

A Private Sector View

Agriculture and Food Trade in the New World Order

World Agricultural Forum, 6th July 2017



Populism and Trade

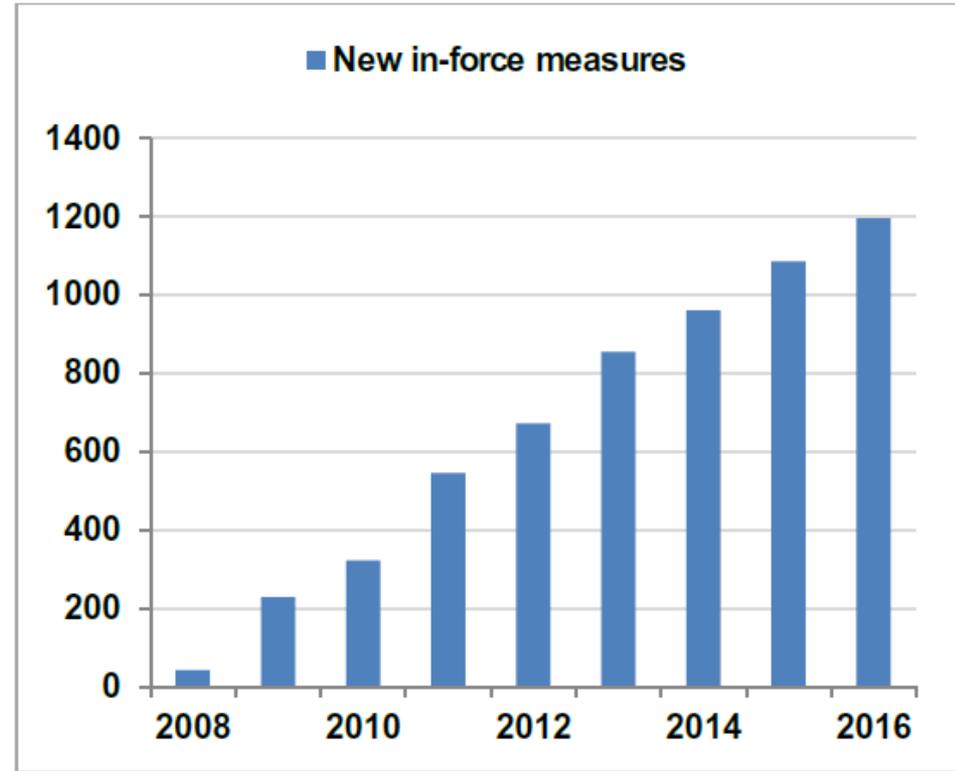
Domestic agricultural produce not globally competitive



Demands for protection against foreign agricultural produce



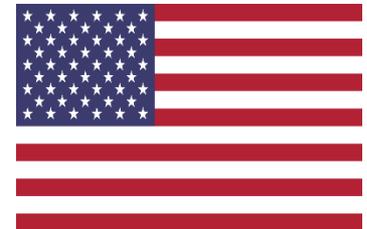
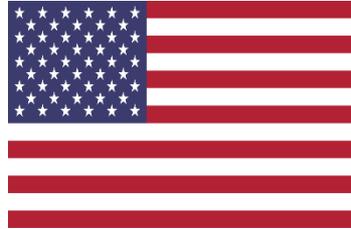
Intensification of protectionism



New Trade Restrictions in G20 Countries (Source: OECD, 2016)

Changing Trade Patterns

The old international trade patterns are collapsing



- Brazil overtook the U.S. as the top exporter of Soybeans in the MY 2012/2013
- Brazil's corn production expanded, it is now the 2nd largest corn exporter, just behind the U.S.

- Russia set to overtake the U.S. and EU as the top wheat exporter in the world in the 2016/2017 MY

Changing Trade Patterns

China as the world's new largest agricultural market

- China produces over 20% of the world's cereal grain, 25% of the world's meat and 50% of the world's vegetable
- China became a net agricultural importer since 2004 – imports 40% of the world's Cotton and over 60% of the world's soybean
- Its produce are still globally competitive – China exports 14% of the world's aquaculture produce and 5.6% of world's vegetable exports



Possible Responses



Invest
into emerging markets



Diversify



Drive
innovation in agriculture

Investing into emerging markets

A case in point: Myanmar

Resource Availability

- Myanmar has control over 19,000 m² of water per capita, which is about **9 times of available level in China and 16 times of India**
- Potential **expansion of cultivated land by nearly 50%**

Deregulation

- The state's 2012 Farm Land Law and VFV Law makes **land concession accessible** to investors
- New **streamlined processes and tax incentives** due to the new Investment Law

Strong Demand for Agri-Technology and Seeds

- Myanmar's **crop yield still one of the lowest in Asia** despite rapid growth
- There is strong demand for **agricultural technology** and **high yielding imported seeds**

Investing into emerging markets

A case in point: Vietnam and Cambodia

Share of Food Crop

- The Vietnamese and Cambodian farms are still focused on rice cultivation
- Huge potential of diversification to other cash crops such as Maize and oilseeds

State Support

- The Vietnamese government has preferential policies in taxes, credit and land for investors in agriculture
- Cambodian government has invested in rural infrastructure and irrigation, facilitating farm expansion

Strong Demand for Agri-Technology

- Vietnam's agriculture output per worker is a third of Indonesia's and less than half of Thailand's
- Cambodian growth derived from using more inputs rather than technology – great potential for agri technology

Investing into emerging markets

Africa as the new frontier of growth

- **Resource abundance in Africa**– availability of 60% of the world’s arable land
- Agricultural land can be bought or leased at a **very competitive rate** - in **Ethiopia**, per hectare of land was rented out to investors for **\$3/ ha**
- The government has been proactive – the **Ethiopian ATA** engaged in seed and fertilizer distribution to improve productivity



Diversify

Specialty Crops as the Crops of the Future

Specialty Crop: Pulses, Beans, Legumes

1

Specialty crops cultivation require less water

2

Specialty crops make healthier food choices

3

Specialty crops cultivation enhances soil fertility

4

Specialty crops are more affordable



Diversify

Specialty Crops as the Crops of the Future

Illustration – Cost of Protein

	Yellow Pea	Soybean
USD/bu	6.41	9.35
USD/lb	0.1069	0.1558
Protein content	23%	42%
USD/lb of protein	0.02	0.07

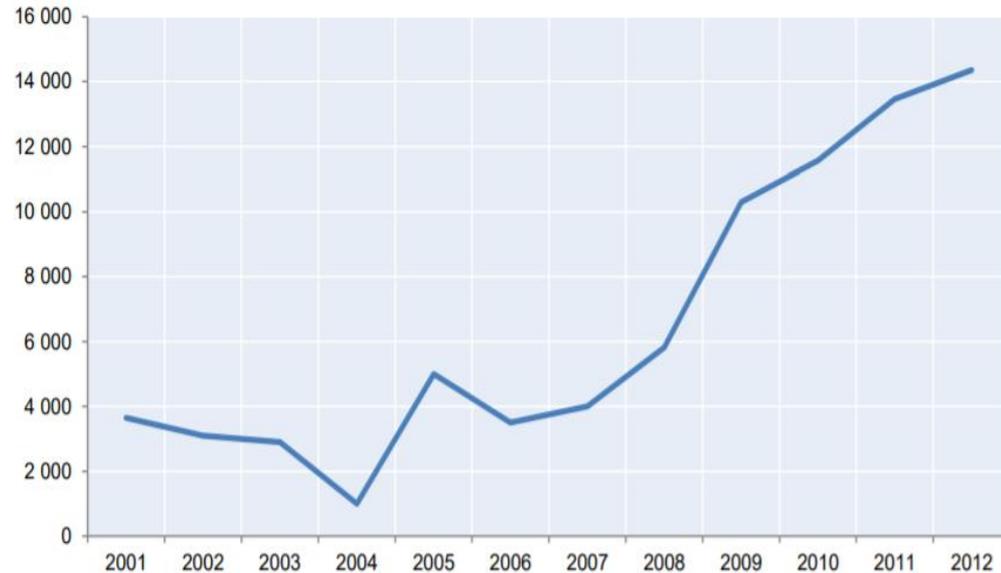
The cost of one lb of pea protein, compared to soybean protein (Source: Mercantile)

Driving innovation in agriculture

Innovation in Agriculture Paving Ways to a Sustainable Future

Public-Private Partnership in Agricultural Research

- There is a huge potential in the partnership of **public and private entities** in driving innovation in the industry
- Examples include the **collaboration between USDA and private entities** in R&D
- In **Asia**, PPP includes the development of a virus resistant strain of Okra seeds in **Thailand** by **BIOTEC** and **Uniseeds Company**.
- Development of new rice varieties in **China** by the **Ministry of Agriculture** and a **private partner**
- **IRRI** in the **Philippines**



Number of USDA R&D Partnership Agreement (Source: USDA Annual Report on Technology Transfer, as cited in Moreddu, 2016)

Driving innovation in agriculture

Innovation in Agriculture Paving Ways to a Sustainable Future

Public-Private Partnership in Agricultural Research

- **We believe in PPP**
- **Agrocorp** is currently funding a research project by **Queensland University of Technology**
- The project is aimed at developing a **better yielding, drought and disease resistant variety of pigeon peas**



Driving innovation in agriculture

Innovation in Agriculture Paving Ways to a Sustainable Future

Smart Irrigation

Real-time monitoring of crop water needs to **avoid wasteful irrigation** – potentially reducing water consumption by 30%



Biotechnology

Creation of crop strains which **consume water in a more efficient manner**



Driving innovation in agriculture

Innovation in Agriculture Paving Ways to a Sustainable Future

Storage Solutions

Integration of
storage services,
crop marketing and
IT for rural farmers



agrevolution

Blockchain

Traceability of food products, ensuring a transparent, safe and sustainable supply chain



arc-net

Thank You

