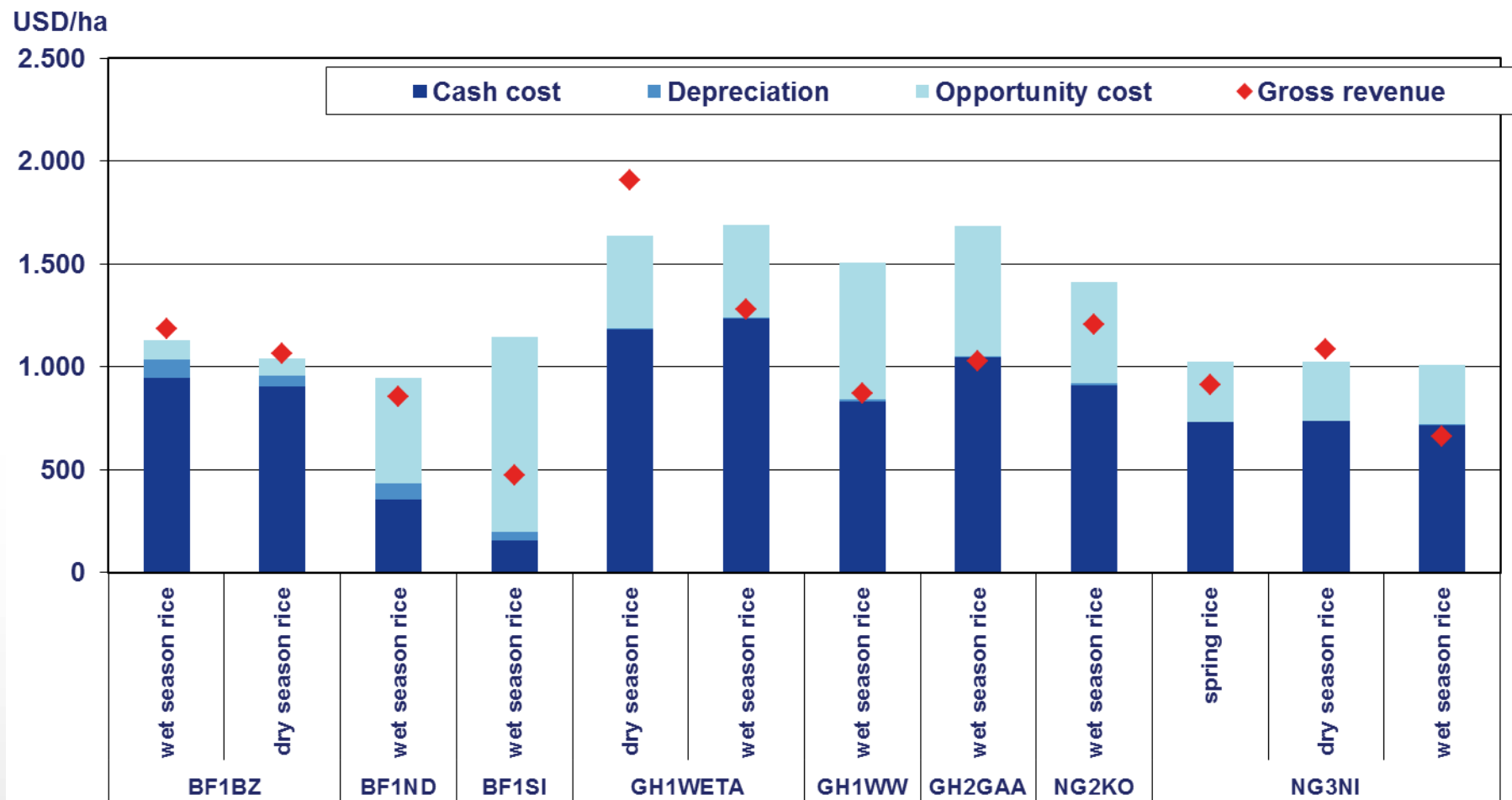
Establishment costs



Take home lesson II

- **Inputs are often applied according to the book disregarding the necessities of the locality or sometimes even the season.**
- **Input costs are extreme in Ghana.**

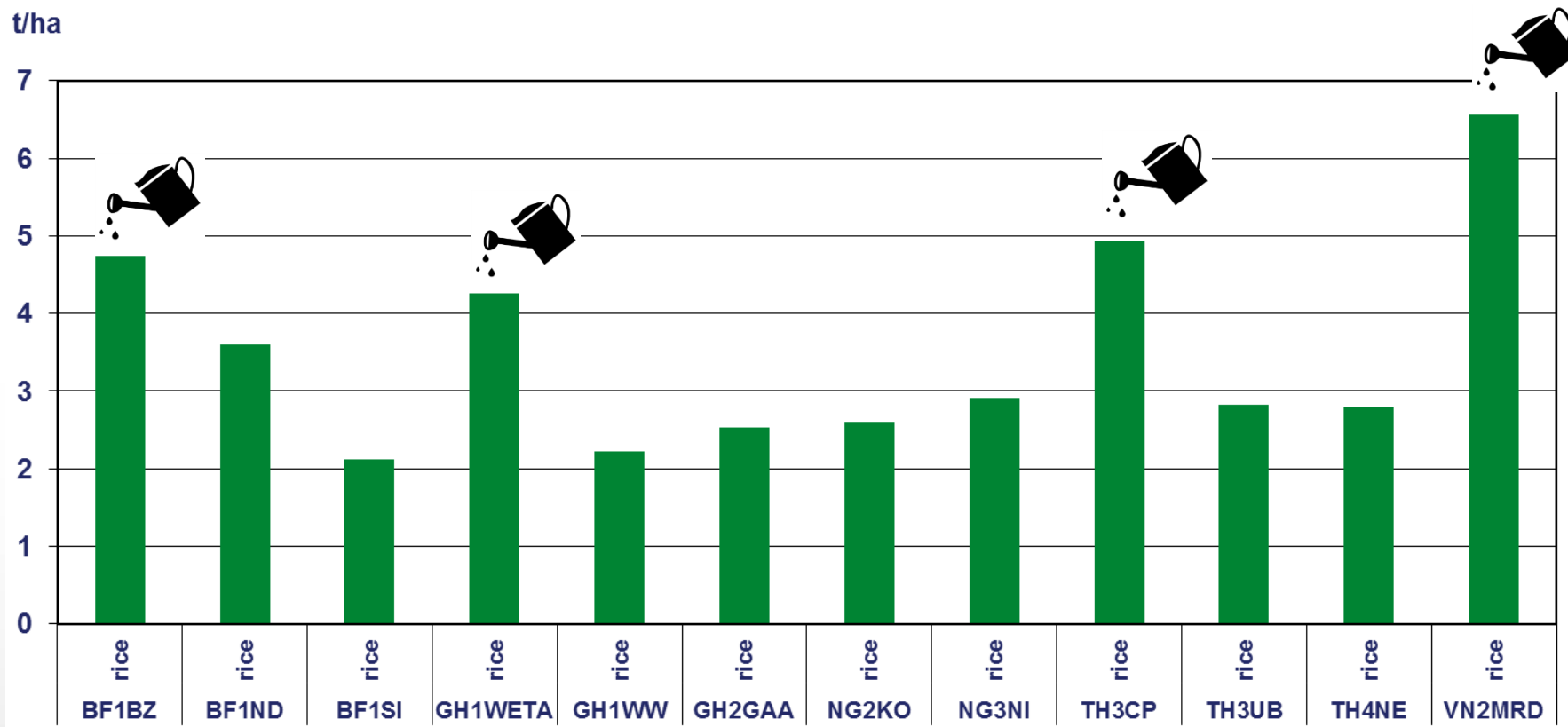
Total cost and gross revenues in 2015



Take home lesson III

Most farms in the sample manage to cover their cash costs but are not profitable when opportunity costs are taken into consideration.

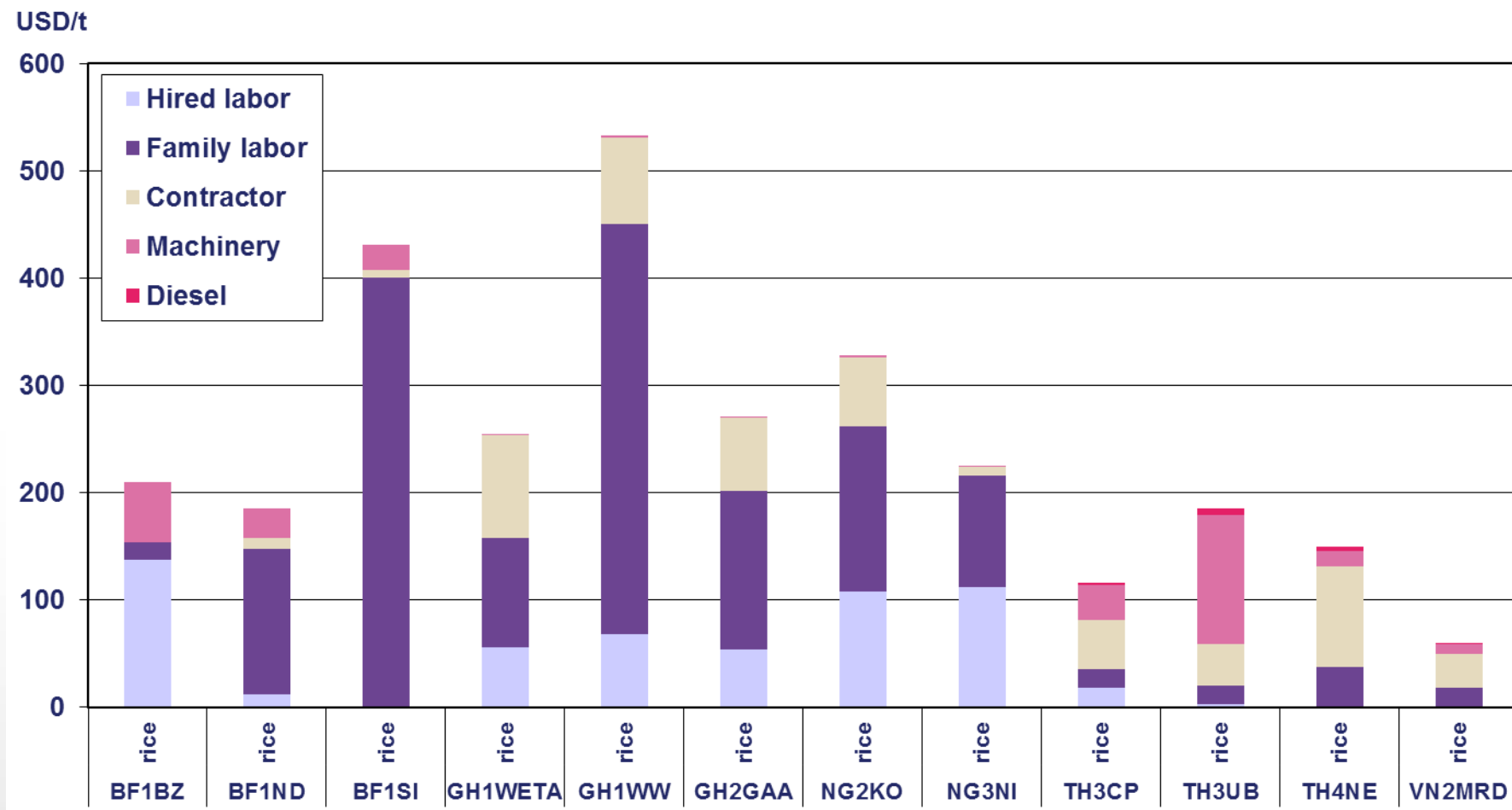
Yields (2014,2015) per crop



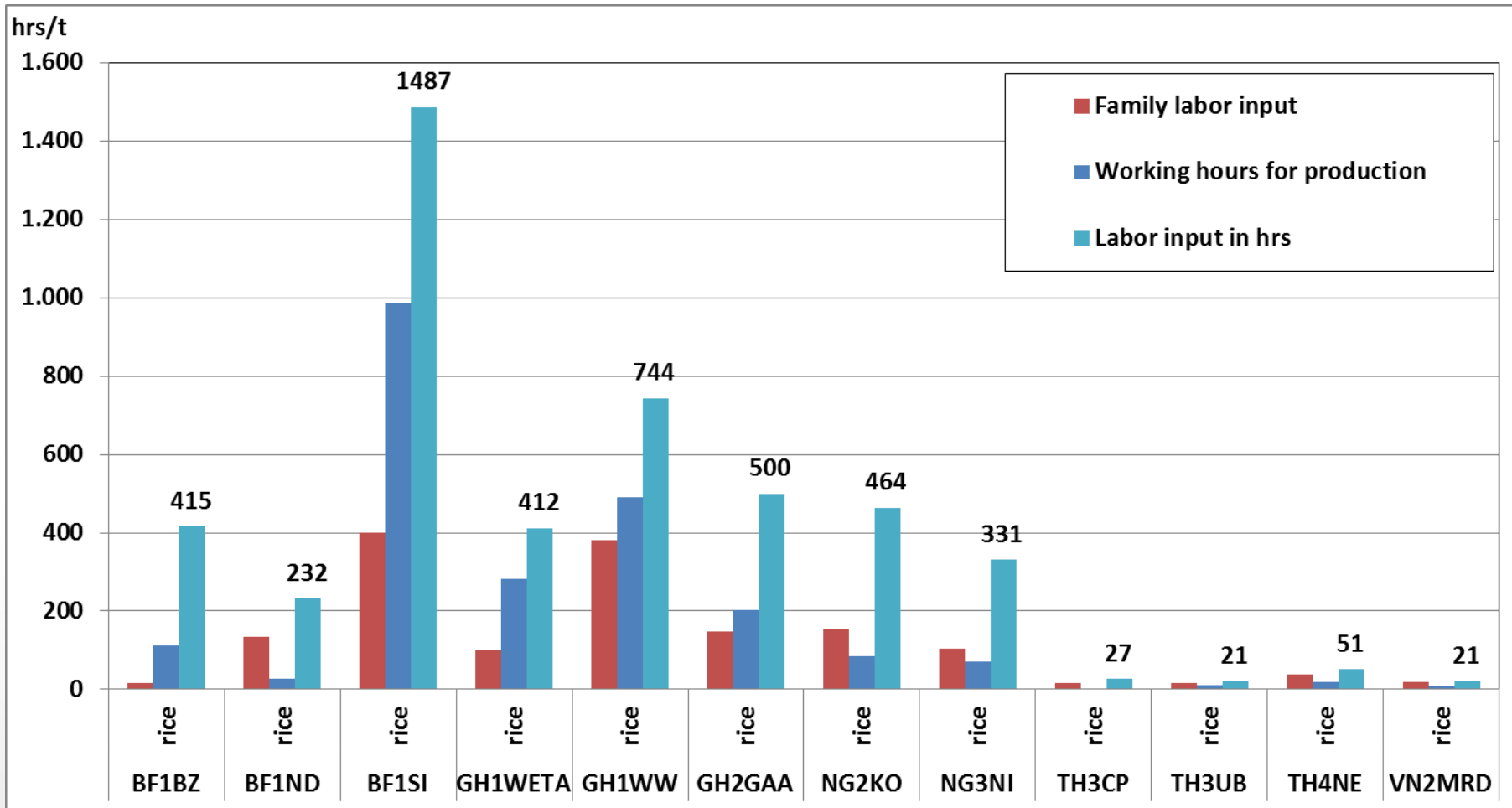
Take home lesson III

Yields in irrigated farms are already comparable to their SEA competitors.

Operating cost (2014,2015) per crop



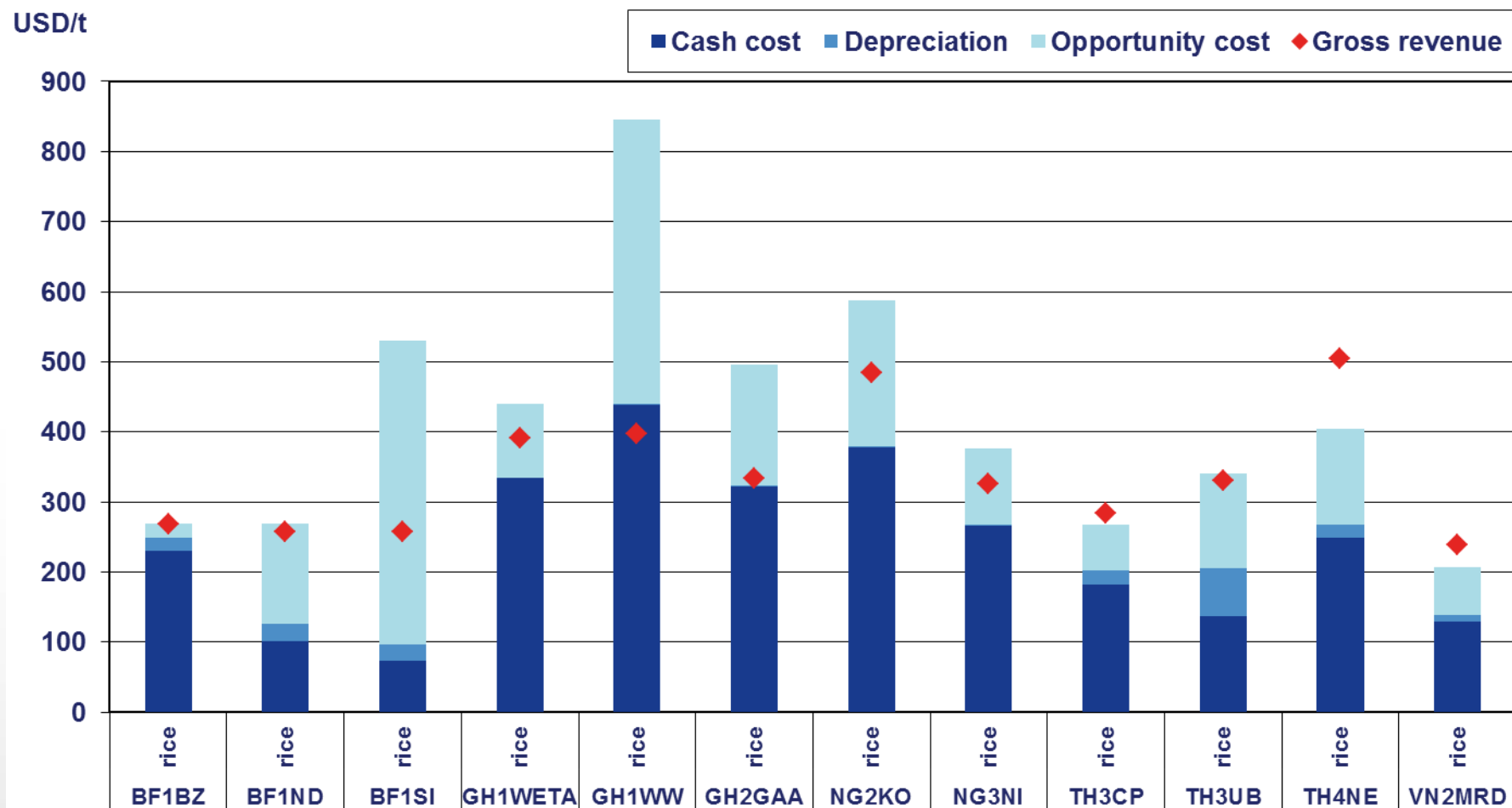
Total labor input and labor input for operations (2014, 2015)



Take home lesson iV

Overhead hours make the West African agri benchmark farms inefficient and drive costs especially in farms with low yields.

Total cost and gross revenue (2014,2015)



Take home lesson V

On per t basis typical farms from SEA outcompete their West African counterparts easily through their better yields and lower operating hours i.e. operating costs.

SEA rice farms have a competitive advantage.

Concluding remarks

- **Growth in West African rice production so far was related to increase of rice area, not rice yield.**
- **Without improvements of yields and lowering of operating costs, reduction of imports in WA seems unlikely. (+imports)**
- **Quality of imports is often different (higher) than that of national production and urban consumers prefer imported rice for its features. (+ imports)**

Thank you for your attention!

Friederike Rösner

agri benchmark Cash Crop

Friederike.Roesner@thuenen.de



Natson Amengor

CSIR Crop Research Institute
Kumasi

senatornatson@yahoo.com