Regional Integration and Linking Farmers to Markets: New Dimensions, Dynamics and Realities

Larry C.Y. Wong

Visiting Fellow ISIS Malaysia/

Visiting Senior Research Fellow MDRI-CESD/

Co-Founder Myanmar Praxis Pte Ltd

A SEMINAR ON 'REGIONAL INTEGRATION: LINKING FARMERS TO MARKETS'

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OUTLINE:

- 1. Introduction Purpose; Underlying theme
- Backdrop Building on salient points from Asia Pacific
 Agricultural Policy Forum and recent ADBI, ADB and World Bank
 Studies that author was involved consider new dimensions,
 dynamics and salient points distilled
- 3. Highlight private sector's increasing role, perspective and initiatives at local, regional and global levels WEF, Inclusive Business, Business for Development, etc compelling reasons for more holistic Supply Chain Management Approach. Evolving Agri-food Supply Chains and Trading Networks in AEC, GMS, Asia New Realities: connectivity, economic corridors and border-trade China's 'One Belt and One Road' initiative and AIIB New normal, challenges and opportunities
- 4. The Way Forward and Key Take Home Messages
- 5. Conclusion

NEED TO TUNNEL FROM BOTH ENDS



INTRODUCTION:

- Purpose: Two fold. (i) Tunneling from the Regional Integration end, build on key salient points from various APAP Forum and Roundtables and related ADBI, ADB and World Bank studies on enhancing regional integration via supply chains and trading networks development and management, with a private sector and rice slant, and (ii) Given the objective and orientation of this Seminar, to stimulate discussion at this meeting and beyond
- Underlying theme: policy makers, researchers, and stakeholders should understand 'why do companies do what they do more recently' (New Vision for Agriculture, Grow Asia and Business for Development, etc) as well as understand that there are compelling reasons to adopt an overarching, more holistic Supply Chain (and trading network) Management Approach given the tremendous potential benefits from increasing connectivity and transforming trade patterns and markets that emerging regional economic corridors bring.

Key Messages:

- ❖ Dynamics of Global and regional agri-food (e.g.rice) markets and trade shifting China hike in imports resulted from raising price subsidy over last few years (expected to import > 4 million MT in 2014/15 coupled with ASEAN and GMS connectivity and China's ambitious 'One Belt and One Road' initiative and establishment of Asian Infrastructure Investment Bank (AIIB) enhancing regional agr-food/rice supply chains and trading networks holds more compelling benefits, far beyond traditional linking farm to market (and food security) considerations.
- ❖ Under the radar and in the lead up to AEC, increasing incidence of cross-border investments in continental ASEAN and increasingly regional agri-food supply chains and trading networks are forming (transfer of technology, management system, export platform) and signs of integration and convergence

Key Messages (Cont'd):

- ❖ Private sector can be the solution and lubricant in enhancing integration of regional agri-food/rice supply chains and trading networks. BERNAS' experience from 1996-2004 provides glimpse of possibilities 'enlightened private sector' increasing incidence of 'Inclusive Business', 'Business for Development' and 'Business for Peace'. Like Adam Smith's invisible hand, will increase net social benefit as well as lead to more sustainable and inclusive growth in individual countries and the region as a whole.
- **❖** Future options, prospects and considerations:
 - B2B Initiated and driven, G2G facilitated (Governments can take credit for success - but need to ensure sustainability and Business not overtaken by greed) – evolving dynamics favour Agri-food/Rice Diplomacy?
 - Who can/should provide regional policy guidance and oversight?

SALIENT POINTS DISTILLED FROM APAP FORUM AND RECENT STUDIES:

- 1. At beginning of ADBI study in 2012, all CLMV targeted to export more rice in future but by end of study, on-going policy debate at national level is how much rice to produce and export? in view of extensive nature, water requirement and low comparative profitability of rice. So recognize increasing importance of Supply Chain development and management (vertical diversification) and crop/enterprise choice or mix (horizontal diversification) rice-based farming system
- 2. Except for Viet Nam (exports around 30-40% of total rice production), CLM export < 10% of production (much much less that what they consume domestically). Cautionary note: disproportionate emphasis on rice exports supply chain domestic spatial and temporal arbitrage supply chains equally important especially for food security, employment generation, poverty reduction, and inclusive growth key is to develop and manage supply chains to expanding markets, BOTH domestic and overseas

SALIENT POINTS: (Cont'd)

- 4. Dynamics of Global and regional rice markets shifting trade and market segments China hike in imports result from raising price subsidy over last few years (likely major importer in future) coupled with ASEAN and GMS connectivity increasing importance of Border Trade and cross-border investments. Also new markets with preferential treatment EU (EBA) for Cambodia, Lao PDR and Myanmar
- 5. Productivity enhancement along entire supply chain beyond efficiency and cost of production, but also cost of milling/processing (electricity, capacity utilization), transportation, export processing, financing. A recent comparison across countries CLM lagging, much room for improvement
- 6. With the exception of Vinafood I and II in Viet Nam, CLM have rolled back the involvement of SOEs, Myanmar Agriculture Produce Trading (Myanmar) and State Enterprise for Food and Crop Promotion (Lao PDR) now playing minor role or restructured future of SOEs (in exporting as well as importing countries) and G to G trade? G to G facilitated but B to B executed

SALIENT POINTS: (Cont'd)

- 7. Significant FDI in mills and processing pivotal role for transforming upstream and downstream segments development of comprehensive supply chains and sub-chains investments in input supply, modern distributive trade, especially supermarkets various forms of contract farming and modalities of provision of agri-support services and foundation for enhancing productivity financing, technology and business organization and market access.
- 8. Need to get basics, balance and leveraging right in order to support ASEAN Equitable Economic Development and enhance regional food security intuitively private sector driven but for regional or cross-border P-P-P and within national borders, role of Government still important especially in terms of governance and dispute settlement

SALIENT POINTS: (Cont'd)

9. Floated Recommendations

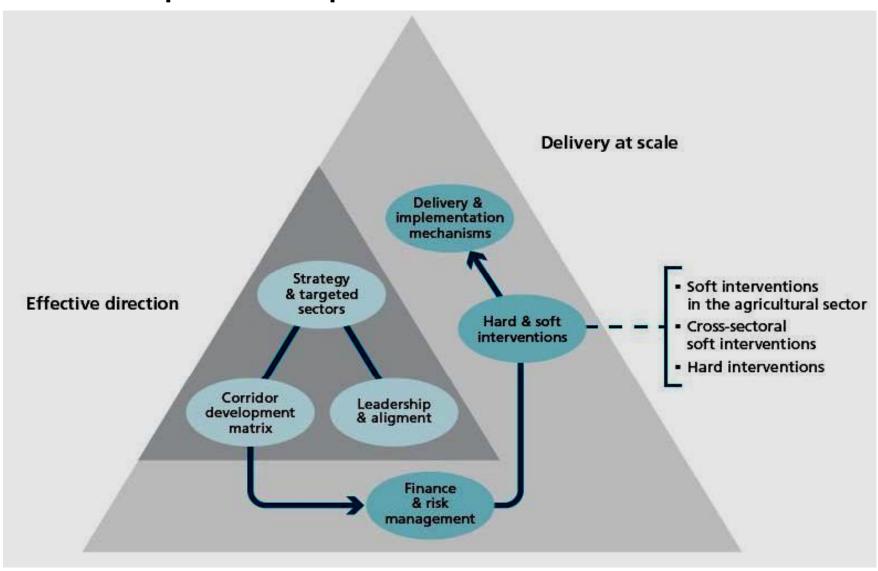
- Policy issues sequential strengthening of identified weak links in rice supply chains – strength of a chain is determined by the weakest link
- Coordinated initiatives/emphasis on green food (low chemicals, traceable, food safety - food scare, absence of heavy metals);
- Development of more high-value end-uses transmission of better prices to farmers/producers;
- Proactive in attracting FDI (technology transfer, management system, export platform);
- More organized border trade leveraging on increasing GMS and ASEAN connectivity especially neighbour's (China and Thailand's) superior infrastructure and linkages (springboard) to other countries
- New Markets with preferential treatment EU EBA and possibility China and Russia – need to be more proactive
- Scalability and Replicability of innovative approaches adaptation, sharing and shoring – Private Sector more adept/capable in this – hence can be the solution rather than traditionally held view of being the cause of socio-politico-economic ills

New Vision for Agriculture - Creating Shared Value

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

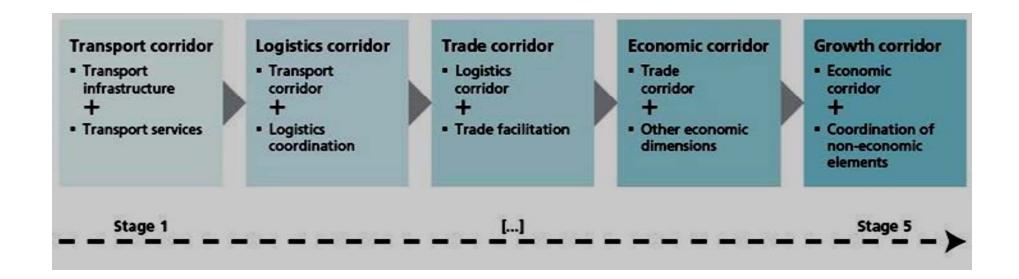


Relatedly, World Development Report 2009: Reshaping Economic Geography and increasing efforts at developing Economic Corridors – Closer Look in relation to AEC and GMS - A framework for economic corridors – Spatial Development



Types of Economic Corridors and Potential Development Path

	* Urban corridor vs urban-rural corridor		
Geographic scope	* Subnational-level corridor		
	* Transnational or regional (supranational) corridor		
Sectoral scope	* Monosectoral corridor (e.g. agriculture and transport)		
	* Multisectoral corridor		
	* Public-led corridor		
	* Donor- or international financial institution (IFI)-led corridor		
Driver	* Private-led corridor		
	* Multistakeholder partnership corridor or public-private partnership		
	(PPP) corridor		



Sectors targeted by the GMS cooperation programme and their corresponding plans

Targeted sector	Support strategy or programme	Flagship project(s)	
1. Agriculture	Core Agriculture Support Programme (CASP)	Flood control and water resource management	
2. Energy	GMS Energy Roadmap	Regional power interconnection and trading arrangements	
3. Environment	Core Environment Programme and Biodiversity Conservation Corridors Initiative (CEP-BCI)	Strategic environment framework	
4. Human resources development	Phnom Penh Plan for Development Management (of human resources)	Development of human resources and skill competencies	
5. Investment	Strategic Framework for Action on Trade Facilitation and Investment (SFA-TFI)	Enhancement of private sector participation and competitiveness	
6. Telecommunications		Telecommunications backbone	
7. Tourism	GMS tourism sector strategy	GMS tourism development	
8. Trade Action Plan for Transport and Trade Facilitation		Facilitation of cross border trade and investment	
9. Transport	Cross-Border Transport Agreement (CBTA)	North-South Economic Corridor (NSEC) East-West Economic Corridor (EWEC) Southern Economic Corridor (SEC)	

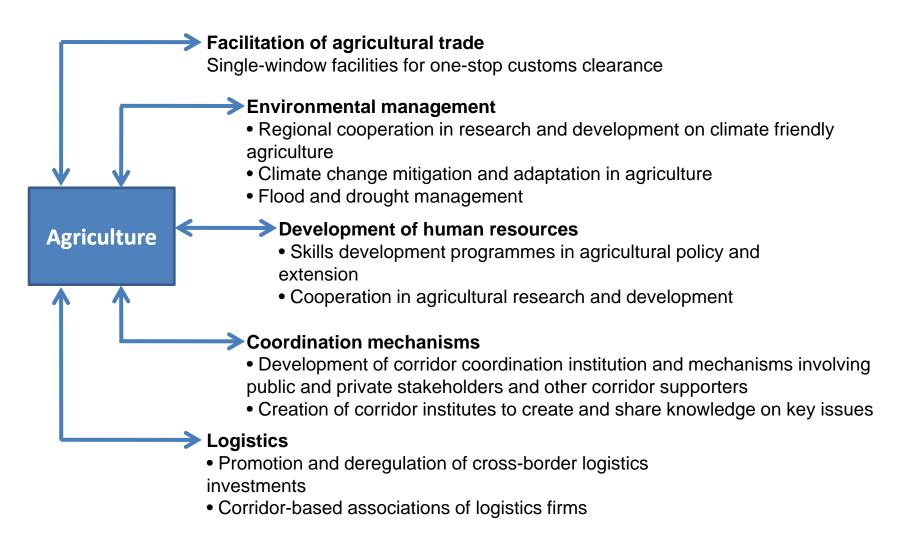
Source: www.adb.org [last accessed April 2015].

ASIDE: Contract farming experiences in GMS agrifood chains

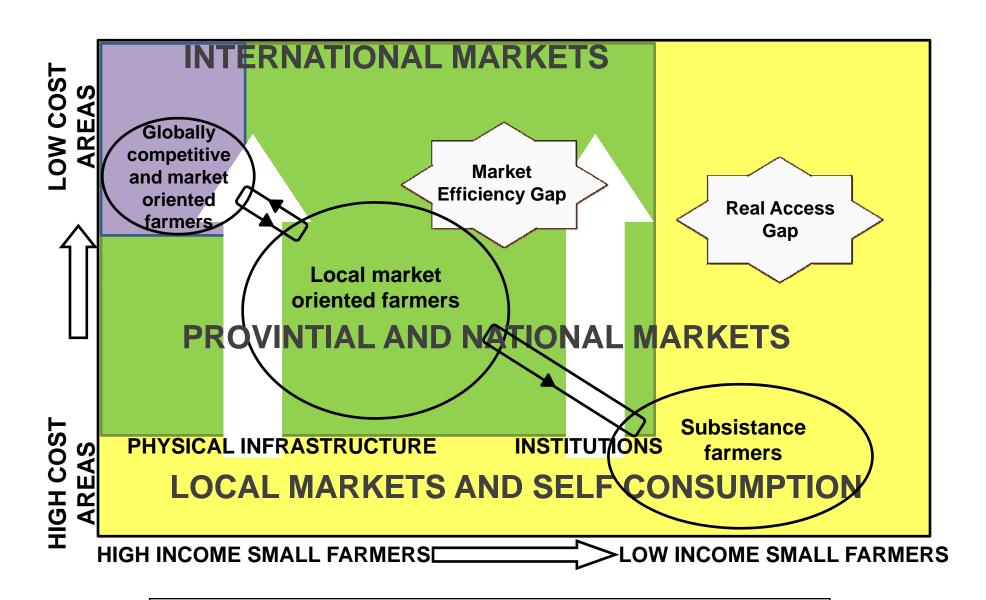
Corridor	Participating countries	Subsectors and value chains
NSEC	Lao PDR, Myanmar, China and Thailand	* Rubber, tea and maize (northern Lao PDR/China) * Cassava and sugar (Guangxi/Viet Nam) * Sugar cane, maize, watermelons, bananas, cabbages, tamarind and other horticultural products (northern Lao PDR/Thailand) * Forest products * Agricultural machinery and equipment * Biofuel production Biofuel from cassava, jatropha and sugar cane (China) Biodiesel from jatropha and oil palm (Thailand) Bioethanol from maize, cassava and sweet sorghum (Myanmar)
EWEC	Lao PDR, Myanmar, Thailand and Viet Nam	* Beer, sugar, beverages and milk production (Viet Nam) * Pinewood oil, beer and sugar (Lao PDR) * Rice (Thailand and Viet Nam) * Organic food
SEC	Cambodia, Thailand and Viet Nam	* Maize (Cambodia and Thailand) * Ethanol from cassava and sugar cane * Rubber * Rice * Pulses * Fruit and vegetables (e.g. durian, pepper)

Sources: ADB (2007a; 2009; 2010b; 2010c); ADBI (2008a; 2008b); Nguyen and Ha-Duong, 2009; Malik et al., 2009; Shepley et al., 2009; USAID, 2009; Manorom et al., 2010.

Examples of corridor soft-side interventions aiming to promote regional integration

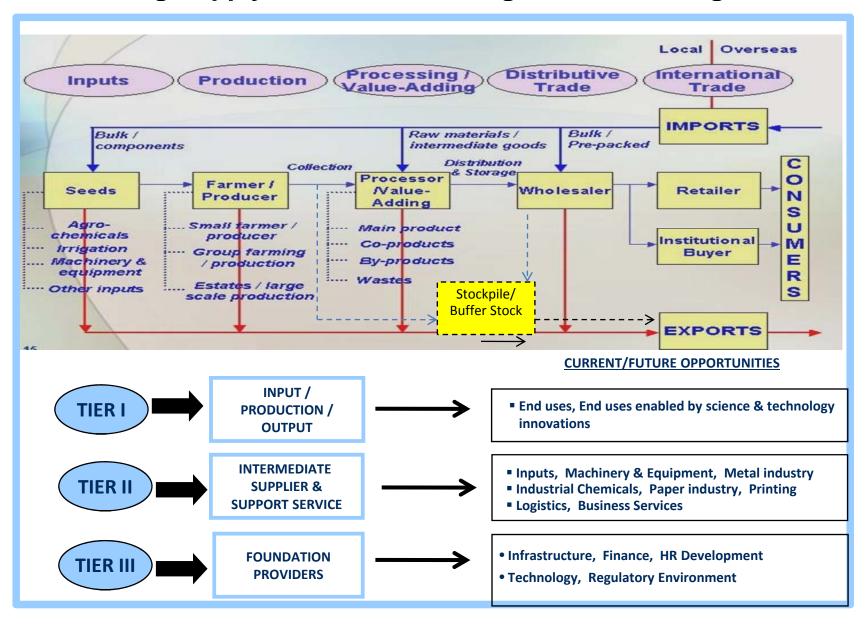


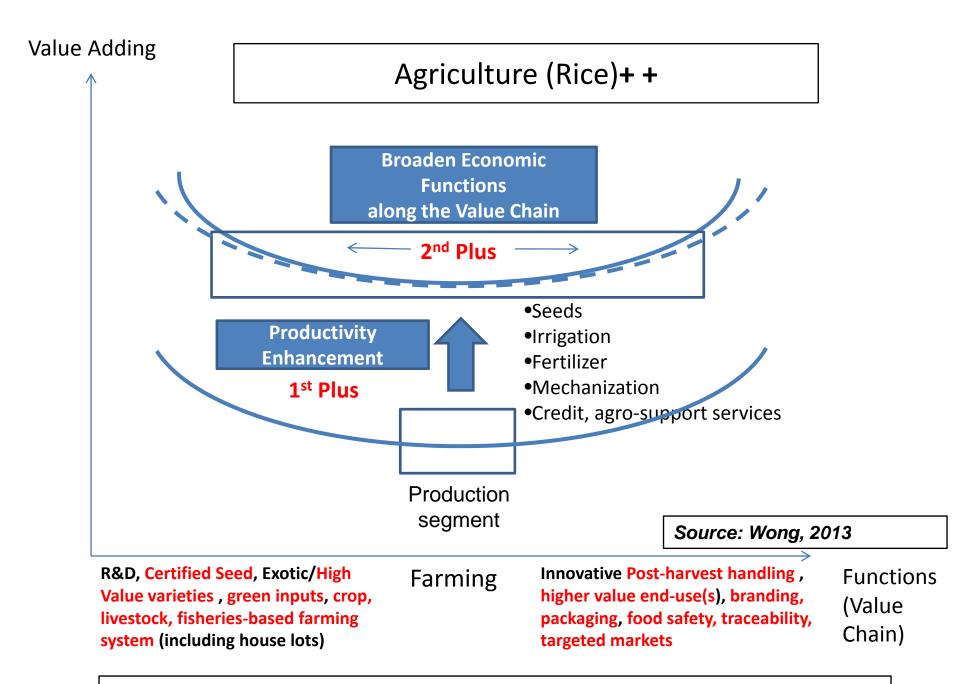
Source: Nogales (2014)



DYNAMICS IN LINKING FARMERS TO MARKETS – Spatial and Temporal

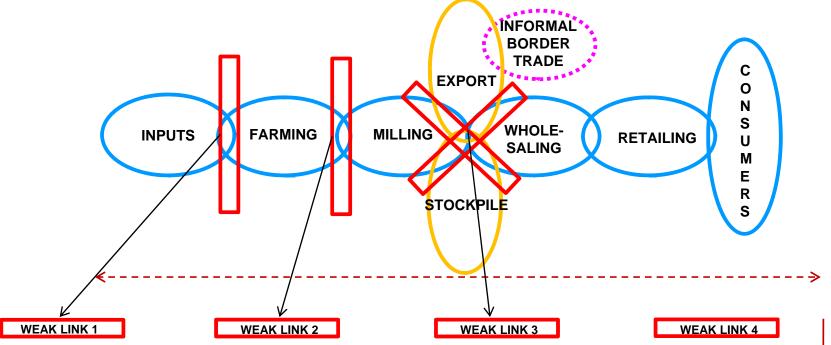
HOLISTIC SUPPLY CHAIN MANAGEMENT APPROACH – Economic Activities Along Supply Chain: basis for Agriculture as 'Engine of Growth'





n.b. Adapted from Malaysian Second Industrial Master Plan – Manufacturing ++

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



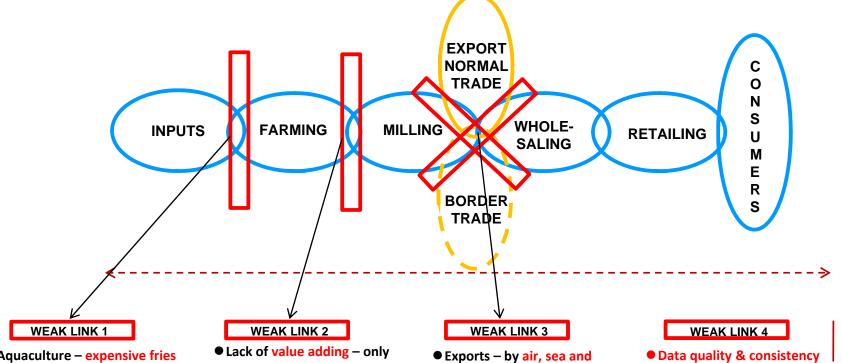
- Poor purity & quality of seeds ● Cultural practice leads to 'sunmainly farm saved seeds
- Low level of inputs
- Poor water management
- Poor quality of fertilizers fake & adulterated
- Misuse of pesticides beginning
- Weak extension service
- Lack of formal credit
- Poor infrastructure farm roads
- Labour shortage especially at planting and harvesting

- cracking' 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

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



- Aquaculture expensive fries and feed
- Aquaculture excessive use of antibiotics and chemicals
- Lack of financing
- Off-shore fishing dominated by foreign vessels
- Encroachment to inshore fishing grounds
- Weak extension service
- Fisheries activities in dams and reservoirs prohibited

- dried fish and fishmeal
- High processing cost inconsistent electricity supply
- Lack of Financing
- Existing plants mainly unhygienic - although 14 plants registered to export to EU

- border-trade live and frozen
- Diversified market for marine fisheries but aquaculture mainly to China
- Export of fishmeal mainly to China
- Lack of food safety management system and accredited testing laboratories

- problem
- Weak R&D and extension
- Lack of HRD Parliament just approved establishment of **University of Fisheries Science**
- Financing issue along entire supply chain

Seemingly Unrelated Events (SURE): Key Importers Changing - Opportunities

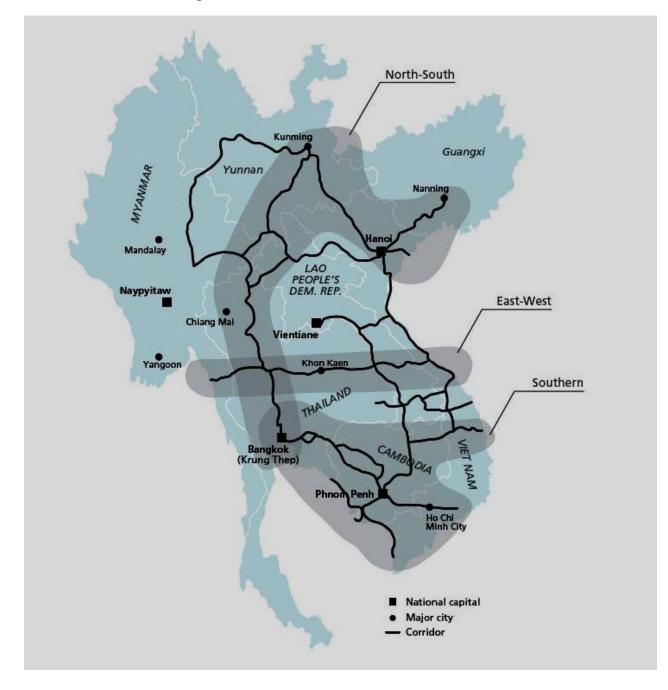
Imports by Key Markets (million tons)							
	2011	2012	2013	2014			
Bangladesh	1.49	.05	.30	0.70			
<u>China</u>	.58	2.90	3.00	4.30			
<u>Indonesia</u>	3.10	1.96	1.50	1.30			
Iran	1.87	1.70	1.50	1.65			
Iraq	1.04	1.48	1.40	1.15			
Ivory Coast	.94	1.45	1.15	1.20			
Nigeria	2.55	3.40	2.90	3.20			
Philippines Philippines	1.20	1.50	1.50	1.70			
Senegal	.81	1.20	1.00	1.20			
Others	22.69	23.51	25.75	26.52			
TOTAL	36.25	39.15	38.60	42.90			

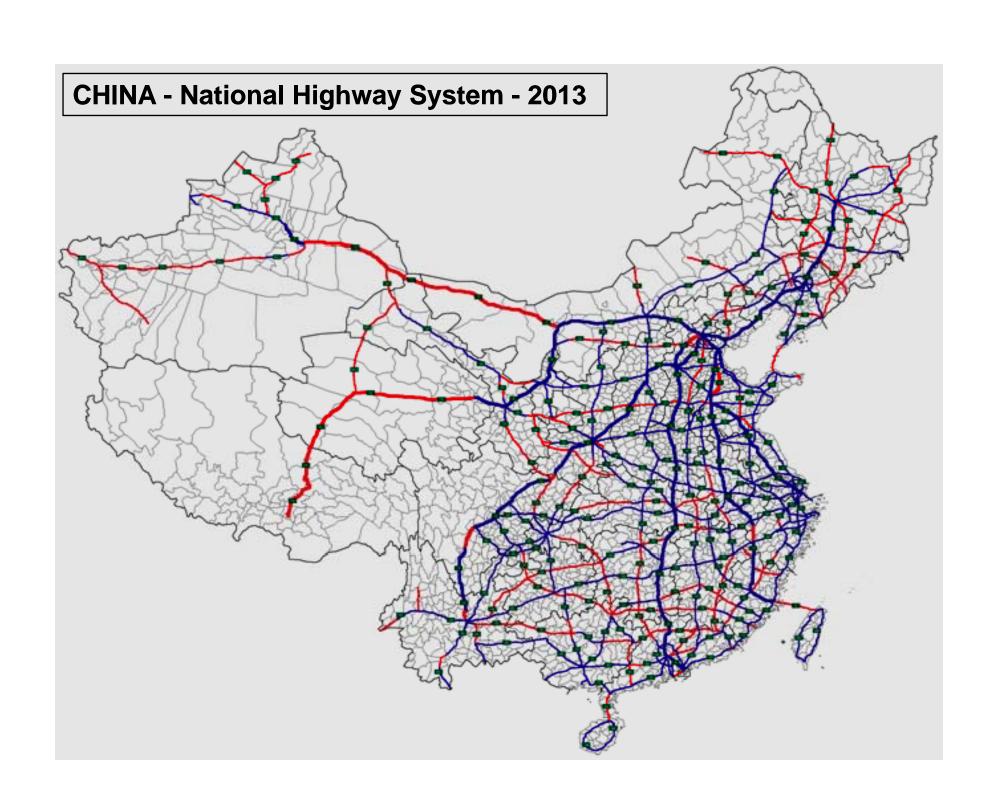
China: Increasing
Paddy support prices2012 \$381/MT, 2013
420/MT (~620/MT rice
wholesale);
TRQ - 5.32 MMT (duty
1% cf outside TRQ 65%)

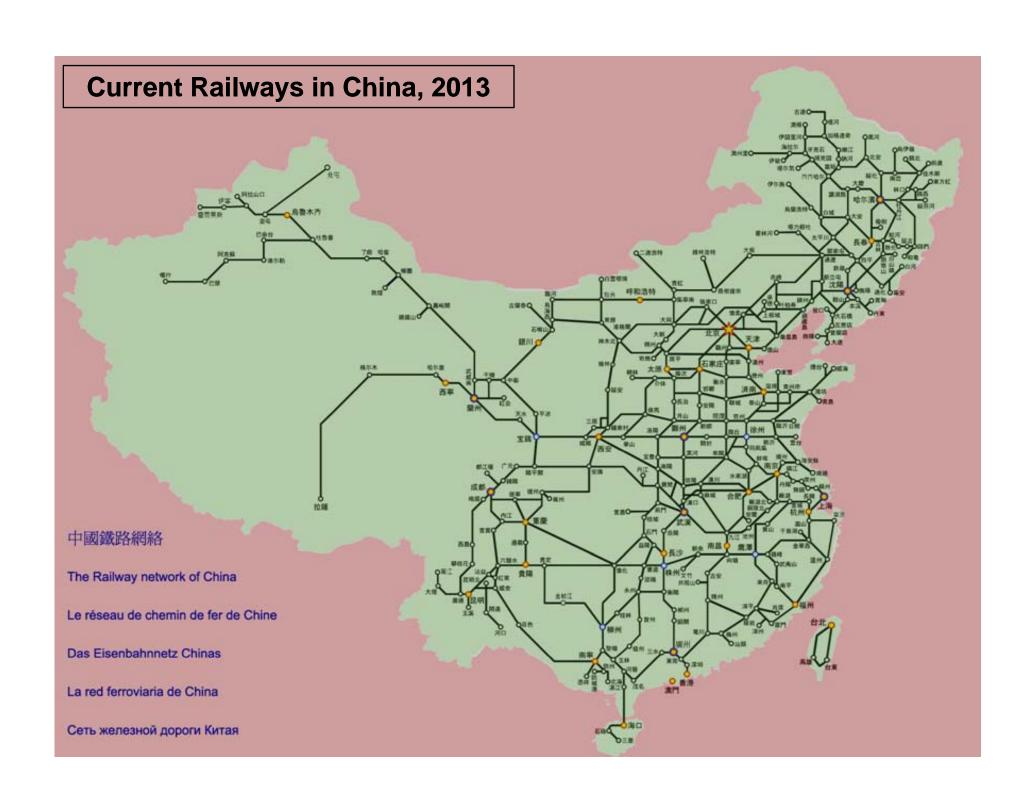
EU: imports
1.5MMT/annum; EBA –
duty free, quota free;
2013 – E175 or
USD228/MT

Source: Tom Slayton and USDA

GMS Connectivity - The three GMS corridors







China's 'One Belt, One Road' (Silk Road Economic Belt and 21st Century Maritime Silk Road) overarching development strategy was put forward by President Xi Jinping in 2013.

- The 'One Belt' links China with Europe through Central and Western Asia (by rail and road) while the 'One Road' represents a maritime road through the Strait of Malacca to Myanmar, Bangladesh, India, Middle East and East Africa.
- The startling thing is the speed with which seeming unrelated past efforts/initiatives are falling into place and integrated by more recent 'big bang' initiatives like the proposed setting up of the Asian Infrastructure Investment Bank (AIIB). Such initiatives include:
 - Pan-Beibu Gulf (PBG) Economic Cooperation Forum was first held in July 2006 in Nanning, Guangxi Zhuang Autonomous Region, involving China, Brunei, Indonesia, Malaysia, Philippines, Singapore and Vietnam. Over subsequent forums, the 'Two Wings and One Axis' was developed and then fleshed out and linked to the '21st Century Maritime Silk Road' at the 8th PBG Economic Cooperation Forum in May, 2014
 - China with Central Asian countries framework of the Shanghai Cooperation Organization (SCO), established June 15, 2001 in Shanghai involving China, Russia, Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan
 - .China with EU Strategic Agenda 2020 for China-EU Cooperation



KAZAKHSTAN

AFGH.

TURKM.

IRAN

FRANCE

LIBYA

SPAIN

Madrid

ALGERIA

GERMANY

POLAND

BELARUS

EGYPT

TURKEY

IRAO

RUSSIA

China-Europe

Block Train

INDIA

/ladivostok

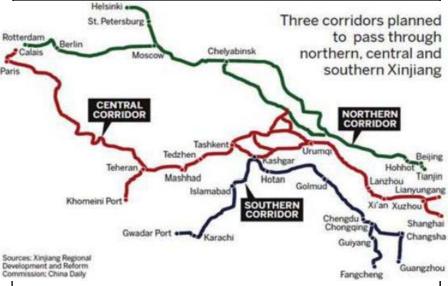
CHINA

JAPAN

China's 'One Belt and One Road'

China's efforts at Modern Silk Routes and recent ambitious 'One Belt and One Road' initiative spanning Eurasia – linking 60 countries, 4.4 billion people, accounts for 29% of world's GDP – expected to be completed by 2025

Asian Infrastructure Investment Bank (AIIB) – 24 Oct 2014 - 21 countries signed - 22 Mar 2015 – 36 countries (incl non-regional members) - starting with \$50 Bil. (both expected to increase significantly)



2011 – Chong Qing to Duisburg (Germany)

2014 - Yiwu (near Shanghai) to Madrid 13,000 km, 82 containers, 1,000MT, 21 days

REGIONAL AGRI-FOOD SUPPLY CHAIN AND TRADING NETWORK INTEGRATION – ALREADY HAPPENING

- Dynamics of Global and regional markets coupled with ASEAN and GMS connectivity – increasing involvement of private sector in treating ASEAN as a production and market base ahead of 2015.
- Productivity enhancement along entire supply chain beyond efficiency and cost of production, but also cost of milling/processing (electricity), transportation, export processing, financing.
- Significant cross-border investments in mills and processing pivotal role in transforming upstream and downstream segments – development of comprehensive supply chains and trading networks investments in input supply, modern distributive trade (especially supermarkets) – various forms of contract farming and modalities of provision of agri-support services and foundation for enhancing productivity and international trade.

Notable Examples of Cross-Border Investments

- Viet Nam 2000s Golden Resources (Hong Kong); Kitoku (Japan) JV with Angimex in An Giang province
 - 2007 Vinafood JV with Iraqi Company in Cantho;
 - 2012 Vinafood JV with Singapore company in Dong Thap

Cambodia – CCAD – JV with Sinograin & Yunnan Pan Asia Ag Cooperation & Development Co; Long Grain Co – JV with UK and Indian investors; Batambang Rice Investment Co (BRIC) – JV with Singapore investor; Crystal Rice Kampuchae – JV with Asia Golden Rice (Thai) in Kampot

Lao PDR – Lao World Co Ltd (French); Sengarthit Development Co Ltd (French); Daum Agro Sole Ltd (Korean); Fu Teng (China) strategic alliance with Dao Phet Group

Myanmar – Myanmar Japan Rice Industry Co Ltd – JV between MAPCO and Mitsui; JV Siacom (French) with XY Trading Co Ltd in Ayeyarwaddy; CP (Thai) with Amari; CAMC Engineering (China) MOU with Myanmar Rice Mill Company

Targeting Multiple end-uses - MAPCO-Mitsui JV in Myanmar Highquality rice Paddy Parboiled. Preliminary Parboiling & rice rice cleaningmilling workshop Storage Rice Rice bran Bran Drying Rice Animal Broken Byproducts utiliztion noodles rice Feedstock Power generation Rice by rice husk husk

Example: Rice and its extended value products

Plant part	1st Stage Product (PRIMARY)	2nd Stage Product (SECONDARY)	3rd Stage Product
Panicle	Milled rice	Human food staple, Flour	Alcoholic drinks, etc.
(Grains)		Human food staple	Noodles, etc.
	Brown Rice	Fuel, Briquettes	Silica-based products
	Hull (Husks)	Bran, Bran Oil	Tocotrienols, Vitamin E
	Embryo and/or		Antioxidants
	Endosperm		
Leaves	Straw	Fuel, Paper, Medium for	
		mushroom growing	
	Phytochemicals	Purified compounds	
Culms	Straw	As above	
(Stems)	Phytochemicals	As above	
Roots	Straw		

BERNAS' Business Strategy/Experience (1996-2004)



SOURCING

 Vertical integration in the sourcing countries through JVs

FARMING

Pioneering HQR farming

MILLING

Improve operational efficiency
 quality by using automation
 and other end-uses of rice

WAREHOUSING

Refocus warehouse to become distribution and logistic support

DISTRIBUTION

 Consolidate business entities and vertically integrated with logistic and production

LOCAL & INTERNATIONAL

(International Trading Network)

- Commodities Trading
- Backward integration through JVs with related sources (eg: flour, manufacturer of food, etc)

OTHER FOOD



Semi Perishables

 Onions, shallots, Garlic, Dried Chilies, Potatoes, Spices

Dry Food

• Bread, Flour, Sugar

Processed Food

Wet Food

• Beef, Chicken, Fish

Horizontal Integration

(Food Super Highway)

 Forward integration through JVs with food distribution network









REALTY & CONST

OTHER BUSINESSES (LOCAL)

(Cluster Development)

WAY FORWARD: Supply Chain Management Facilitation

Livelihood Strategy

What investments could increase gain and reduce risk? Ensure sustainable Production?

Upgrading Strategy

What is need to meet the product requirements? To include asset poor farmers?

Intermediary Model

What new is needed? Are there services and practices that support smallholder inclusion, benefits, risk mitigation?

Lead firm business model

What products, strategies, or purchasing practices can promote smallholder inclusion?

Farmers

(Productivity, income, quality)

Aggregator, Trader

Processor

Branded Firm

Public Investment (NGO, Govt., foundations)

Co-Investment (businesses and donor)

Value chain services and practices

Business Strategy

Dynamics in Roles and Responsibilities of Multi-stakeholders

Farmers

Delivering
change
on the ground
themselves –
participating,
adapting, and
investing at the
farm-level

Government Ministries

Creation of strong pro-agriculture

enabling
environment,
and deep
coordination
across Ministries

Local Private Investors

Expertise on innovative local investment ideas; local partners for multinational investors

Global Private Investors

Expertise on innovative global investment ideas; global partners for local investors

Civil Society Organization

S

Ground-level
expertise
to help
execute and
make
investments
locally sound

Development Partners

Alignment of activities (e.g., capacity, infrastructure, financing) to support partnership agenda

Local Government

Ground-level expertise to help implement (e.g., local extension services)

Research institutes

Technical
expertise to
support the
advancement of
innovative
methods and
technologies

Key Messages:

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 - Who can/should provide regional policy guidance and oversight?

CONCLUSION:

- ❖ Finally, it bears reminding that in development economics, as in politics, there is no such thing as a final word.
- Consequently, this presentation and the examples therein, as in the numerous case studies that will be shared in this workshop, do not in any way suggest the superiority of one approach over the other.
- Hopefully, its usefulness lies in emphasizing the need for a more holistic overarching framework afforded by Supply Chain (and Trading Network) Management as well as considering the various new dimensions, dynamics, and realities (new normal?).
- ❖ In this respect and to end with a touch of Zen, it merely acts as a 'finger pointing to the moon'. As always, the usefulness of the finger is in pointing away from itself to the light which illuminates finger and all.



larry@isis.org.com / larry.cesd@gmail.com