

# RICE BUSINESS DEVELOPMENT IN MYANMAR: Towards Comprehensive Agriculture and Rural Development

Dr Soe Tun – Joint Secretary General MRF/Executive Director MAPCO Ye Min Aung – Secretary General MRF/Managing Director MAPCO Dr Larry Wong – Senior Advisor MRF/Visiting Fellow ISIS Malaysia

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## **OUTLINE:**

- 1. INTRODUCTION
- 2. BACKGROUND Resource endowment, overview of rice sector, historical development and performance
- 3. OVERVIEW OF RICE BUSINESS DEVELOPMENT Supply Chain Management Approach, New Vision, MRIA/MRF, MAPCO
- 4. MAJOR ISSUES DISTILLED with respect to comprehensive agriculture and rural development
- 5. THE WAY FORWARD Key Take Home Messages
- 6. CONCLUSION

#### INTRODUCTION:



Purpose: Provide an appreciation of the dynamics, challenges and response in Rice Business Development and the increasing role of the private sector and PPP arrangements with a MRF and MAPCO slant.

 Underlying theme: It is crucial to have public and policy dialogue so as to understand the new dynamics and challenges in Rice Business Development and its role as a partner in the overall development of Myanmar

#### **MYANMAR'S RESOURCE ENDOWMENT:**

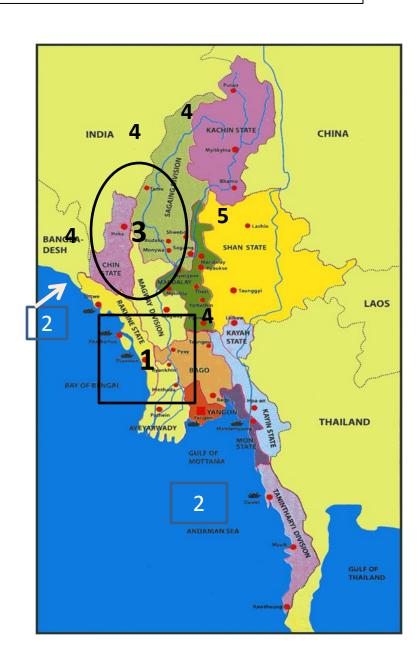
Largest continental ASEAN member country – 67.6 mil ha – 1,900 km coastline

- A. Lower Myanmar
- 1.Delta region
- 2.Coastal region
- **B.** Upper Myanmar
- 3. Central dry zone region
- 4. Mountainous region
- 5. Shan Plateau

Wide ranging agro-climatic zones and abundant water resources (3 of 4 major rivers originate within own border) – can grow crops ranging from tropical to moderate temperate – rice (50% cropped area), pulses (20%), oil seeds (15%), maize, cotton, sugar cane, rubber, vegetables, tropical fruits – also coffee and tea

#### **Also Livestock and Fisheries**

Virgin and fallow land – 5.67 mil ha plus Forest land – 33.6 mil ha – underscoring Myanmar's reputation of having significant land frontier





4 Major Rivers (of which 3 originates within own border) and many rivers and creeks flow into or join the major rivers

Sagaing Region

Crop Season	Planting Area (acres million)
Monsoon Paddy	16
Summer Paddy	3
Total	19

**Rakhine State** 

East & West Bago Region

> Ayeyarwaddy Delta Region

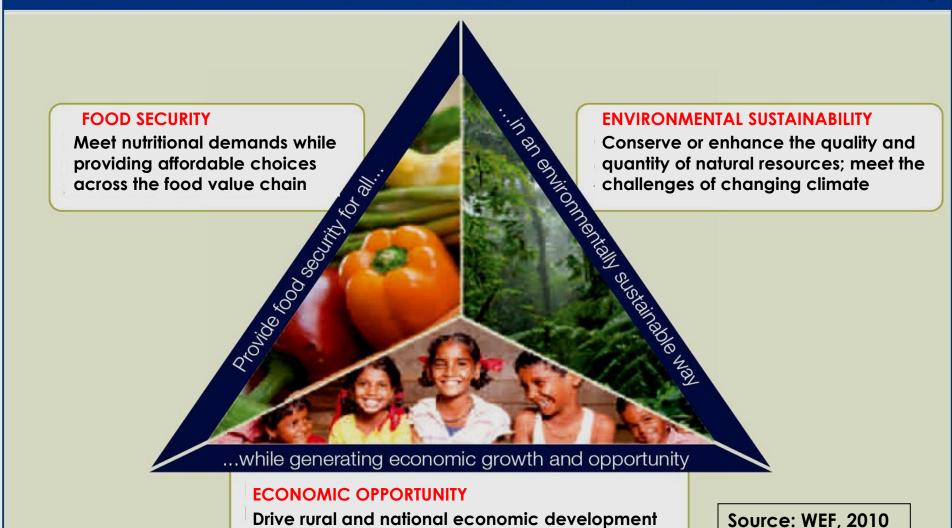
Four Major Rice Granaries in Myanmar

oldi	17
	MT (million)
Paddy Production	35
Milled Rice	13-14
Export (2012)	1.4
Border Trade	0.5-1
National Surplus	2-3
Per capita Consumption	
Urban	120-130 (kg)
Rural	200-210 (kg)

# 'Realizing a New Vision for Agriculture' at National and State/Region Levels

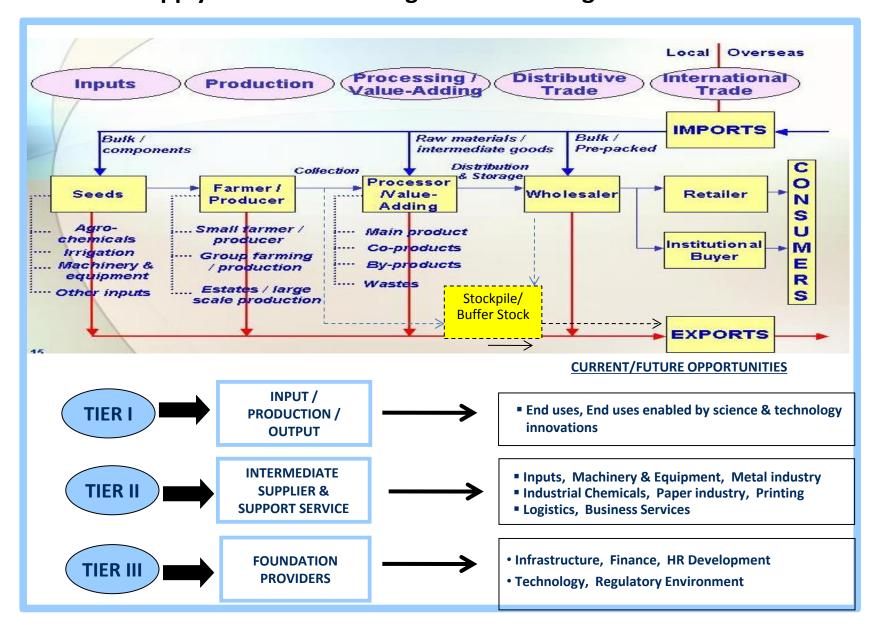
- (Agriculture Productivity & Natural Resource Management)

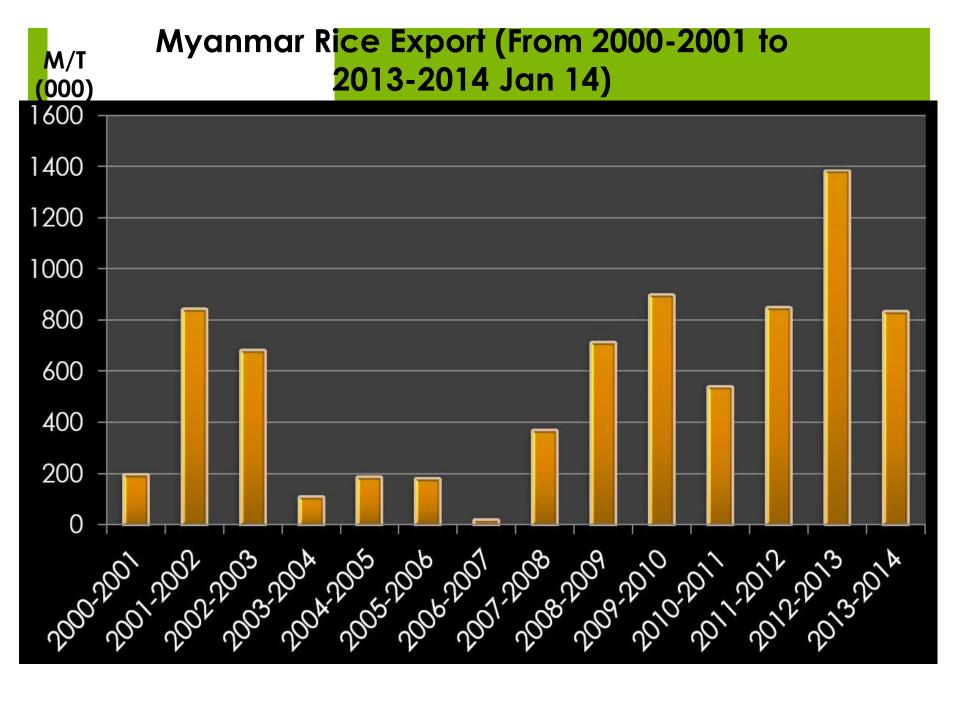
A global agriculture system that harnesses the power of markets and multistakeholder collaboration to feed the world, protect our planet and create prosperity



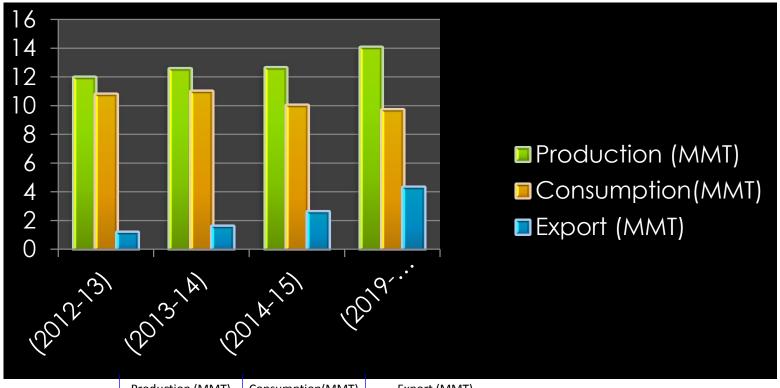
around the globe with well-targeted investments

# HOLISTIC SUPPLY CHAIN MANAGEMENT APPROACH – Economic Activities Along Supply Chain: basis for Agriculture as 'Engine of Growth'





# PRESENT AND FUTURE OUTLOOK: RICE PRODUCTION, CONSUMPTION AND EXPORT



	Production (MMT)	Consumption(MMT)	Export (MMT)
(2012-13)	11.97	10.8	1.17
(2013-14)	12.58	10.98	1.6
(2014-15)	12.65	10.04	2.6
(2019-2020)	14.05	9.71	4.3

	2012-2013	2013-2014	2014-2015	2019-2020
Consumption	180 kg	180 kg	162 kg	145.8 kg
Sown Acres	19 million	18.5 million	17.57 million	14.05 million
Population	60 million	61 million	62 million	67 million
Per Acre Production	0.63 MT	0.68 MT	0.72 MT	1 MT

# Recently, the Export has Started to Recover

### Myanmar: Recent rice exports, '000 tons

	2010	2011	2012	2013
Formal	485	816	605	600
Informal/ border	4	6	684	800
Total	489	821	1,289	1,400



Africa
China

# **Triggers to Higher Export Were:**

- Dropping the requirement for permits to transport rice to areas near the border
- Reducing the export tax from 10% to 2% and then suspending it
- Unifying the official and parallel currency markets
- No longer setting minimum export prices
- Dropping the requirement that exporters to have in stock 50 percent of the rice for which an export license is sought
- No longer giving the Rice Specialized Companies a priority in obtaining export licenses (i.e. excluding/restricting others)

# EXPORT PERSPECTIVE: Opportunity #1: World Rice Market is Growing

# World rice trade, million tons

Decades	Quantity
1970s	8.8
1980s	11.9
1990s	18.2
2000s	27.9
2010	31.6
2011	36.2
2012	39.1
2013	38.1
(forecast)	

Asian Dev. Bank Projections 2010-2021:

- Global rice consumption increase 1.14% per year
- Global rice trade increase 2.27% per

Source: USDA (June 2013).

# Opportunity #2: EU Market and EBA

### Estimate of the EU rice imports, '000 tons

Quality	Volume
Basmati	450
Jasmine	250
White brokens	400
High grade white	400
and parboiled	

Source: Slayton & Associates.

# Everything but Arms Agreement (EBA)

- 0% import tariff (worth \$228/ton)
- Quota-free
- Large market
- Only Cambodia
   has the same EBA
   access

# **Opportunity #3: China**

Double-Digit Increase in Farm Support Price Drives Domestic Rice Prices UP, ...

China: Early rice crop paddy support price, \$/ton

	Price
2010	273
2011	316
2012	381
2013	436

More demand from Myanmar because Conflict between Vietnam and China, Source: USDA.

# Stimulating Import (in Spite of Good Crops)

China Rice Import, '000 tons

Av. 2005-09		468
2008		296
2009		338
2010		366
2011		578
2012 (official)	2,345	
2012 (border)		670

Source: World Trade Atlas

## **Challenges:**

- Myanmar rice exports focuses on low grade 25% segment small and declining segment
- Going to face strong competition from Cambodia (also eligible for EBA from EU) and Vietnam
- Poor product quality arises from traditional method of production coupled with poor and outdated milling facilities
- Poor infrastructure (electricity, logistics, communication, handling costs at ports higher freight charges)
- Weak or absence of financing , banking and insurance
- Role of Government still important especially in provision of public goods and acting as enabler

### **RICE REFORM & LEGISLATION:**

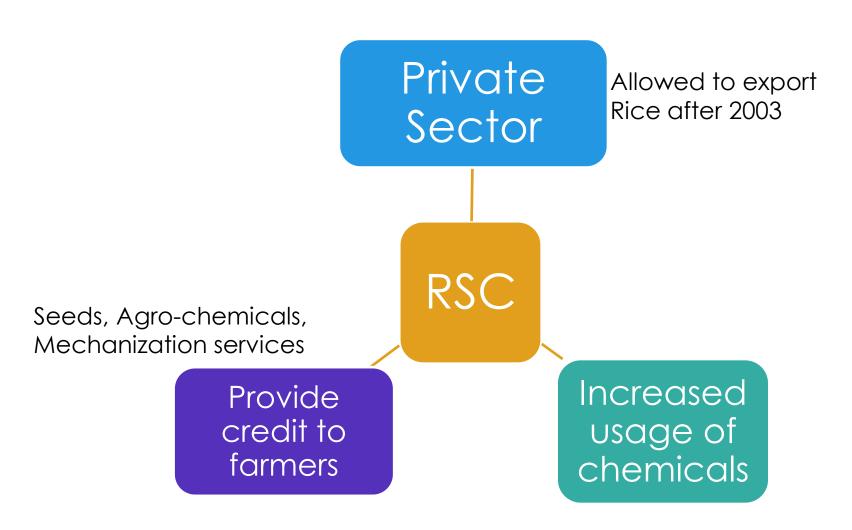
- In 1988-89, Centrally Planned Economic system ended
  - State adopted Market Oriented Economic System
- In 2003, Rice Export by Private Sector is allowed
  - MAPT rolled back involvement in BOTH Domestic and Export markets
- In 2011, Export tax on Private Sector was reduced from 10% to 2%

Plant Pest Quarantine Law	1990
Pesticide Law	1993
Fertilizer Law	2000
Farmland Law	2012
Virgin & Fallow Land Law	2012
Seed Law Farmer Protection Act	2013 2013

## **OTHER SIGNIFICANT REFORMS:**

EVENT	YEAR
Formation of Rice Specialization Companies (RSC)	2008
Formation of Myanmar Rice Federation (formerly Myanmar Rice Industry Association, MRIA)	2010
Formation of the Myanmar Agribusiness Public Corporation (MAPCO)	2012

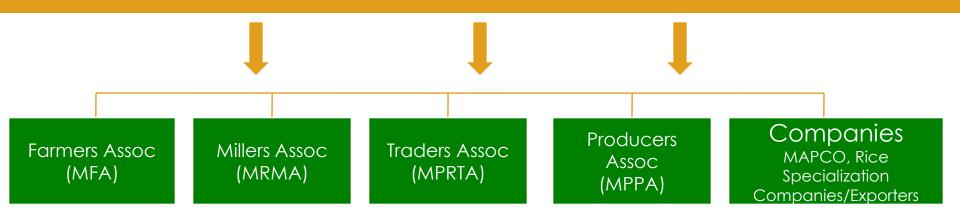
# Rice Specialization Companies



# PRIVATE SECTOR – MYANMAR RICE INDUSTRY



# Myanmar Rice Federation (MRF)



MRF has branch offices in all States and Regions.



## **Three Pillars of MAPCO – Corporate Core Agendas**



Food
Security

- Sustainable Food Security
- National Stockpile management
- Effective & Efficient Coordination along Supply Chain, Value Chain
- Food Safety & Environment Conservation

Business
Operations

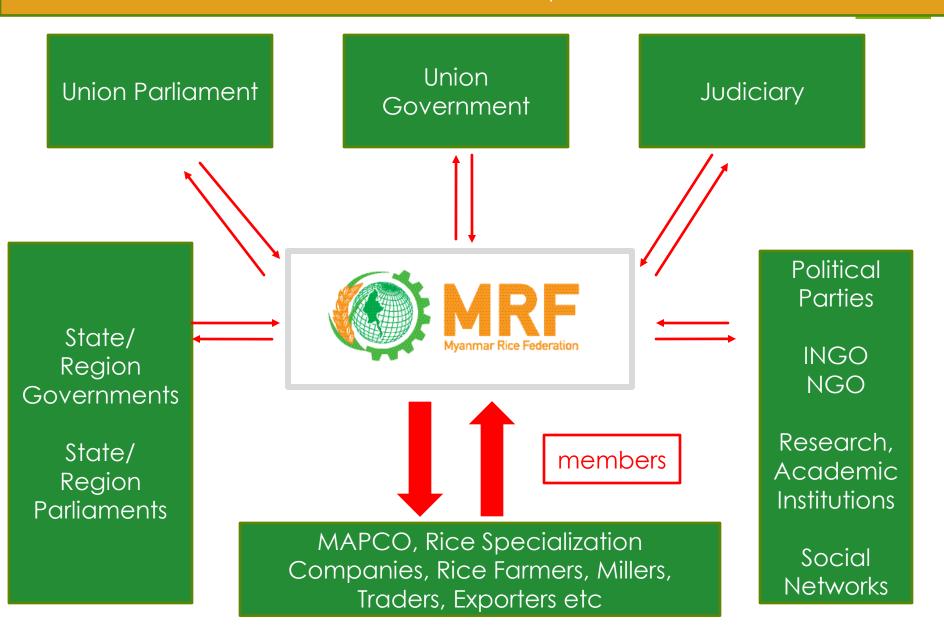
- Domestic & International Trade
- Investment in Agribusiness Sector
- Contract Farming
- Fertilizer Distribution
- Seed Production & Distribution
- Infrastructure & Logistical Development
- Agricultural or Farmers' Bank
- Special Industrial Projects

MAPCO is a business arm of MRF, covering not only rice but also other agribusinesses, and is formed to mobilize investment in agriculture and agro-based industries.

Sustainable Market Development

- Market Harmony & Sustainability
- Policy advocacy to Government
- Price & Supply Stabilization (Buffer Stock Practices)
- Commodity Exchange Centers (COMEx)

# Promoting the interest and welfare of members – Effective & Efficient Coordination & Cooperation





# KEY PRIORITY AREAS FOR RICE DEVELOPMENT ACTION PLAN

Promote Role of Market & Trade, Support Agribusinesses





Contract farming



Investment in Food & Energy Processing

Nationwide implementation of High Quality Variety Zones, High Yield Variety Zones, Seed Production Zones in 2013-2014 and 2014-2015 (Rice-based) Integrated Food & Energy Production Complexes

- ❖ 4 Projects in 2013-2014
- 11 Projects by 2019-2020
- Commodity Warehouses
- Agribusiness Services Center (ASC)



### MRF's Strategy to Implement New Vision for Agribusiness in Myanmar: Value Addition, Integrated Food and Energy Production, Comprehensive Supply Chain Management & Private-Public Partnership as Main Drivers

- Farming as a livelihood --> Farming as a business (transition from small scale to commercial scale by introducing Forward Sales Contract (FSC) and by implementing Contract Farming Schemes, by establishing Commodity Exchange & Wholesale Centers – "commodity futures" market in near future and by promoting the innovative use of farm machinery and equipment rental service)
- Rice Processing/Rice Milling --> Food and Energy Production (Change from rice milling to Food and Energy Production- Investment in Processing Complexes which integrate the different value addition components for all the byproducts, including rice husk fired power plant, quality rice production & sustaining the better level of national competitiveness)
- Business As Usual Model --> Strategic Promotion of the roles of trade and market (Price and Supply Stabilization, Selective Intervention and Smart Subsidies, Trade Promotion by G-to-G arranged - B-to-B execution)
- Private-Public Partnership --> Productive & Effective Market-based Policies; Promotion of Equality & Justice at Land related matters; Strong macroeconomic environment that prioritizes Agribusiness; Competitive Exchange Rate; Focus, Coordination and Cooperation in R & D activities

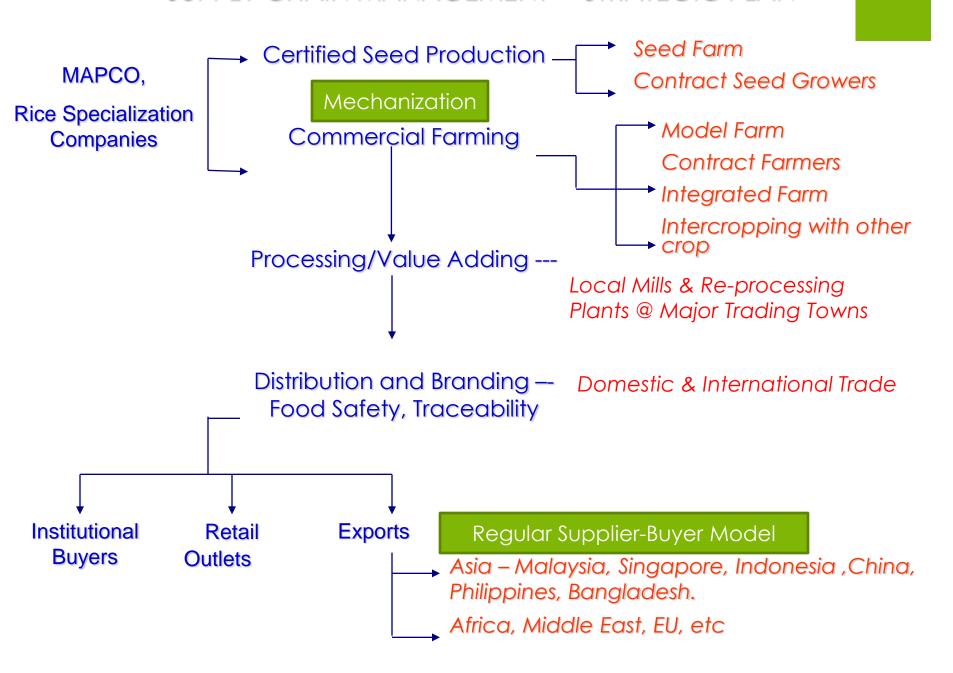


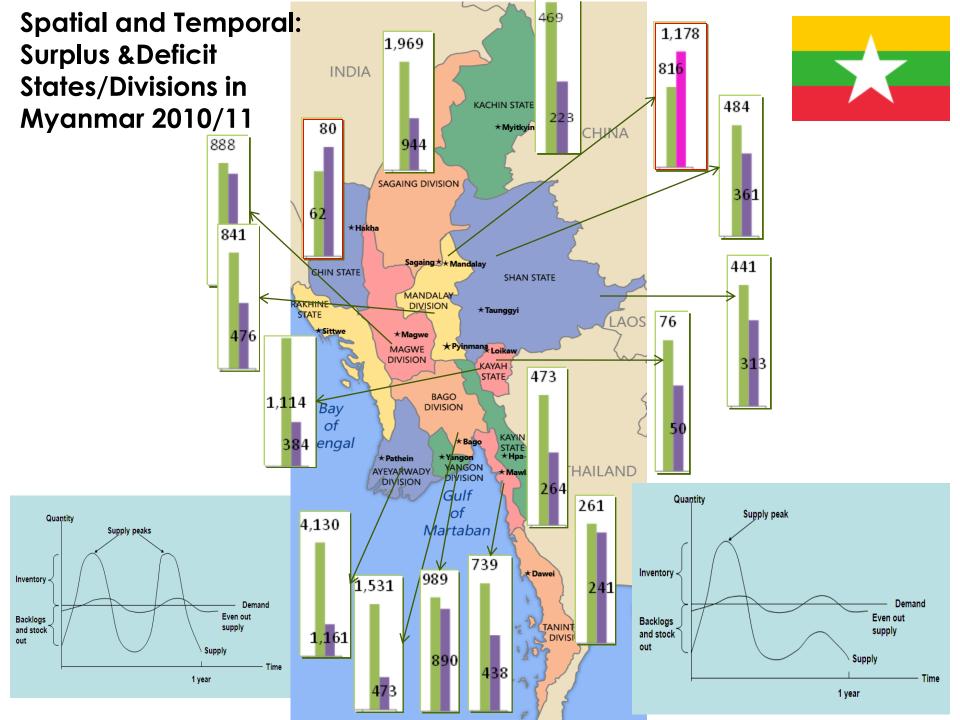
# The Road to Faster, Comprehensive & Sustainable Rural Development: Rice Industry as Major Driving Force

### **Three Complementary Elements:**

- Accelerated output growth (per acre yield -intensification)
   through technological support, access to working capital, and price incentive effects designed to raise the productivity of small farmers
- Stimulating Domestic and International Demand for various quality/grades of rice & Attracting Private Sector Investment (FDI AND PDI)in Processing/Reprocessing into higher value endusers targeted at expanding markets
- Diversify to higher value produce requiring less land and capable of generating more employment and income (moving up the value ladder)- including livestock, aquaculture, flowers, vegetables and fruits

#### SUPPLY CHAIN MANAGEMENT - STRATEGIC PLAN

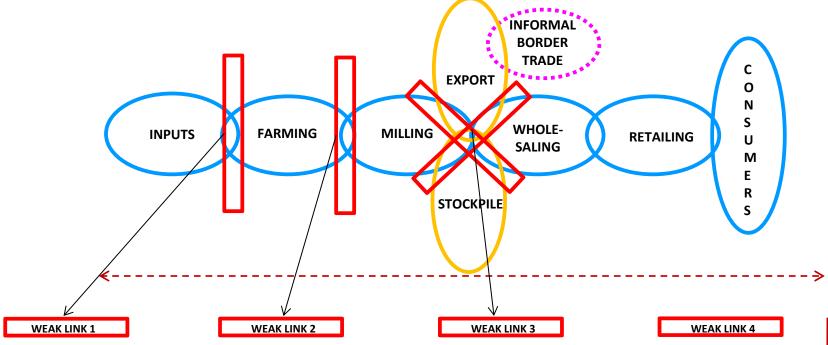




**EXISTING RICE SUPPLY CHAIN IN MYANMAR International** Input Paddy Rice processing trade production **RICE MILLS** Huller rice mill-15477 Farmers Big rice mill – 1220 (15 tonnes per day) No. farm family-Modern new rice mill -22 Certified seed 2146000 Parboiled rice mills-6 (only Govt.) Paddy land = 13.28 m acres Rice bran Milled rice **Broken** Parboiled rice White rice) rice Chemical fertilizer and Paddy Rice snack /Liquor pesticide collector (Private companies) Rice Exchange Animal Center (REXC)in feed and Farm machineries F.o.b. YGN Local rice Yangon Bayint fish farms -landpreparation exporters Naung Wholesale -Threshers Market -harvesters -water pumping Local rice Exporters' Prepared engines warehouse exporter **Farmers** for export working with rice leading Agri-support companies Rice traders service Shweli (Ruili) in (Intermediaries) in Muse (Public sector) China (border trade) Wholesalers in Yangon **REXC** in Irrigation, **Bavint Nauna** Wadan, near Drainage and Wholesale Market Yangon River flood (YBNWM) prevention Dam-(Govt.) Super-Retail Rice wholes alers in market Mandalay and other Markets markets in rice deficit areas

**CONSUMERS** 

### Prioritizing and sequencing interventions – Myanmar Rice Supply Chain: Strength of Chain is determined by weakest link



- mainly farm saved seeds
- Low level of inputs
- Poor water management
- Poor quality of fertilizers fake & adulterated
- Misuse of pesticides beginning
- Weak extension service
- Lack of formal credit
- Poor infrastructure farm roads
- Labour shortage especially at planting and harvesting

- Poor purity & quality of seeds • Cultural practice leads to 'suncracking' - high brokens
  - Lack of proper drying & storage facilities at mills, especially for summer crop
  - Lack of development of other end-uses of rice and rice byproducts
  - High processing cost inconsistent electricity supply
  - Lack of Financing most mills operating under capacity
  - Low quality output improved somewhat with recent new and upgraded mills

#### Exports – inconsistency of quality and supply

- Dependency on African market
- poor understanding of dynamics of international markets
- Increasing border trade especially to China, Myanmar side legal but China side informal/illegal
- Stockpiling with MRF/MAPCO - needs monitoring & evaluation
- High transaction costs transportation, logistics and handling costs

- Data quality & consistency problem - overstated production - difficult to plan and difficult to attract investments
- Little or no sharing of data/ information along supply chain
- Financing issue along entire supply chain

# Weak Link 1

- Strengthen input markets for and promote proper usage of quality/certified seeds, fertilizers and pesticides through targeted investments and enforcement of regulation
- Increase public investments in research and extension, and organization of smallholders and their subsequent integration

# Weak Link 2

- Proactively, attract FDI /DPI/JV in strategic and integrated processing
- Extension to Rice Bran Oil & other high value end uses

# Weak Link 3

- Improve Rice Stock Pile & Buffer Stock operation
- Reduce costs associated with exports through enhanced port and border trade facilities, and greater efficiency of regulation

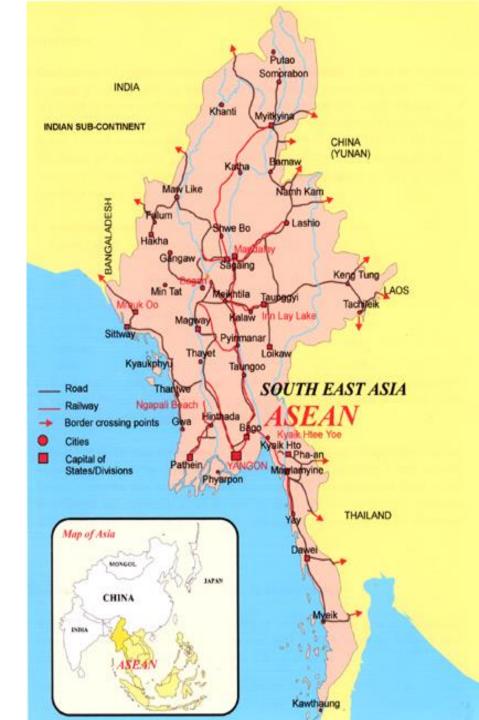
# Weak Link 4

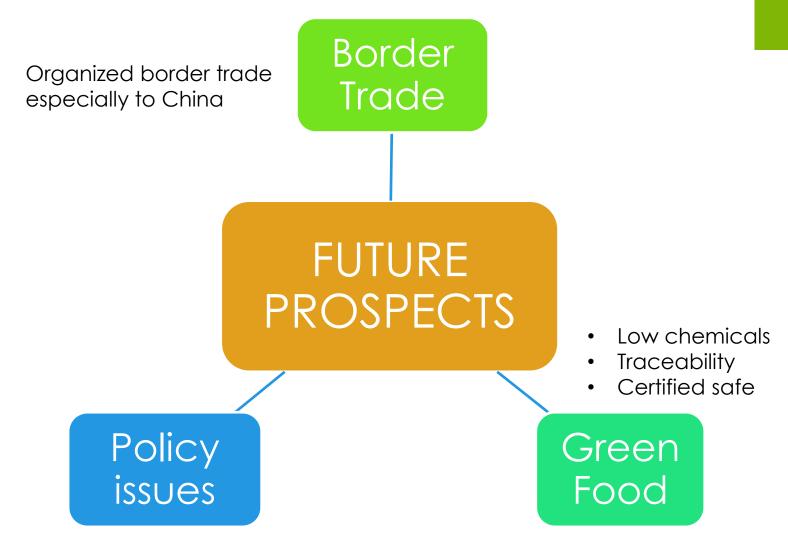
- Reform agricultural data collection and information sharing to enable evidence-based policies as well as attract strategic investments.
- Pilot a weather index-based insurance scheme coupled with a warehouse receipt financing scheme

# INFRASTRUCTURE – Strategic Border Posts/Crossings (15)

#### **Key Border posts:**

- a) Muse China (Link to Lashio-Mandalay—Monywa-Tamu in India)
- b) Tachileik Thailand (Link to Keng Tung-Taunggyi)
- c) Myawaddy Thailand (Link to Pha'an)





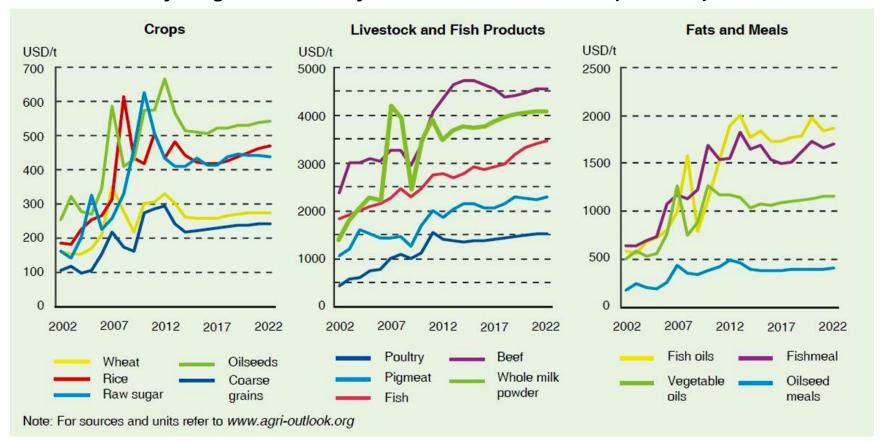
- Strengthening weak links
- Coordinated reforms
- Restructuring of Rice Industry

## Stakeholders are already engaging on many interventions

	Specific interventions in the value chain	
Research & Development	<ul> <li>High yield, stress-tolerant input</li> <li>Bottom of the pyramid designs</li> <li>Local varieties/adaptations</li> </ul>	<ul><li>Proper incentives for R&amp;D</li><li>High-caliber institutions</li><li>Grants for nutritious orphan crops</li></ul>
Input distribution and adoption	<ul><li>Agri-dealer networks</li><li>Product bundling</li><li>Risk mitigation in purchasing</li></ul>	<ul><li>Farmer networks/organizations</li><li>Model farms</li><li>Smart subsidies</li></ul>
	Contract/nucleus farms	Train off-farm skills, diversification     Advancion considers, consolitity building
Farming	<ul><li> Crop selection optimization</li><li> Water efficiency</li><li> Soil/emissions management</li></ul>	<ul> <li>Extension services, capability building</li> <li>Monitor land use change</li> <li>Husbandry safety procedures</li> </ul>
Trading and processing	<ul> <li>Trading businesses</li> <li>Local storage facilities</li> <li>Processing plants</li> <li>Prudent food aid procurement</li> </ul>	Investments in "value-add" industries (e.g., oil refining) Cooperatives Grain exchanges
Manufacturing and retailing	<ul><li>Conscientious sourcing</li><li>Fair trade pricing</li><li>Local distribution channels</li></ul>	<ul><li>Access to export markets</li><li>Build ports</li><li>Quality/safety standards</li></ul>
Consumer table	<ul><li>Fortification</li><li>Ethical labeling</li><li>Build consumer awareness on diet diversity/nutrition</li></ul>	<ul> <li>Nutrition education</li> <li>Access to potable water</li> <li>Teach proper food prep habits</li> <li>Prioritize maternal/infant health</li> </ul>

Source: Myanmar Rice Federation - Key Red Circle Areas need more focus and support

#### Price trends for agriculture and fish commodities to 2022 (nominal)



Source: OECD-FAO Agriculture Outlook 2013-2022

Price trends serve as guide for investments and putting in hard and soft infrastructure for the different subsectors. Need to build in flexibility – flexible specialization. Oilseeds, meat and fish more favourable than for rice. So for rice need to target markets and move to higher quality rice. Recall 'moving up the value ladder'.

#### **KEY TAKE-HOME MESSAGES:**

- Rice Business Development increasingly more complex, multi-scale and interdependent so, need to continuously (re)adress dynamics and emerging challenges in a more holistic manner
- Need trans-disciplinary, multi-centric, networked solutions factoring in supply chains and trading networks and dynamics rather than isolated solutions aimed at just one problem or level of supply chain (especially production-centric)
- Myanmar have made significant progress in strengthening its rice supply chains with a evolving 'institutional' structure of Private-Public-Partnership recently, with the private sector, especially Rice Specialization Companies and MAPCO, in leading role with close enabling support and collaboration of MOAI, MOC and other institutions. Much more to be achieved, together.
- Guided by the new dynamics, we should be on the lookout for innovative ways of structuring and conducting business through a system of piloting initiatives to address priotised weakness and opportunities, and moving in tandem (public, private and civil society) to up-scale and replicate successful ones and then have the discipline to make on course corrections.
- Myanmar can and should build on these past gains by drawing from other countries' experience and craft its own unique Rice Business Development Model geared towards comprehensive agriculture and rural development

#### Conclusion:

Stemming from the above, it is clear that Myanmar Rice Business has come a long way, but has a long way yet to go. There is so much to be achieved, together as we move into a more globalized and liberalized trading environment as well as a more integrated ASEAN and GMS in the 21st century.

As always, the challenge is in getting the 'basics' and 'balance' right as well ensure the buying in and taking ownership of initiatives planned by the key stakeholders, especially the public and private sectors at the macro, meso, and micro levels. Hopefully, our presentation can stimulate active discussion at this workshop and beyond.

