

WUR exchange session DFS project

Value chain analyses – onion, mango and beef

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Goals of value chain analyses

- Overall goal: Increase food security in DMA
- Goal of value chain analyses:
 - Analysis of value chains to reveal points for improvement;
 - Generate information for 'Market Access and FNS' training;
 - Draft a strategic action agenda for Dhaka Metropolitan Area (DMA) City corporations > interventions
- Goal interventions: Decrease Food Loss and Waste (FLW) with 5%

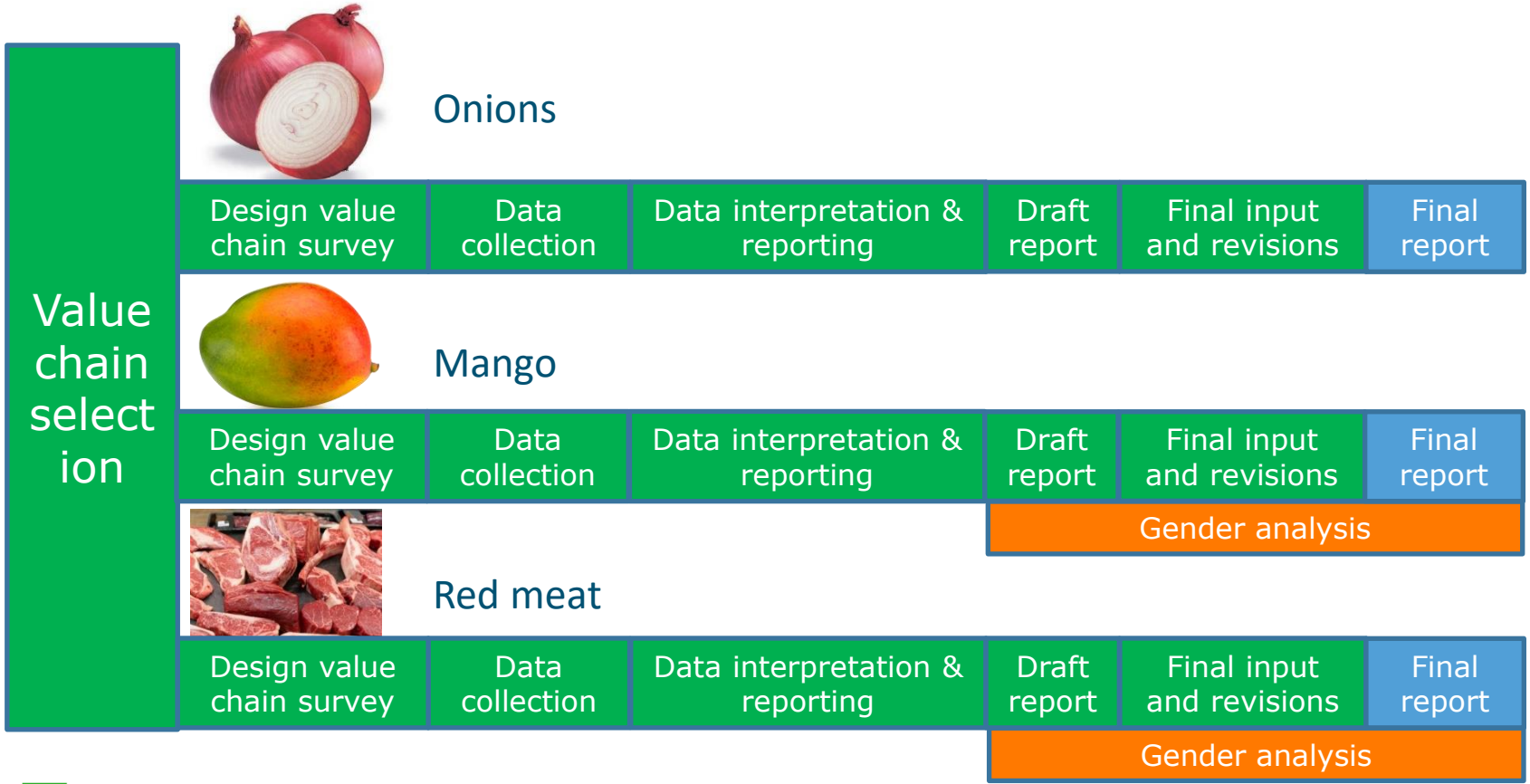


1.4 - Value chain selection

- Use of our food databases
- Multi-criteria selection

Input phase 3	Item	Trend		FLW		H2O		Diet		W. score
		score	weight	score	weight	score	weight	score	weight	
1	Onions, dry	5	1	2	1	2	1	5	2	3,8
2	Mangoes, mangosteens, guavas	5	1	3	1	5	1	2	2	3,4
3	Vegetable, freshness	2	1	3	1	1	1	5	2	3,2
4	Milk, whole fresh goat	2	1	2	1	no data		3	2	2,5
5	Rice, paddy	2	1	5	1	4	1	0	2	2,2

Value chain analyses: products



Value chain analyses: data collection

- 350+ structured interviews of value chain actors per value chain with:
 - Producers
 - Intermediaries
 - Wholesalers
 - Retailers
 - Transporters
 - Mobile vendors
 - Institutional users

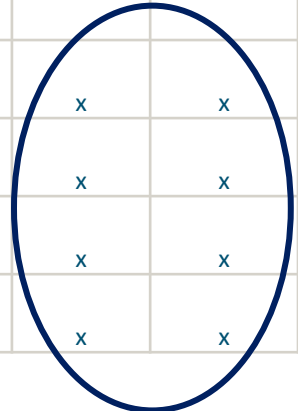


Results onion



- FLW hotspots at producers, retailers and mobile vendors
- Landfill and consumption

	Reasons for FLW	Producers	Intermediaries	Wholesalers	Retailers	Mobile vendors	Institutional users
Harvest	Immature, perished or damaged product	x					
Post harvest	Rough handling, no market, no (proper) curing, lack of storage	x					
Transport	Damaged due to road conditions and packing		x	x	x	x	
Sorting	Caused earlier in supply chain		x	x	x	x	
Storage	No proper curing after harvest, no cooled facility			x	x	x	
Market	No market on time				x	x	x



Results mango



- FLW hotspots at retailers and institutional users, landfill, animal feed, given away

	Reasons for FLW	Producers	Intermediaries	Wholesalers	Retailers	Mobile vendors	Institutional users
Harvest	Damaged, perished, infected, diseased fruits, or impossible to harvest	x					
Post harvest	Exposure to sun, rough handling, damages during the activities	x					
Transport	Damages due to road conditions and packaging		x	x	x		
Sorting	Caused earlier in supply chain, purchase bad quality fruits		x	x	x	x	
	Rough handling		x	x			
Storage	No proper storage facility with temperature quality			x	x	x	x
	Bad quality fruits already before storage			x	x	x	x
Handling	Cut off bad parts, peeling losses					x	x
Market	No market on time				x	x	x

Results beef

- Live cattle mainly slaughtered at wholesale stage
- Mortality rates at producers (7%) and intermediaries (4,4%)
- Amount of beef lost is less than 5%
- Reasons:
 - Suboptimal work accuracy of butchers
 - Poor quality meat/lack of costumers



Opportunities

- Increase domestic production and storage capacity for onions > widely consumed



- Producer support

- Currently low fruit intake > mango

- Export and branding opportunities for mango > high end markets



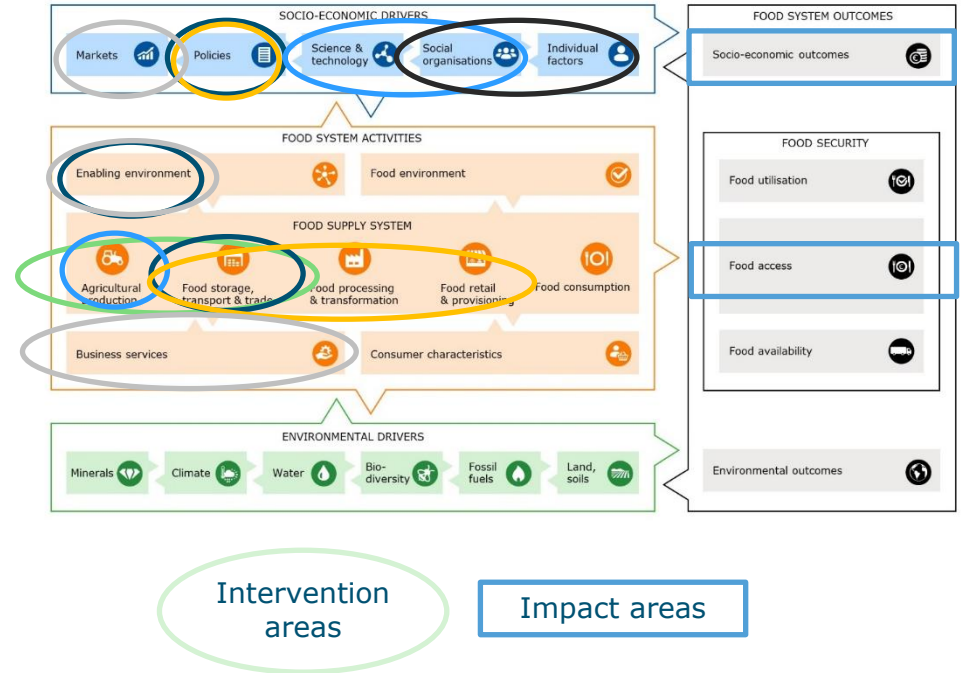
- Anticipate cattle surplus and growing urban population > higher demand

- Cattle production byproducts



Value chain analyses: generic recommendations

- Reduce trade dependencies
- Improve production & storage
- Social structures for collaboration
 - Machinery & labour
- Enforce regulations
- Invest in enabling environment & business services
- Capacity development




Next steps

- Final concept reports, to be specified to city corporations
 - Responsibilities/mandates?
 - Role of private sector and national government?
- Recommend three interventions based on value chain reports
- Product selection for two more value chain analyses



Any questions?

- Which products to select for other VCs?
- Advise on how to do the other two value chain analysis with smaller budget available?
- How to approach intervention selection?



To explore
the potential
of nature to
improve the
quality of life

Recommendations – fruits, vegetables and meat

Overall goal: Increase food security in DMA

- Provide technical support to improve the yield and quality of produce
- Production, harvest and post-harvest handling, incentives to use machinery (rent)
- Create business links between the farmers and high value markets for direct selling (e.g. through cooperatives)
- Increase incentives to invest and access credit with low interest
- Regular market monitoring, act against market syndicates
- Improve communication and information systems e.g. about ag. production and product prices
- Improve transportation system > reduce bribes, allow for smoother passage
- Release pressure from main urban areas, stimulate rural development

Main recommendations onions

- Examine feasibility of alternative import sources such as China, Egypt, Malaysia, Myanmar, Pakistan, Turkey, and Vietnam
- Decrease price fluctuations, but not too much price reduction
- Increasing domestic production and storage capacity, reduce dependency on imports
- Improve quality of onions at production to reduce FLW in rest of SC (e.g. onion rots)



Main recommendations mangoes

- Improve the quality of the mangoes at the production level
 - Effective extension systems to facilitate and educate farmers on production, harvest and post-harvest handling
- Investigate whether branding with respect to food safety is an option to increase demand (and price) in medium and high-end markets in urban areas
 - Opportunity: fruit intake is far below the advised quantity for a healthy diet
- Explore ways to support export: trust needs to be restored
 - Training and trade support (e.g. on EU requirements)



Main recommendations beef (1)

- Improve cattle feed availability
 - Lowering the feed costs e.g. through increased feed production and Preservation
 - Make use of circular flows
- Improve utilization of by-products and cow dung
- Invest in cold storage facilities for prepared meat
- Actively implement and regulate food safety standards for beef
- Create awareness for buying safe and good quality meat
- Provide supervision by veterinary doctors and Huzur in slaughterhouses
- Increase number of slaughterhouses in urban areas



Main recommendations beef (2)

- Anticipate on the coming **cattle surplus** and **increasing urban population**
 - Both trends require high-level supply chains with respect to food safety, traceability and added value (packaging, frozen - and assorted meat)
 - Opportunities for export

