





Rice Value Chain development : Guiding principles from Asia

Consultation Workshop on Rice Competitiveness

Aman Khanna, Sr. Agribusiness Consultant World Bank "Those who cannot remember the past are condemned to repeat it."

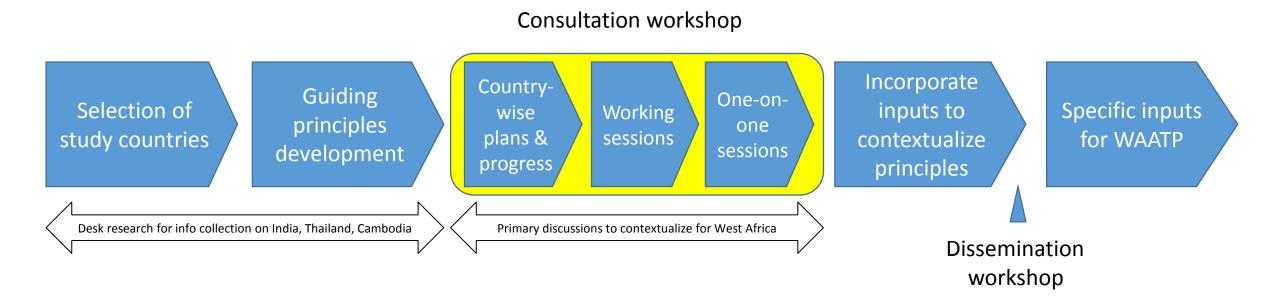
- George Santayana, 1905

But...

"Those who learn from the past of others have an unmatched opportunity to leapfrog over challenges" - Anonymous, 2018

Key objective of workshop: Contextualizing lessons from Asia

Organized as part of ongoing World Bank study seeking to understand the policy, institutional and public/private investment drivers of successful rice value chain development in Asian countries that dominate exports to West Africa – with a view to inform WAATP and other interventions towards rice self-sufficiency

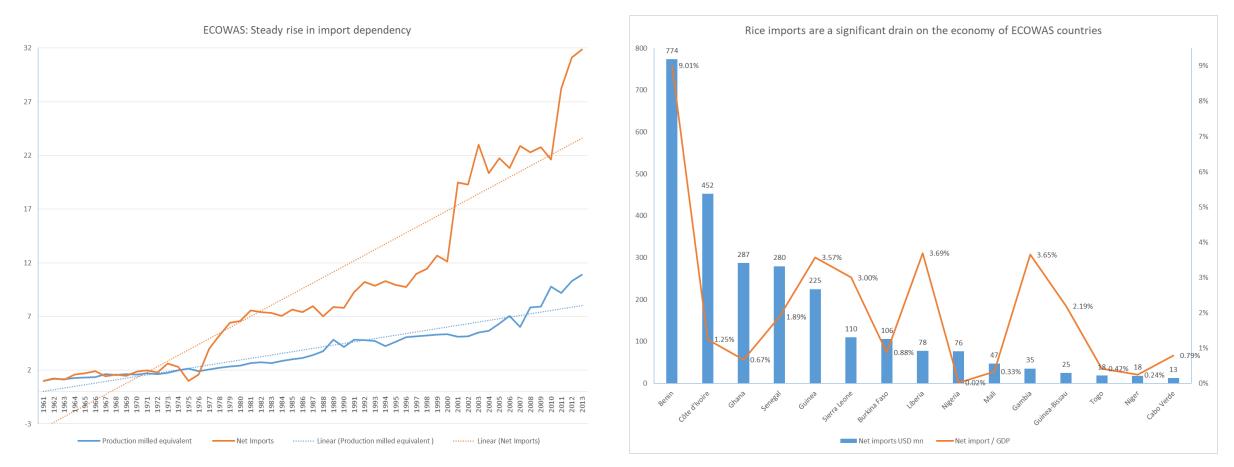


We seek to derive specific implementable actions from a blend of Asian and West African experiences, particularly in the post-harvest value chain

Agenda

- Background and context
- Rice value chain development in
 - India
 - Cambodia
 - Thailand
- Key guiding principles and considerations for West Africa
- Next steps

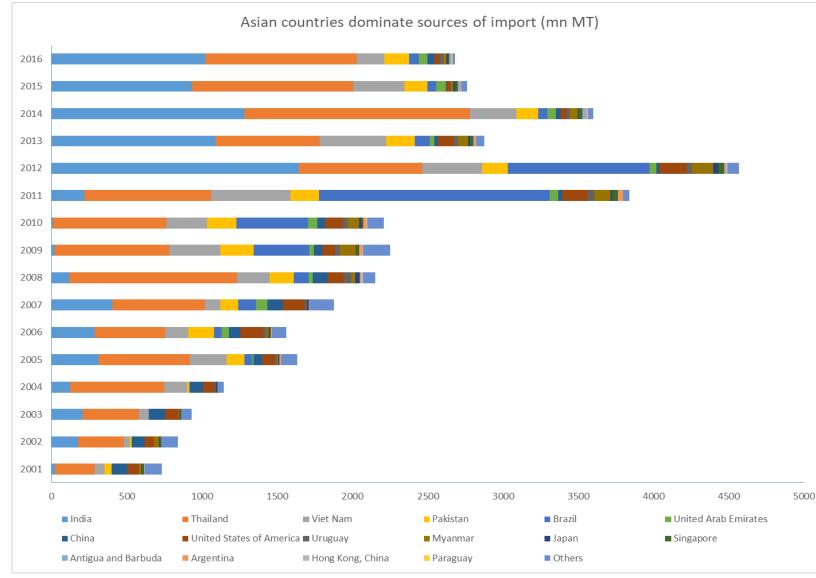
Rice self-sufficiency is critical: solid progress made but more needed



Note: In chart on the right, the import figure for Benin does not account for unofficial exports to Nigeria; similarly unofficial exports to Ghana through Ivory Coast are excluded. Nevertheless, the magnitude of spend at the regional level is evident

- Fast growing component of staple diet
- Heavy (and rising) burden on (not just the) exchequer

Dominant Asian exporters have worked through similar challenges

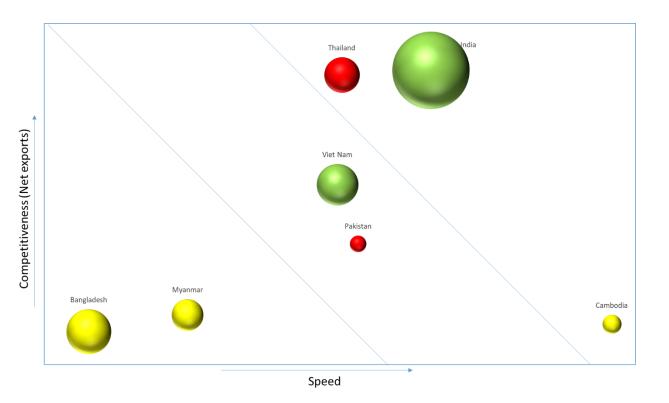


- Competitive and dominant
- Production aligned with West African palate
- Overcame several similar challenges
 - High share of smallholders
 - Aid / import dependency
 - Low level of irrigation
 - Role of regional synergies

Note: Chart includes imports to ECOWAS countries

India, Cambodia and Thailand emerge as most suitable examples

Indicator	Filters	Core parameters	"Tie-breakers"
Scale	Drop if	Production (2014)	Exports
Speed	 Neither a top-15 producer nor a top-15 net 	Avg growth of production (1962- 2014) Avg growth of net exports (1988- 2014) Growth in export to ECOWAS (2005-2014)	Avg growth of exports (1988- 2014)
Competitiveness	exporter	Net exports (2014)	
	 Negative net exports Non- Asian 	Share of export to ECOWAS (2009-2014 avg) Share of smallholders in all growers (<1ha)	Year of WTO accession Level of government intervention /
Context		Share of production exported	control
comparability		National income level	Landlocked



Notes: Color of bubble is indicative of context comparability (green indicates high comparability and red indicates low comparability) and size is representative of total production

- Extent, duration and speed of achievement of competitiveness considered
- Depth of domestic market and strength of supply chain serving it key

Self-sufficiency requires going beyond just producing more rice...

• Requires making rice in the

Right Quantity: By

growing more (better varieties) and

wasting less volume (threshing, handling, transporting, storing better)

Right Quality: By

growing <u>better</u> on farm

cultivation practices (extension)

harvesting practices (mechanization)

using appropriate inputs

managing better post-farm

wasting less value (cleaning/de-stoning, better milling, not mixing varieties) adding value (parboiling, polishing, (re)packaging, (un)bundling, branding)

• Available at the

Right time: By

making available throughout the year (storage)

Right place: By

distributing, merchandizing, retailing at key (urban) outlets

...addressing gaps across the value chain

Inputs Upstream: Inputs	Production	Market intermediation (aggregation, trade and distribution) Physical intermediation: Storage & Transport Direct off-take / out-grower arrangements Imports Midstream: post-harvest activities including procurement, handling, distribution, associated logistics	Processing	Processed produce wholesale, Retail, HoReCa, Exports
 Availability of quality Seed Fertilizers Pesticides Research Irrigation Power Illustrative areas for consideration Illustrative measures Nature and quality of contracting/informal arrangements/links Penetration of branded / high 	 Land (fragmentation, tenures etc) Mechanization Labor availability & cost Production practices (availability of extension / testing labs etc) Credit / financing Insurance (weather, others) Yield (MT/ha; \$/ha) Share of market price realized by farmer Availability & cost of credit Prevalence of cultivation & harvesting "best practices" Availability of market price & demand information Cost / unit of production & price / unit of sale 	 Transparent & reliable access for farmer to services & infrastructure for handling & basic value addition (weighing, cleaning, landing, grading/sorting, packaging, storage, aggregation etc.) finance, insurance, hedging (WRS) marketing (platform for spot sale, future / forward sale, ability to enter into transparent & fair outgrower contracts & / or long term / committed offtake arrangements) Market structure of intermediaries (level of scale & integration) Prevalence of & adherence to process and product standards Availability & quality of technical skills eg. handling, packaging etc Availability & quality of soft & entrepreneurial skills Packaging, handling, storage & transportation practices Reliability & quality of supporting transport infrastructure & services (road, rail, air, ocean/coastal) 	 Ability to meet urban/export consumers' requirements (standards & grades) Impact on competitiveness arising from factors beyond farm (losses, intermediary margins/ market structure etc) overall manufacturing competitiveness Market structure of buyers lead firms / off-takers local firms Ability to enforce outgrower/offtake arrangements Local/SME links with lead firms/off-takers Regulatory/policy/ taxation issues Access & capability of local/SME firms for market development 	
 Market structure of suppliers Reach and spread of distributor network 		 Losses along the chain (prevalence of handling, storage & transport "best practices") Marketing costs for farmer, intermediaries & other SME agribusinesses Intermediary cost and margins Distribution network for paddy and milled rice – no. agri markets, their volumes, mills and their capacities, utilization, Cost / unit of production & price / unit of sale Break even / payback / ROI for investment in processing, aggregation, wholesaling, exporting 		

skills and services like financial and cash flow management, accounting, compliance documentation

Notes: Color of bubble is indicative of context comparability (green indicates high comparability and red indicates low comparability) and size is representative of total production

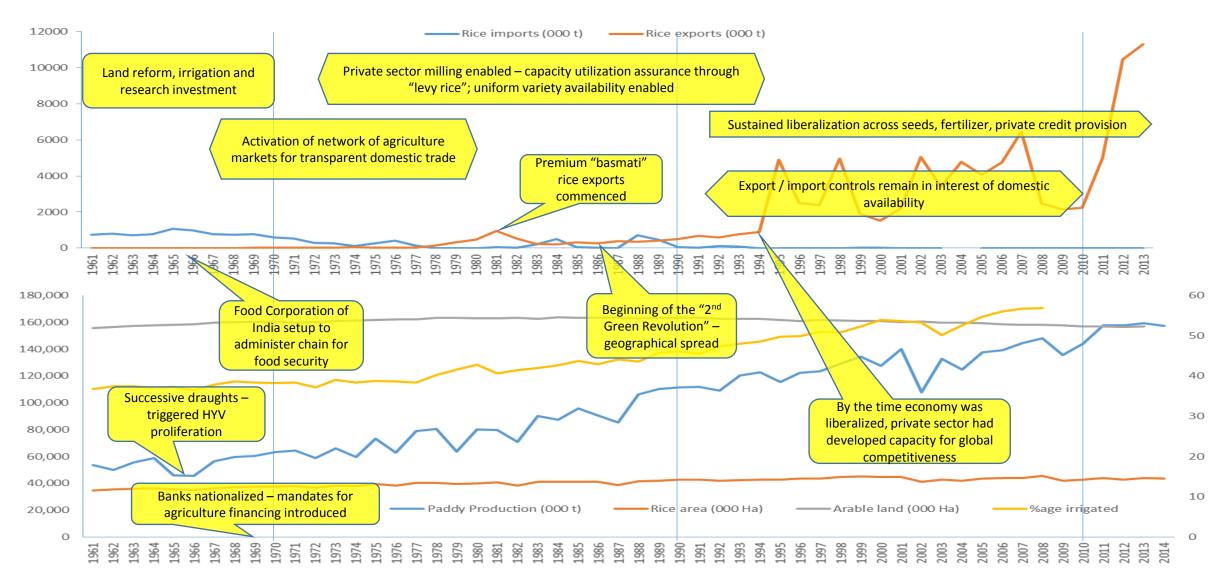
...addressing gaps across the value chain

	Inputs	Production	Market intermediation (aggregation, trade and distribution) Physical intermediation: Storage & Transport Direct off-take / out-grower arrangements Imports	Processing	Processed produce wholesale, Retail, HoReCa, Exports
	Upstream: Inputs, cultivation & harvesting		Midstream: post-harvest activities including procurement, handling, distribution, associated logistics	Dowr	nstream: Markets
Self-sufficiency parameters	Inputs	Production	Market / physical intermediation	Processing	Distribution and Reta
Right Quantity					
growing more					
wasting less					
Right Quality					
growing better					
cultivation practices					
harvesting practices					
using appropriate inputs					
managing better post-farm					
wasting less value					
adding value					
Right Time					
available throughout the year					
Right Place					
Distribute, merchandize, retail			importance of that segment in achieving respective parameter for self-sufficiency		

Agenda

- Background and context
- Rice value chain development in
 - India
 - Cambodia
 - Thailand
- Key guiding principles and considerations for West Africa
- Next steps

India achieved competitiveness through a sustained process of strong public action while enabling private sector to develop organically



India achieved competitiveness through a sustained process of strong public action while enabling private sector to develop organically

• Upstream

Upfront agrarian reforms dismantling an age-old colonial land tenure system Rapid and focused efforts were undertaken to boost farm productivity Encouraged cultivation of single-variety in each region Public-administered yet largely private operated inputs network

• Midstream

A thriving (small scale) private sector milling industry was enabled A network of agriculture markets was established across the country

Downstream

Administered procurement and distribution system ensured protection of both producer and consumer interests

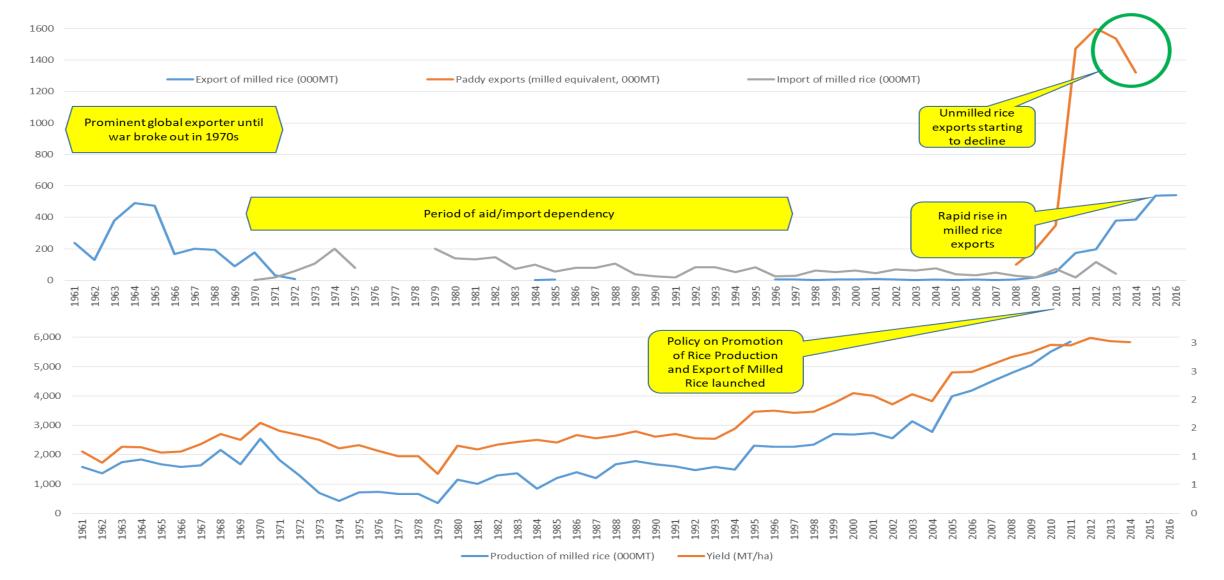
Cross-value chain

An enabling system of credit provision was built

Government focused, and spent heavily, on agriculture

In conjunction with the above, export and import of rice was brought under government control

Cambodia's recent rapid growth is built upon coherent and directed policies, particularly enabling private investment



Cambodia's recent rapid growth is built upon coherent and directed policies, particularly enabling private investment

• Upstream

Strong action on the demand side "pulling" the upstream network into order

• Midstream

Milling was identified as focus segment and specific incentives were provided

Downstream

Direct and indirect support for compliance with stringent international buyers' standards was provided Branding and promotional activities for higher price realizations were supported Coordinated action on establishing standards, promulgated by Royal Decree, institution of quality assurances

Cross-value chain

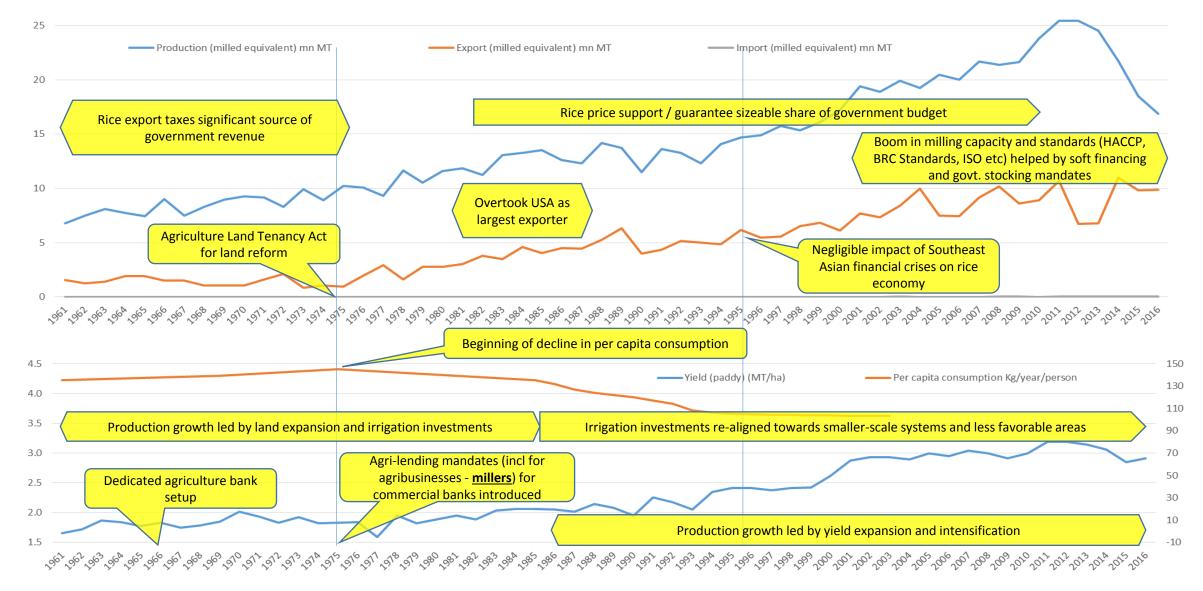
Realistic and time-bound, yet comprehensive policy pronouncement was made with sponsorship from the top and clear allocation of responsibility, resources and accountability

Donor-support was aligned to the policy and well-coordinated

Public-private dialogue and collaboration was driven by the government with a rising uptake from the private sector Regional linkages were exploited and leveraged

Demanding urban markets in West Africa perhaps need to be targeted in the the same way as Cambodia targeted its demanding export customers

A traditional rice exporter, Thailand demonstrates the success (and failure) of balancing private-public roles



A traditional rice exporter, Thailand demonstrates the success (and failure) of balancing private-public roles

• Upstream

Rice has been used as a revenue generator at one time to a recipient of heavy government price support now Land tenure issues were sorted out early on

Strong demand "pulled" the upstream network (inputs etc) into order – relatively low public support Traditionally strong support for cooperatives

• Midstream

A thriving private sector milling industry enabled through direct and indirect incentives

Downstream

No material policy intervention or support except export taxes in the upto 1970s Recent populism-driven price controls have distorted markets

Cross-value chain

Consistent strong credit support including mandates for commercial banks and dedicated agriculture bank

Agenda

- Background and context
- Rice value chain development in
 - India
 - Cambodia
 - Thailand
- Key guiding principles and questions for West Africa
- Next steps

A few key guiding principles emerge from Asian examples

- **Take "custodianship" of the chain:** A public policy approach towards the development of the entire value chain works better than undertaking isolated independent improvements in each segment
- Continuously monitor and maintain balance between consumer interests and producer incentives: Achieving self-sufficiency has to balance the goals of providing affordable food to the population and maintaining incentives for the producer to continue to grow the food
- **Provide domestic upstream and midstream stakeholders "breathing time" to become competitive:** Solving market failures that prevent competitiveness takes time targeted policy protection with a disciplined direction towards addressing these failures goes a long way.
- Scale in milling does not have to be concentrated in a few large firms: The spirit of the local small / medium entrepreneurs can just be as strong and compelling and deliver greater impact when encouraged and tapped effectively as a large multinational corporate providing a one stop large scale solution.
- Quality upgradation requires a market-driven approach with a sharp, relentless focus on consumer needs
- **Regional linkages matter and, if leveraged well, can be synergistic:** Regional cooperation and synergies can counter many of the disadvantages of the limited size and depth of each individual economy
- Credit is the lifeblood of agriculture value chains

Questions to ponder?

- Could hundreds of small milling units across the region be incentivized to upgrade/align to urban demand? Incentives (fiscal / other) and credit to scale? Incentives and credit for consolidation? Tier 1 suppliers / contract millers to larger mills focusing on consumer aspects?
- Could spend and credit be increased/reallocated to development of input networks to rapidly ensure reach? Tighter collaboration on research for locally suited fragrant/long-grain rice? Investment in government extension network leveraging technology and private sector? Government controlled but privately operated distribution network?
- Could private partnerships in near-farm network of cleaning, grading, sorting infrastructure be explored?
- Could support (fiscal / other) be provided for local brand building?
- Could community / cooperative owned mills be explored?
- (Only) In conjunction with above

should carefully calibrated import controls be imposed? can commercial banks be mandated to lend share of portfolio to agriculture/rice?

• Could consolidated procurement of imported inputs be considered for the region's requirements?

Application of guiding principles would necessarily have to account for regional peculiarities eg. head-start enjoyed by imports, skewed rural-urban poverty split, different ecologies, wider consumption palate and lower public investment capacity

Guidance for breakout discussions

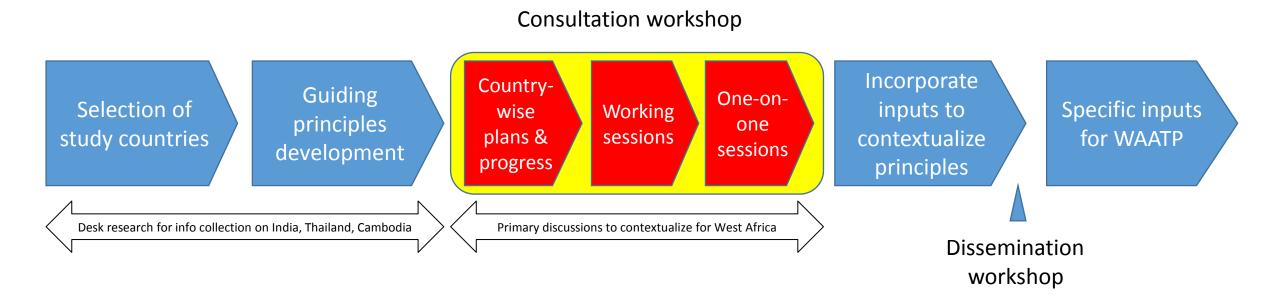
- <u>Traders' perspective</u> What drives most of the major traders to deal with only imported rice? What are the drivers to make them consider handling the domestic produce?
- <u>Quality vs quantity</u> How do Asian countries manage to deliver large amounts of rice of uniform quality (in terms of variety and processing performance) to the major domestic cities as well as for exports
- <u>Scale in terms of production, processing and aggregation</u> What is the scale of production, processing and aggregation in Asian countries? What are the pros and cons of having different scales of production, processing and aggregation? Is large scale always the better option? What is the context that creates the appropriate scale (or mixture of appropriate scales) of production?
- <u>Transactions</u> What are the terms of trade between different players in the value chain, particularly between rice farmers (or group of farmers) and the off-takers / millers? How are these terms observed?
- <u>Supply chain design</u> With respect to the above, what is the appropriate (doable) scale of production, processing and aggregation in West Africa given its socio economic conditions?
- <u>Policy tools</u> What are the key policies, laws, regulations and standards that ensure delivery of rice of certain quality? What are the roles of the public / private sectors to put them into sufficiently?
- <u>Role of public investment</u> What is the nature of the public investment that facilitates private investment? Does it change with the context?
- <u>Risk mitigation and management (for financiers)</u> What are the key risks of rice value chain players perceived by the financing sector? How have the stakeholders in the agriculture sector (both public and private) responded (or failed to respond) to address these factors?
- <u>Employment</u> What is the type and scale of employment created in the reference countries in Asia? Can we envisage the same scenario for West Africa?
- <u>Regional synergies</u> What are practical and implementable means of leveraging regional synergies in the rice value chain?
- <u>Production ecosystems</u>: How (and if) the approach for development in West Africa should be different, given lesser share of irrigated and greater share of upland rice growing area in the region?

Agenda

- Background and context
- Rice value chain development in
 - India
 - Cambodia
 - Thailand
- Key guiding principles and considerations for West Africa
- Next steps

Key objective of workshop: Contextualizing lessons learnt from Asia

Organized as part of ongoing World Bank study seeking to understand the policy, institutional and public/private investment drivers of successful rice value chain development in Asian countries that dominate exports to West Africa – with a view to inform WAATP and other interventions towards rice self-sufficiency



We seek to derive specific implementable actions from a blend of Asian and West African experiences, particularly in the post-harvest value chain