Strengthening Supply Chains and Agricultural Productivity in CLMV

Lao PDR Policy Forum
‘Enhancing Agriculture Sector Productivity in Lao PDR’

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INTRODUCTION:

Development of Supply Chains together with Development of Seed Industry and Agriculture Sector Reform/Restructuring constitutes integral components of the Enhancing Agriculture Productivity strategic thrust of the Pilot Phase of the Supporting ASEAN Equitable Economic Development (CLMV) Project.

PURPOSE: Draw from work done as well as country level Discussion Papers and Regional Discussion Paper and Policy Brief on the Development of Supply Chains in CLMV, focusing on rice, with a Lao PDR slant to stimulate discussion at this Policy Forum.

Underlying theme: Despite many challenges and on-going reforms, CLMV are slowly but surely getting the basics and balance right in terms of supply chain management towards more productivity increases along rice supply chain and ultimately efficient, inclusive and sustainable growth—however, need to keep transforming to catch up (some areas leapfrog) and realize full potential, individually and as a group—so much to be achieved.
KEY MESSAGES:

1. All CLMV countries are currently net rice exporters - except for Myanmar, CLV were rice importers before – turn-around largely policy driven

2. At beginning of study in 2012, all CLMV targeted to export more rice in future – but more recently, 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 (vertical diversification) and crop/enterprise choice or mix (horizontal diversification) – rice-based farming system

3. Except for Viet Nam (exports around 30-40% of total rice production), CLM export < 10% of production (much less that what they consume domestically). Cautionary note: disproportionate emphasis on rice exports supply chain – domestic spatial and temporal arbitrage supply chain equally important especially for food security, employment generation, poverty reduction, and inclusive growth
4. Dynamics of Global and regional rice markets – shifting trade and market segments – policy changes in India, China and Thailand – 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 and Russia (CIS countries)

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 especially 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 and G to G trade? G to G facilitated but B to B executed
7. Significant FDI in mills and processing [Viet Nam > Cambodia > Lao PDR > Myanmar (MITSUI with MAPCO, more to come) – 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 - role of Government still important in the wake of increasing importance of private sector and P-P-P
KEY MESSAGES: (Cont’d)

9. Future prospects/Recommendations

- Policy issues – sequential strengthening identified weak links in rice supply chains;
- 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, export platform);
- More organized border trade – leveraging on increasing GMS and ASEAN connectivity – for Viet Nam, with Cambodia and Lao PDR as well as
- New Markets with preferential treatment – EU - EBA and possibility China and Russia) – more proactive
- Scalability and Replicability of innovative approaches – adaptation, sharing and shoring
- Explore possibility of development of ‘regional rice cluster’ covering not only CLMV but also ASEAN + 3
A global agriculture system that harnesses the power of markets and multi-stakeholder collaboration to feed the world, protect our planet and create prosperity.

FOOD SECURITY
Meet nutritional demands while providing affordable choices across the food value chain.

ECONOMIC OPPORTUNITY
Drive rural and national economic development around the globe with well-targeted investments.

ENVIRONMENTAL SUSTAINABILITY
Conserve or enhance the quality and quantity of natural resources; meet the challenges of changing climate.

‘Realizing a New Vision for Agriculture’ at National, CLMV and ASEAN Levels – (Enhancing Agriculture Productivity, etc)

Source: WEF, 2010
Productivity - Increase production and productivity of food commodities in a sustainable way
Connectivity - Improve linkages between food producers and consumers; input and output markets
Resilience - Enhance the resilience of social and ecological systems against the effects of climate change
Foundations for New Vision of Agriculture:

From...

- Broadly implement individual initiatives across entire country (e.g., fertilizer subsidies, extension, seed systems)
- Individual agendas for country, donors and private sector
- Government driven
- Design programmes around technical and political considerations
- Everything is priority

... to

- Holistic mini-transformations with enough change energy in a geographic region or value chain – then scale/replicate from there
- Coordinated, multi-stakeholder planning process and execution management
- Market-driven, with government as enabler
- Design for scalability
  - Scalable projects and change agents (e.g., nucleus farmers, warehouse aggregators)
  - Focus on replicability
  - Transaction-focused approach
- Explicitly sequence one’s activity choices, and explicitly choose not to do certain things

Source: WEF, 2010
WHY SUPPLY CHAIN MANAGEMENT

- Future competition will no longer be between firms but between supply chains.
- All components along supply chain need not belong to one company or group. Varying degrees of strategic alliances can be developed – from loose structures (JV ‘at the door’) to dedicated/designated suppliers and cross investments – role of government.
- There is value-adding along supply chain.
- Supply chain can reduce asymmetry of information at interface with each subsequent level, thereby reducing transaction costs as well as increasing feedback and improving response rate to changes in consumer preferences and tastes – so as to capture premiums. This sharing of info greatly facilitated/revolutionised by ICT.
There can be amicable/sustainable sharing of margins along supply chain, especially transmission of prices back to farmers/producers.

Small farmers/producers can be hooked up to increasingly sophisticated local supply chains (involving supermarkets) and more lucrative overseas markets, especially niche markets.

Supply chains speedily exploit advances in biotechnology (21ST Century – ‘Century of Biology’) and convergence with ICT as well as innovations.

Exponential growth, if and when interconnectivity of supply chains are exploited.

Investments in agri-food supply/value chains accelerates structural transformation and rural-urban linkages

Above all, it provides the means of using agriculture to drive overall growth.
COMPREHENSIVE RICE SUPPLY CHAIN – Productivity increases, value adding and economic activities along supply chain

**TIER I**
- INPUT / PRODUCTION / OUTPUT

**TIER II**
- INTERMEDIATE SUPPLIER & SUPPORT SERVICE

**TIER III**
- FOUNDATION PROVIDERS

**CURRENT/FUTURE OPPORTUNITIES**
- End uses, End uses enabled by science & technology innovations
- Inputs, Machinery & Equipment, Metal industry
- Industrial Chemicals, Paper industry, Printing
- Logistics, Business Services
- Infrastructure, Finance, HR Development
- Technology, Regulatory Environment
ASIDE: Agriculture (Rice) + +

Productivity Enhancement

- Seeds
- Irrigation
- Fertilizer
- Mechanization
- Credit, agro-support services

1st Plus

2nd Plus

Broaden Economic Functions along the Value Chain

Value Adding

Farming

R&D, Certified Seed, Exotic/High Value varieties, organization of production units, rice-based farming system

Innovative Post-harvest handling, higher value end-use(s), branding, packaging food safety, traceability, targeted markets

Functions (Value Chain)

Adapted from Wong, 2013
This is an indicative interpretation of the UK supply network. Waste figures based on work undertaken by the Food Process innovation Unit at Cardiff University on behalf of the Food Chain Centre. WRAP estimates have been used for consumer waste figures. Available online at:

Focus on rice supply chain’s underlying importance for overall growth and sustainable development. Focus on three major aspects of supply chains (a) structure, (b) dynamics and (c) future prospects of rice supply chain development and related policy issues

1. Overview
- cropped acreage, yields, production and level of self-sufficiency
- summary of Rice Policy changes and key milestones which impacts on structure and development of rice supply chain
- surplus and deficit areas - spatial considerations
- extent of double cropping – temporal considerations
- compare domestic prices with international rice prices of similar grades
2. Structure

- A general mapping of supply chain – inputs to consumers/export
- Differentiated supply chains - domestic flows from surplus to deficit regions; export through ports; exports through border; others
- Facilities along the supply chains - mills - small, medium to large mills. with dryers, wet polishers, colour sorter and packing machine – Rice Specialization Companies – provision of mechanization services tractors, threshers, combine harvesters as well as good quality/certified seeds
- Cost and returns
- Financing, transportation, vulnerable groups (landless farmers)
- Identify weak links (at interfaces) along rice supply chain - Strength of chain is in the weakest links

3. Dynamics

- Transformation of supply chains - growing importance of mills as a fulcrum or pivot & P-P-P arrangements, FDI
- Which of the differentiated supply chains (domestic surplus to deficit areas, exports through ports; via Border Trade; others – growing fastest and why?
NATIONAL LEVEL : (Cont’d)

3. Dynamics (cont’d)
   • Temporal (single or double cropping areas - rice-based farming system, crop rotation) and spatial (which areas more likely to have productivity increases - irrigated areas with multipurpose dams generating electricity to run mills and processing centres). Advantage of market access – cost effectiveness

4. Future prospects
   • Policy issues – strengthening identified weak links in rice supply chain; proper development of seed industry and coordinated reform and transformation of rice industry
   • Coordinated initiatives/emphasis on green food (low chemicals, traceable, certified safe, food scare, heavy metals) rice
   • More organized border trade – especially to China
   • Replicability of innovative approaches
(4) Major Rivers (of which 3 originates within own border) and many rivers and creeks flow into or join the major rivers.

- Sagaing Region
- Rakhine State
- East & West Bago Region
- Ayeyarwaddy Delta Region (40% total prodn)

**Four Major Rice Granaries in Myanmar**

**Cultivated area:** 8 million ha  
**Total Production:** 23.6 million MT (paddy)

*Myanmar- potential to be water-energy-food secure, in short term, if not already so*
Production and harvest areas

Table. Rice production in Lao PDR (2010/11)

<table>
<thead>
<tr>
<th>Particular</th>
<th>Harvest area (ha)</th>
<th>Production (Million tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wet season</td>
<td>604.235</td>
<td>2.214.391</td>
</tr>
<tr>
<td>Dry season</td>
<td>101.611</td>
<td>477.110</td>
</tr>
<tr>
<td>Upland</td>
<td>69.117</td>
<td>141.597</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>774.963</strong></td>
<td><strong>2.822.098</strong></td>
</tr>
</tbody>
</table>

*Source: Agriculture Census, MAF, May 2012.*
Rice Surplus and Deficit Provinces and Land Concessions by Investment Project Locations and Products in the Agriculture Subsector
### Food Production in Agricultural Markets

#### Rice Production - Cambodia

<table>
<thead>
<tr>
<th>Descriptions</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultivated Areas (Ha)</td>
<td>2,585,905</td>
<td>2,615,741</td>
<td>2,719,080</td>
<td>2,795,892</td>
<td>2,968,529</td>
</tr>
<tr>
<td>Harvested Areas (Ha)</td>
<td>2,566,952</td>
<td>2,613,363</td>
<td>2,674,603</td>
<td>2,777,323</td>
<td>2,766,617</td>
</tr>
<tr>
<td>Yield (T/Ha)</td>
<td>2.621</td>
<td>2.746</td>
<td>2.836</td>
<td>2.970</td>
<td>3.173</td>
</tr>
<tr>
<td>Production (MT)</td>
<td>6,727,127</td>
<td>7,175,473</td>
<td>7,585,870</td>
<td>8,249,452</td>
<td>8,779,365</td>
</tr>
<tr>
<td>Rice Surplus (MT)</td>
<td>1,649,640</td>
<td>2,025,033</td>
<td>2,244,598</td>
<td>2,516,752</td>
<td>2,780,328</td>
</tr>
<tr>
<td>Paddy Surplus (MT)</td>
<td>2,577,562</td>
<td>3,164,114</td>
<td>3,507,185</td>
<td>3,932,425</td>
<td>4,344,263</td>
</tr>
</tbody>
</table>

- **Lowland Rice** (80.4%)
- **Deep Water Rice** (3.5%)
- **Dry Paddy Rice** (14.2%)
- **Upland Rice** (1.9%)
Viet Nam Rice Production

Red River Delta
Rice land: 0.6 mil. ha
17% of total production

Mekong River Delta
Rice land: 1.87 mil. ha
55% total of production
95% of total export

Rice land: 3.9 mil. ha
Cultivated area: 7.4 mil. ha
Yield: 5.32 ton/ha
Production: 40 mil. tons (paddy)
Export: 7 mill tons (rice)
Trade Flows Of Rice And Paddy In Cambodia – Conventional and Border Trade
DIFFERENTIATED Rice Supply (Sub) Chains:

• Traditional Rice Supply Chain

• Spatial & Arbitrage Supply Chain

• International Rice Trade Supply Chains

• Border Trade Rice Supply Chain

Also (for CLMV):

• Traditional Rice Supply Chains

• Transforming Rice Supply Chains

• Modern Rice Supply Chains

Source: Wong and Wai (2013)
Figure 9. RICE SUPPLY CHAIN IN MYANMAR

Service Providers: Transporters (highway and waterway), market information, Bank, packaging material, SGS

Support Institution
DOA, MADB, MOAI, MOC, MRA, UMFCCI,

Institutional Environment
Trade policy, export regulation, Tax policy, Investment policy (FDI), Company act, seed law, Fertilizer law, Pesticide law,

Infrastructure
Roads, Bridge, port, transport
Rice Supply Chain in Lao PDR

**Input**
- Certified seed only Govt.
- Chemical fertilizer and pesticide (Private companies)
- Farm machineries -
  - land preparation
  - Threshers
  - harvesters
  - water pumping engines
- Agri-support service (Public sector)
- Irrigation, Drainage and flood prevention (Dam-Govt.)

**Paddy production**
- No. farm family = 724,000
- Paddy land = 987,000 ha
- Paddy collector
- Farmers working with rice leading companies

**Rice processing**
- Rice mills
  - Big rice mill <10 mills (33 ton/day)
  - Modern new mill-200 (16 ton/day)
- Rice bran
- Milled rice (White rice)
- Broken rice
- Animal feed
- Wholesale Market
  - Exporters’ warehouse
  - Prepared for export
  - Local rice exporter
- Rice traders (Intermediaries)
- Wholesalers in Vientiane
  - Government contractor (military/police)
  - Retail Markets
  - Supermarket
- Rice wholesalers and other markets in rice deficit areas
- Local rice exporters

**International trade**
- Thailand, Vietnam (Lak20), China (border trade)

**CONSUMERS**
- Government contractor (military/police)
- Retail Markets
- Supermarket
- Rice wholesalers and other markets in rice deficit areas
Rice supply chain in the Mekong River Delta

Source: Vo Thi Thanh Loc, 2010
ASIDE: FDI at Mills segment - technology, finance, markets

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

Lao PDR – Lao World (Thai); Sengarthit (French)

Transformation of Rice Supply Chain - Process Diagram

Paddy → Preliminary cleaning - Storage → Parboiling & rice milling workshop → High-quality rice → Parboiled rice

Paddy → Drying → Rice Bran → Rice bran oil

Paddy → Byproducts utilization

- Rice bran
- Broken rice
- Rice husk

- Rice bran oil
- Rice noodles
- Power generation by rice husk

Animal Feedstock
# COMPARISON OF UP STREAM & DOWN STREAM LINKAGES OF THE SIX CASE STUDIES IN LAO PDR

<table>
<thead>
<tr>
<th>Company</th>
<th>Up Stream</th>
<th>Mill</th>
<th>Down Stream</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Contract Farming</td>
<td>Agents/ Others</td>
<td>Capacity</td>
<td>2012 Business Volume (MT)</td>
</tr>
<tr>
<td>Lao World</td>
<td>allied mills</td>
<td>100MT/day</td>
<td>6,000</td>
<td>Own</td>
</tr>
<tr>
<td>Sengarthit Limited</td>
<td>mostly agents</td>
<td>30MT/day</td>
<td>5,000</td>
<td>Almost all</td>
</tr>
<tr>
<td>Daum Limited</td>
<td>mainly agents</td>
<td>5MT/day</td>
<td>1,200</td>
<td>Almost all</td>
</tr>
<tr>
<td>Fu Teng &amp; Dao Phet Group</td>
<td>12,500 contract farmers - seeds, fertilizers, agro-chemicals</td>
<td>390MT/day</td>
<td>50,000</td>
<td>Almost all</td>
</tr>
<tr>
<td>Lao Agro. 2000 Co., Ltd</td>
<td>some</td>
<td>20MT/day</td>
<td>5,000</td>
<td>some</td>
</tr>
<tr>
<td>Suthat</td>
<td>some</td>
<td>6MT/day</td>
<td>3,000</td>
<td>some</td>
</tr>
</tbody>
</table>
Transformation in rice retailing in Lao PDR

From loose form in traditional markets to packed and branded rice in supermarkets

Major Supermarkets in Vientiane includes:
• Tengferes (Overseas Laotian)
• D’Mart (Chinese)
• U-Express (French)
• M-Point Mart (Thai)
GMS Connectivity

Road Transport Network

2015 (Committed)

Source: West Indochina
CHINA - National Highway System
Prioritizing and sequencing interventions – Myanmar Rice Supply Chain: Strength of Chain is determined by weakest link

WEAK LINK 1
- purity and quality of seeds – mainly farm saved seeds
- low level of inputs
- poor water management
- poor quality of fertilizers – fake & adulterated
- misuse of pesticides
- weak extension service
- lack of credit
- poor infrastructure – farm roads
- Labour shortage – planting and harvesting

WEAK LINK 2
- Cultural practice leads to ‘sun-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 by-products
- Lack of Financing – most mills operating under capacity
- Low quality output – improved somewhat -recent new and upgraded mills

WEAK LINK 3
- Exports – inconsistency of quality and supply
- Dependency on African market
- poor understanding of dynamics of international markets – Supply driven
- Stockpiling – with MRF/MAPCO (private sector) – needs monitoring and evaluation
- Increasing border trade – especially to China - Myanmar side legal but China side informal/illega
- High transportation, logistics, and handling charges at port

WEAK LINK 4
- Poor quality and inconsistent data - overstated production – difficult to plan and difficult to attract FDI
- Little or no sharing of data/ information along supply chain - collected and disseminated by different interest groups
- Financing issue not only with farmers but along entire supply chain
Trade structure (quality segments) has changed

<table>
<thead>
<tr>
<th>Quality</th>
<th>mid 90s</th>
<th>2005-07</th>
<th>2010-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basmati</td>
<td>.89</td>
<td>2.00</td>
<td>3.64</td>
</tr>
<tr>
<td>Jasmine</td>
<td>1.20</td>
<td>1.90</td>
<td>2.52</td>
</tr>
<tr>
<td>Jasmine Bkns</td>
<td>NA</td>
<td>.69</td>
<td>0.73</td>
</tr>
<tr>
<td>Glutinous</td>
<td>.28</td>
<td>.34</td>
<td>.46</td>
</tr>
<tr>
<td>Japonica</td>
<td>1.50</td>
<td>2.58</td>
<td>2.42</td>
</tr>
<tr>
<td>Rough</td>
<td>.50</td>
<td>2.45</td>
<td>2.36</td>
</tr>
<tr>
<td>Brown</td>
<td>.60</td>
<td>0.70</td>
<td>.64</td>
</tr>
<tr>
<td>Parboiled</td>
<td>2.15</td>
<td>6.93</td>
<td>6.07</td>
</tr>
<tr>
<td>High</td>
<td>3.20</td>
<td>5.10</td>
<td>8.14</td>
</tr>
<tr>
<td>Medium</td>
<td>2.50</td>
<td>3.07</td>
<td>2.97</td>
</tr>
<tr>
<td>Low</td>
<td>3.86</td>
<td>5.27</td>
<td>4.63</td>
</tr>
<tr>
<td>Brokens</td>
<td>.83</td>
<td>1.82</td>
<td>2.01</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>17.50</td>
<td>32.85</td>
<td>36.60</td>
</tr>
</tbody>
</table>

Source: Personal Communication Tom Slayton
## Key Importers Changing - Opportunities

### Imports by Key Markets (million tons)

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>CHG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>1.49</td>
<td>.05</td>
<td>.30</td>
<td>.25</td>
</tr>
<tr>
<td>China</td>
<td>.58</td>
<td>2.90</td>
<td>3.00</td>
<td>.10</td>
</tr>
<tr>
<td>Indonesia</td>
<td>3.10</td>
<td>1.96</td>
<td>1.50</td>
<td>- .46</td>
</tr>
<tr>
<td>Iran</td>
<td>1.87</td>
<td>1.70</td>
<td>1.50</td>
<td>- .20</td>
</tr>
<tr>
<td>Iraq</td>
<td>1.04</td>
<td>1.48</td>
<td>1.40</td>
<td>- .08</td>
</tr>
<tr>
<td>Ivory Coast</td>
<td>.94</td>
<td>1.45</td>
<td>1.15</td>
<td>- .30</td>
</tr>
<tr>
<td>Nigeria</td>
<td>2.55</td>
<td>3.40</td>
<td>2.90</td>
<td>- .50</td>
</tr>
<tr>
<td>Philippines</td>
<td>1.20</td>
<td>1.50</td>
<td>1.50</td>
<td>0</td>
</tr>
<tr>
<td>Senegal</td>
<td>.81</td>
<td>1.20</td>
<td>1.00</td>
<td>- .20</td>
</tr>
<tr>
<td>Others</td>
<td>22.69</td>
<td>23.51</td>
<td>25.75</td>
<td>2.24</td>
</tr>
<tr>
<td>TOTAL</td>
<td>36.25</td>
<td>39.15</td>
<td>38.60</td>
<td>1.54</td>
</tr>
</tbody>
</table>

**Source:** Personal Communication Tom Slayton

**Increasing Paddy support prices:** 2012 $381/MT; 2013 – 420/MT (~620/MT rice wholesale) – TRQ – 5.32 MMT (duty 1% cf outside TRQ 65%)

**EU – 1.5MMT/annum; EBA – duty waiver – E175 or USD228/MT**
KEY CONSIDERATIONS:

- Underscores importance of supply chain to enhancing agricultural productivity - initiatives required at different levels of supply chain (identified weaknesses at the interfaces need to be addressed more holistically - prioritising and sequencing) - too production-centric and piecemeal in past

- Importance of Public-Private-Partnership (in various forms) in developing comprehensive supply chains and trading networks - 'from seed to shelf' - link to local as well as foreign more lucrative markets

- Key pivot /fulcrum in 'balancing' and driving productivity - the mills/processing plants - contract farmers, provision of high quality/certified seeds, provision of mechanization services, produce other end uses (rice bran oil, rice wine, rice-based drinks, vermicelli, rice flour, animal feed, etc), perform stock-piling function for Government, including provision of rice to military; packed and branded rice into supermarket chains.
KEY CONSIDERATIONS: (Cont’d)

• All already or intend to export rice - besides from ports, increasing importance of border trade and related cross border investments - springboard to other countries- (China’s well developed rail and road links – to CIS and Europe (Rotterdam)

• Each has inherent advantage – Myanmar’s strategic geo-political and geo-commercial location; Cambodia and Lao PDR’s special market access to Europe (EU – Everything But Arms – duty exemption ~ USD200/MT); - potential for organic and/or green (product) branded rice into local and overseas niche markets and supermarket chains.
KEY ISSUES AND RECOMMENDATIONS

At national level:

• Balanced, inclusive and sustainable growth – attention to marginalization of ‘smaller’, less connected stakeholders, especially farmers
• Export more rice? – crop/enterprise mix – Paddy ++ with increasing rural development orientation
• Understand, track shifts in Global and regional rice markets – need to be proactive

At CLMV level:

• Leverage on ASEAN and Greater Mekong Subregion increasing connectivity – intermodal logistics -> transit corridors (Lao PDR, Cambodia): regional food supply chain and trading networks – exploit synergisms and leverage on relative strengths- cross border investments (FDI/JV) – joint exploitation of emerging markets – China, EU, Russia
KEY ISSUES AND RECOMMENDATIONS (Cont’d)

- Increasing P-P-P BUT Government role at National and CLMV levels crucial - Investments in infrastructure (reduce transportation, electricity and cost of doing business), provision of smart and well-targeted subsidies; investments in science & technology, R&D and innovation along supply chain (seed and other input industry development), agri-support services and foundations

- All CLMV undergoing economic, social (and political) transformation – execution need to be managed and coordinated - policy, legal and institutional framework, finance and HRD – liberalization with improved governance – rolling back of SOEs – Provision of Public goods (blurring of Public Vs Private goods)

- Implementation Coordination/Management Unit – change management
KEY ISSUES AND RECOMMENDATIONS (Cont’d)

Also:

- Seek out and realize potential in managing increasingly comprehensive supply chains – convergence of Biotechnology and ICT (with increasing digital penetration) – enables leap-frogging – for production, market information, training.

- Work on exploiting connectivity and convergence of agricultural supply chains – rice with other essential goods (edible oil, sugar, pulses and beans, etc) as well as other enterprises in rice-based farming systems (Rice ++)

- Aware special requirement of new markets (EU – EBA but need certification GMO free)

- Cross-pollination of ideas and innovations in different CLMV countries (and further afield) – Use of gasifiers in Cambodia, intermodal logistics, mid-stream loading (Thai experience) using barges to overcome draft and port constraints.
KEY MESSAGES:

1. All CLMV countries are currently net rice exporters - except for Myanmar, CLV were rice importers before – turn-around largely policy driven

2. At beginning of study in 2012, all CLMV targeted to export more rice in future – but more recently, 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 (vertical diversification) and crop/enterprise choice or mix (horizontal diversification) – rice-based farming system

3. Except for Viet Nam (exports around 30-40% of total rice production), CLM export < 10% of production (much less that what they consume domestically). Cautionary note: disproportionate emphasis on rice exports supply chain – domestic spatial and temporal arbitrage supply chain equally important especially for food security, employment generation, poverty reduction, and inclusive growth
4. Dynamics of Global and regional rice markets – shifting trade and market segments – policy changes in India, China and Thailand – 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 and Russia (CIS countries)

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 especially 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 and G to G trade? G to G facilitated but B to B executed
7. Significant FDI in mills and processing [Viet Nam > Cambodia > Lao PDR > Myanmar (MITSUI with MAPCO, more to come)] – 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 - role of Government still important in the wake of increasing importance of private sector and P-P-P
KEY MESSAGES: (Cont’d)

9. Future prospects/Recommendations

• Policy issues – sequential strengthening identified weak links in rice supply chains;
• 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, export platform);
• More organized border trade – leveraging on increasing GMS and ASEAN connectivity – for Viet Nam, with Cambodia and Lao PDR as well as
• New Markets with preferential treatment – EU - EBA and possibility China and Russia ) – more proactive
• Scalability and Replicability of innovative approaches – adaptation, sharing and shoring
• Explore possibility of development of ‘regional rice cluster’ covering not only CLMV but also ASEAN + 3
CONCLUSION

- With increasing interconnectivity/interdependence in Technology, Productivity, Regional Trade and Food Security – need to view as food ecosystem – increasingly develop and apply systems and trans-disciplinary approach, especially in view of overlapping regional frameworks.

- Interesting work is being conducted incorporating ‘complex theory’ – involving systems approach innovatively combining hard and soft systems analysis, coupled with systems to manage information/knowledge.

- Ultimately, and paraphrasing Victor Hugo, markets open to trade and minds open to ideas will help drive CLMV’s individual and collective efforts in addressing regional integration, catching up, and food security, ultimately targeted at efficient, inclusive and sustainable growth.
THANK YOU!

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