

Webinar 2: How to conduct horticulture value chain assessments

Horticulture for Development Professional Series

Questions? Email horticulture@ucdavis.edu









How to Conduct Horticulture Value Chain Assessments

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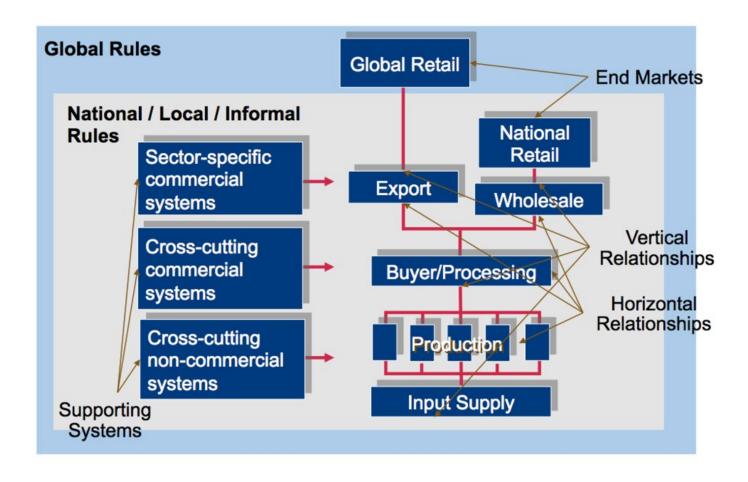








What is a value chain?



Why should you use a Value Chain Approach?



Market Systems Perspective



Focus on End Markets



Role of Value Chain Governance



Importance of Relationships

What role does Value Chain Approach play into Program Design?

Analyze to uncover the root causes of systems performance

Planning for Exit: Crowding in other market actors Identify an initial strategy that includes a clear vision for inclusive change

Monitor, Evaluate, Learn and Adapt

Facilitate participatory, iterative design and implementation of interventions

Steps in Value Chain Analysis

Desk Review

Stakeholder Listening Value Chain Prioritization

Value Chain Mapping and Analysis Value Chain Development Strategy

Extra Analysis Specific for Horticulture

Horticulture in developing countries is characterized by high food losses, often over 50% for highly perishable products. Value chain analysis for horticulture crops needs to pay special attention to food loss – both pre and post harvest

Commodity Systems Assessment Methodology!



Desk Review

- Ministry of Agriculture Strategic Plans
- Donor's Agriculture Plans for the Country
- Project reports of relevant past and present projects
- Assessments and papers on the horticulture sector
- Production and export data and other official statistics from statistical departments



Stakeholder Listening

- Interviews/Focus Group Discussions with Primary Stakeholders to understand their experiences.
- Especially important to hear the voice of the farmers for Farmer-Centered Design
- Questions should range on:
 - Farmer profiles
 - Crops grown, profitability, demand and competitiveness
 - Challenges such as pests and diseases, inputs supply, production practices, postharvest storage, farm organization, access to markets and access to finance
 - State of Infrastructure roads, electricity, mobile technology and internet, key markets
 - Non-farm income
 - Special attention to issues of climate change, gender, youth and social inclusion

Value Chain Selection and Prioritization

• Impact Criteria:

 Nutrition, income, climate-smart/resilience, youth/gender-friendly, employment, influence, food security, scalability

Feasibility Criteria:

 Organization's presence, VC services, market demand, small-holder friendly, upgrading potential, Staff knowledge of crop, strong implementing partner, enabling environment, donor interest

Source: Catholic Relief Services

Impact Matrix

	Nutrition	Profit Potential	Climate smart/resilience	Youth friendly	Gender friendly	Jobs	Influence sector	Food security	Scalability	Total Score	Rank
Weight	10%	20%	15%	10%	10%	10%	5%	5%	15%		
Vegetables											
Onion											
Potato											
Tomato											
Cabbage											
Sweet Potato											
Fruits											
Citrus											
Mango											
Banana											
Guavas											

Feasibility Matrix

	Presence in target territory	chain				implementing partner/NGO	d farmer	knowledge	/align with Govt	Donor /investor interest	Rank
Weight	5	10	1.	5 10	10	15	5	10	10	10	
Vegetable s											
Onion											
Potato											
Tomato											
Cabbage											
Sweet Potato											
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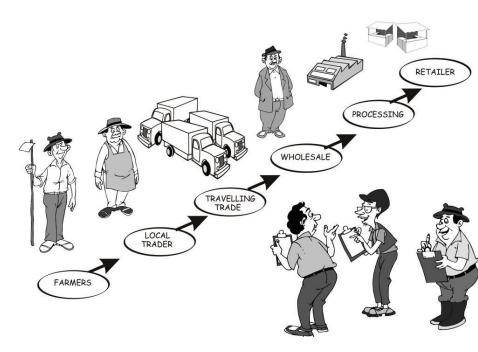
Value Chain Mapping and Analysis



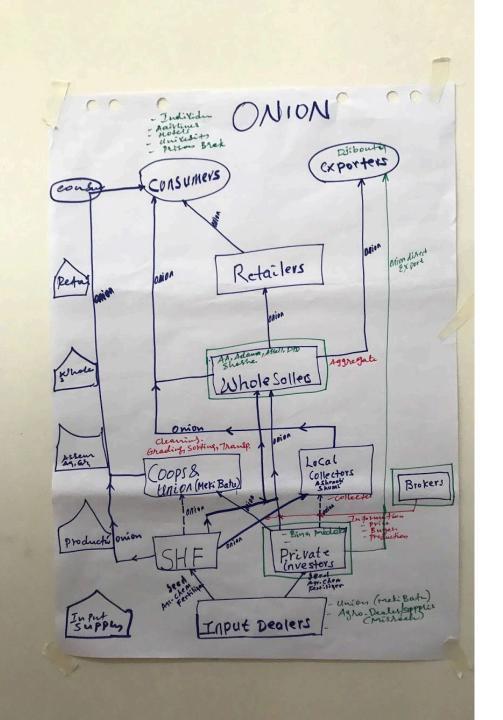
Who to Interview?

Two types of key informants:

- Market participants: the actors involved in the production, marketing and processing;
- Knowledgeable observers: insightful, knowledgeable people who can offer a broad, and sometimes detailed, perspective on the sub-sector – Esp. Government officials, other projects and apex organizations







Value Chain Mapping Exercise with Stakeholders

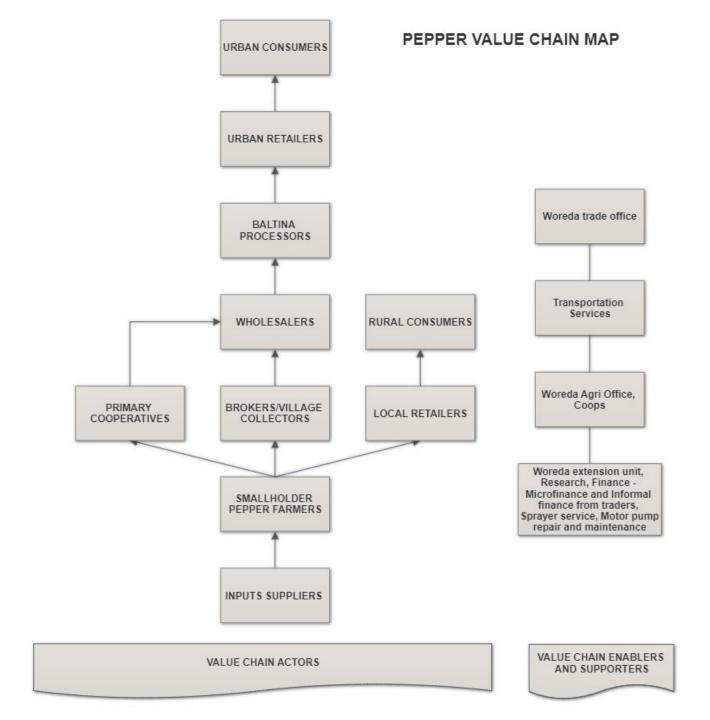
Relationships

- Identify all Value Chain Actors
- Business Development
 Service Providers
- Product and information flow
- Price and payment
- What are the challenges?
 What is missing? What is the opportunity?

External Influences

- Economic forces
- Political/legal forces
- Socio-cultural forces
- Environmental forces
- Technological forces

Pepper Value Chain -Ethiopia



Analysis

- Analyze all interview data
- Analyze all product flows
- Analyze price increase and value addition along the chain
- Analyze challenges and opportunities for key stakeholders, end markets, business enabling environment, vertical linkages, horizontal linkages, supporting markets, inter-firm relationships, upgrading and value chain governance

Commodity **Systems Assessment** Methodology – Causes of pre and postharvest losses at different points

TRANSPORT

- Environmental conditions
- Physical & mechanical damage





- Climatic damage
- Physiological damage
- Mechanical damage



PRODUCTION

- Poor cultural practices
- Pest and disease damage
- Ecological & soil conditions
- Poor water management
- Physiological damage
- Mechanical damage



PRE-PRODUCTION

- Lack of information
- Poor management ability
- Poor roads
- Low level of technical knowledge
- Poor quality planting materials
- Poor locations of nurseries

- Poor information
- Weak credit & price policies
- Weak institutions
- Poor services
- facilities
- Poor road development

ASSEMBLY/SORTING/PACKING

- Improper postharvest handling
- Delays
- Deficient engineering, design or finishing of packing material
- Physical, mechanical, and physiological damage
- Lack of infrastructure
- Inappropriate technologies



- Delays
- Poor coordination
- Poor technology



STORAGE

- Physical, mechanical, or physiological damage caused by: rough handling, bacteria. fungus, mildew. insects, or rodents and environment



PROCESSING

- Physical, mechanical, or physiological damage
- Inefficiencies
- Poorly trained workers
- Inappropriate technologies



DISTRIBUTION

- Deficiencies in: organization, transport, storage, management, technology training
- Consumer habits
- Public sector environment



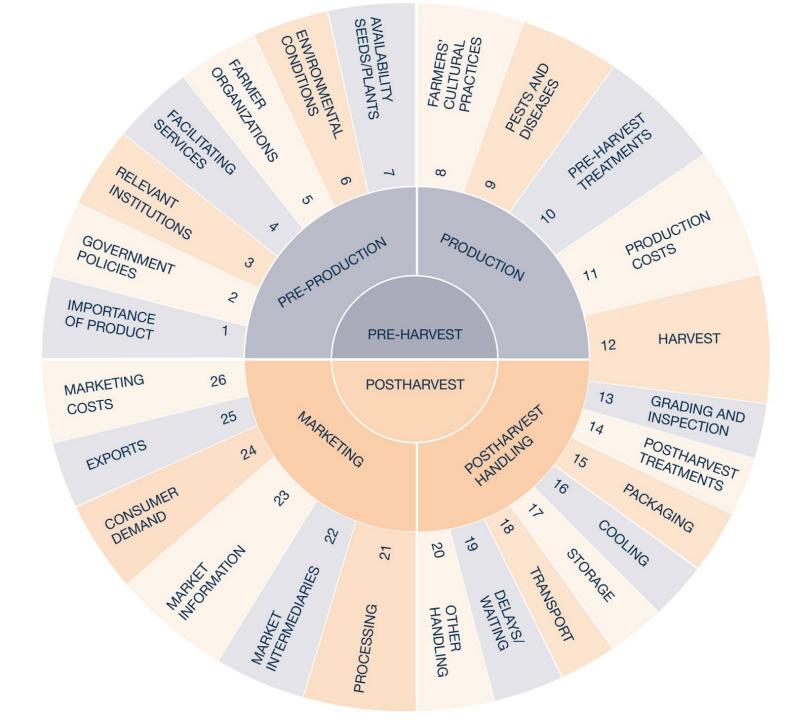


PRODUCTION/PLANNING

- Poor production planning

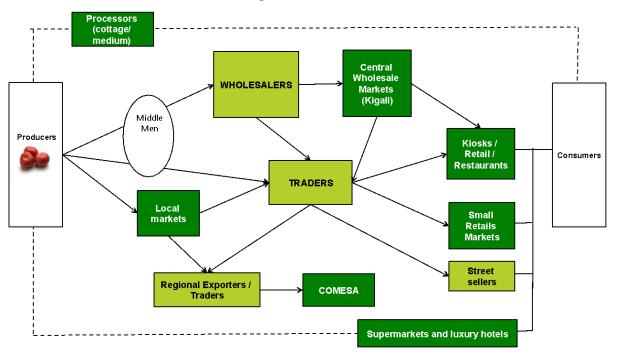
- Poor planned marketing/storage
- Inappropriate marketing policies

Principal Components for an Agriculture Value Chain Assessment from a Food **Loss Perspective**



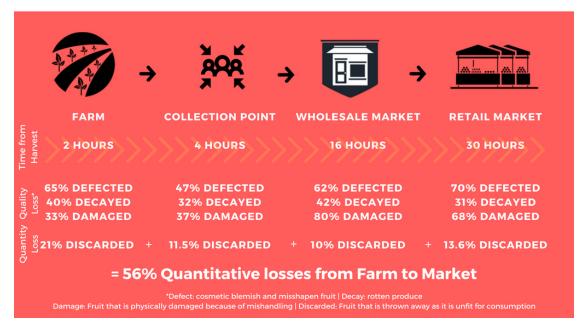
Putting it all together – Case of Tomatoes in Rwanda

Value Chain Map of Tomatoes



Tomato losses

FROM FARM TO MARKET IN RWANDA



Convergence! CSAM Findings











Value Chain Recommendations

- Harvest and Postharvest Recommendations
 - Promote usage of crates
 - Training on harvest and postharvest best practices
 - Reduce barriers to use for collection centers
 - Development of and support for localized cooling and storage solutions
- Processing:
 - Investigate tomato processing options









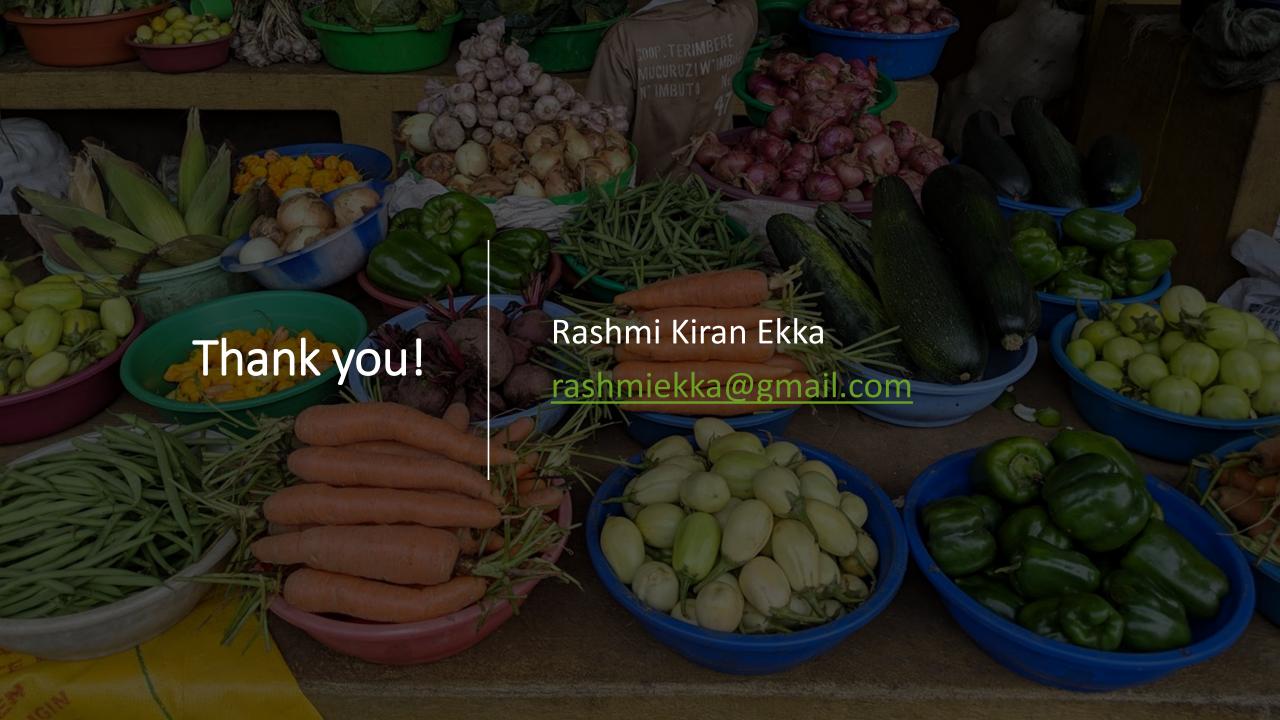
Project Interventions Snapshot

Best Practices

- Use a participatory approach and involve stakeholders in each step of the assessment
- Ensure that assessment team and key informant reflects the demographics of the stakeholders esp. including women, youth and those who are socially excluded
- Have an inter-disciplinary team: Agronomist,
 Postharvest specialist, Input Systems, Financial
 Inclusion and others as per the goals of the Project
- Vet findings in a final workshop and get stakeholder buy-in
- When planning interventions think about sustainability of your interventions and how they will continue after the Project ends – wherever possible ensure that the Project's role is primarily as a Facilitator

Resources

- Commodity Systems Assessment Methodology: <u>http://repiica.iica.int/docs/B4232i/B4232i.pdf</u>
- Value Chain Approach: https://www.marketlinks.org/good-practice-center/value-chain-wiki/key-information-those-new-value-chain-approach
- Value Chain Analysis: https://www.marketlinks.org/good-practice-center/value-chain-wiki/how-information-those-designing-or-implementing-vc-project





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