

Measuring the effects of the project

Presenting the protocol

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Post harvest losses in the chain

- Different losses:

- Physical (quality) → Economic (low price)

- Quality

- From begin to end of the VC.
 - Due to damage, poor packing, overloading and time the quality and the price of the tomato vary.
 - This results in reduced value in the entire value chain.

Measurement

- WUR developed a protocol to follow the tomatoes along the chain
- Parallel measurement of weight and quality in:
 - Plastic crates (3)
 - Basket (3)
- 2 rounds

Measurement

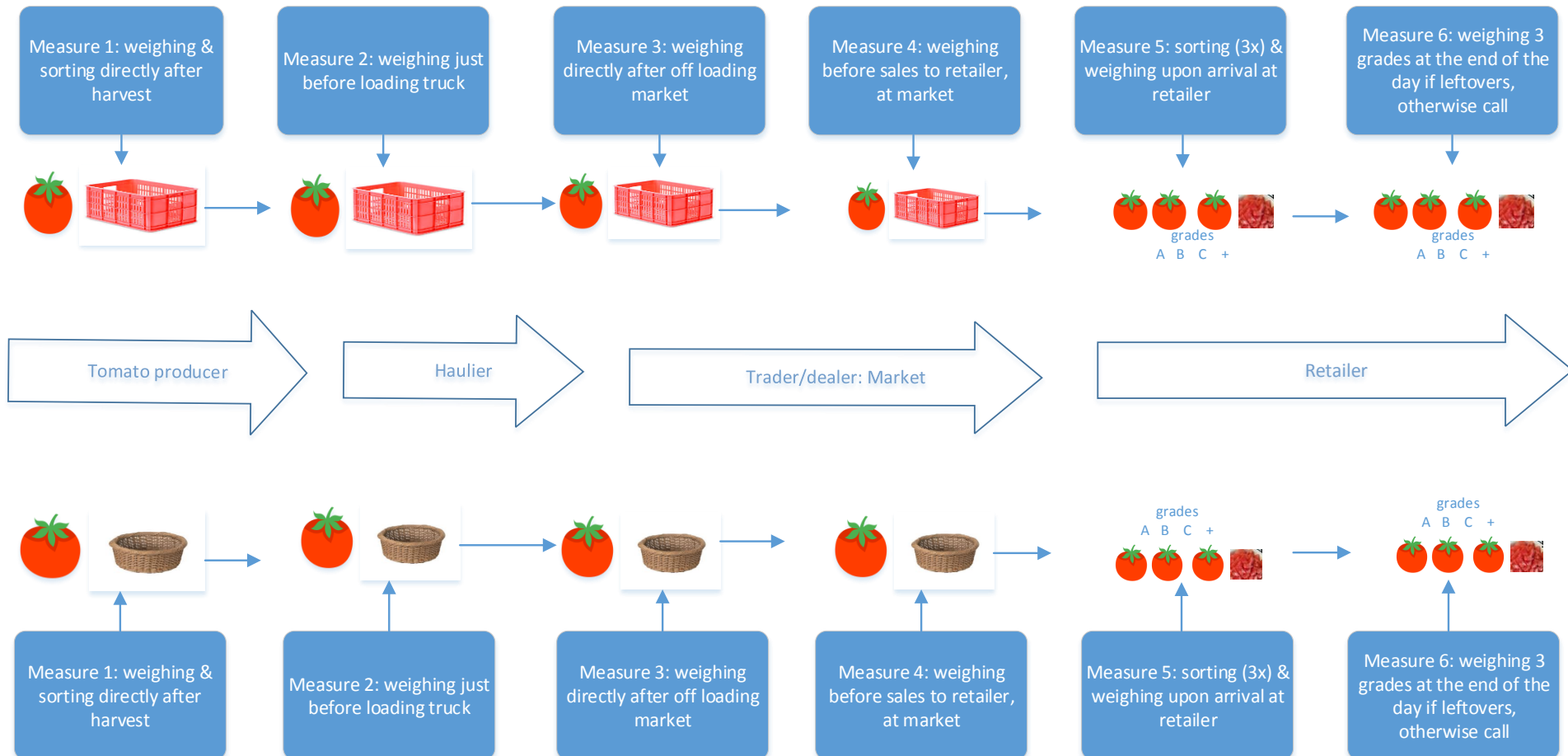
- Enumerators will follow the tomatoes from farm to retail to collect the data:
 - Weighing and grading at different moments in the chain
 - Labelling of the tomato to identify them from the rest
 - Using scales

Measuring with the protocol

- Different measurement points in each VC:

	Weighing	Sorting
Farmer after harvest	x	x
Farmer before loading	x	
At arrival on the market	x	
When tomatoes leave the market in the North	x	
When tomatoes arrive in the South	x	
When tomatoes arrive at retail in the South	x	x

Parallel measurement: basket vs crate



Measurements

[illegible]

Measurement

- Only introduce the crates, the rest is business as usual













Planning

- As soon as the crates are being used we will start monitoring
 - As identified in the previous assignment
 - Planning sheets

Tomatoes classes and volumes

Exercise

1) Volume

2) Quality classes identification

Final remarks and questions



Measuring the effects of the project

Enumerator training

Kano, February 2018



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Weighing

- At farm level:
 - First sort according to the 4 grades
 - Weigh different grades
 - To have the total weigh add all the grades together.
 - Weigh the basket/crate and record it.
- At the other steps in the chain weigh the tomatoes with the basket/crate and deduct the weight of the basket

Sorting/ grading

- The grading is key for the measurement!
- The same at farm level and at retail level

Price registration

- Prices should be included
 - Note the value for the entire basket and crate
 - At retail level: determine the value of the different grades
 - Measure the volume that the retailer put on an average plate in order to estimate the value of the tomatoes.
 - E.g. if a crate contains 16 kg of grade 1 tomatoes and she sells plates of 2 kg she can sell 8 plates from this crate. Repeat it for every grade to determine the total value of the tomatoes.

Measurement

■ Actions

- You will follow the tomatoes from farm to retail to collect the data to weigh and grade at different moments in the chain
- Use an Excel inform sheet
- Labelling of the tomato to identify them from the rest
- Using scales (digital and 'normal')
- Whatsapp

- Important: do the grading the same way at beginning and at the end

Measurement moments

- Different measurement points in each VC:

	Weighing	Sorting
Farmer after harvest	x	x
Farmer before loading	x	
At arrival on the market	x	
When tomatoes leave the market in the North	x	
When tomatoes arrive in the South	x	
When tomatoes arrive at retail in the South	x	x

Survey tool: data registration

VALUE CHAIN nr.:	<input type="text"/>	NAME FARMER :	<input type="text"/>	VILLAGE or CITY:	<input type="text"/>	NAME of ENUMERATOR:	<input type="text"/>
ROUND nr.:	<input type="text"/>	NAME COLLECTOR:	<input type="text"/>	VILLAGE or CITY:	<input type="text"/>		
DATE:	<input type="text"/>	NAME WHOLESALER:	<input type="text"/>	VILLAGE or CITY:	<input type="text"/>		
COLOUR LABEL:	<input type="text"/>	NAME RETAILER:	<input type="text"/>	MARKET:	<input type="text"/>		

BASKET sample#1	0: BASELINE: FARMER		1: FARMER (before loading)	2: COLLECTION POINT (before loading)			3: WHOLESALER / DEALER (at arrival)			4: RETAILER (at arrival)			5: RETAILER (before sales)		
	QUALITY	WEIGHT (kg):	WEIGHT (kg):	WEIGHT (kg):	Dealer pays farmer (NAIRA):		WEIGHT (kg):	Dealer pays (NAIRA)		WEIGHT (kg):	Retailer pays dealer (NAIRA):		QUALITY	WEIGHT (kg):	Buyer pays retailer (NAIRA):
	A1												A5		
	B1												B5		
	C1												C5		
	D1												D5		
TOTAL	-	-	-	unsold	-		unsold	-		unsold	-		unsold	-	

Survey tool: observations at the MP

Observations research-team AT THE MEASUREMENT POINTS:		at FARMER	at COLLECTION POINT	at WHOLESALE
Tomato VARIETY				
Weight of the empty BASKET	kg			
Weight of the empty CRATE	kg			
Time of HARVESTING of the product	hh:mm			
Presence of a SHED or COVER at loading point	YES or NO			
Way of product HANDLING of the product	with care: YES or NO			
Duration time of LOADING of the product	minutes			
Way of STACKING product in vehicle	write down a value from 1 to 5 (see explanation below) in the appropriate green cell (C15,D15,E15):			
1=VERY POOR:	many products damaged during stacking of baskets/crates; packaging directly on top of product			
2=POOR:	many products damaged during stacking of baskets/crates; measures are taken to avoid further damage during transport			
3=REASONABLE:	some product damaged during stacking of baskets/crates; product properly stacked, minimising damage during transport			
4=GOOD:	stacking of baskets/crates is done with care avoiding product damage; minor risk of product damage during transport			
5=VERY GOOD:	very well stacking of baskets/crates with good temperature control in the truck during transport.			
ambient (air) TEMPERATURE (°C)	in °C			
WEATHER at time of measurement	describe the weather at the time of measuring (sunny, cloudy, no/little/heavy rain, ...)			

Survey tool: transport

Observations research-team DURING TRANSPORT:		FARMER à COLLECTION POINT	COLLECTION POINT à WHOLESALER	WHOLESALER à RETAILER
VEHICLE type	open/closed truck, large/small truck, mini-van, pick-up, etc.			
Vehicle LOADING CAPACITY	tonnes			
TEMPERATURE CONTROLLED compartment	YES or NO	YES/NO	YES/NO	YES/NO
transport DISTANCE	km			
WAITING TIME between harvest & loading	hours/minutes			
WAITING TIME between arrival & loading	hours/minutes			
Time of DEPARTURE of transport	day:hh:mm			
Time of ARRIVAL of transport	day:hh:mm			
Transport DELAY	YES or NO, hours/minutes			
reason(s) for the delay:	<i>f.e. number of stops, road blocks, bad quality roads, traffic jams, police stops / fines, a.s.o.:</i>			
QUALITY of the ROAD	write down a value from 1 to 5 (see explanation below) in the appropriate green cell (C39,D39,E39):			
1=VERY POOR:	<i>sandy road, many potholes, road damages, only very slow driving is possible</i>			
2=POOR:	<i>sandy road, some road damages, moderate driving is possible</i>			
3=REASONABLE:	<i>paved road, with potholes, road damages, swift but careful driving is possible</i>			
4=GOOD:	<i>paved road, with occasionally (minor) road damages, speedy driving generally possible</i>			
5=VERY GOOD:	<i>paved and smooth road, highway speed</i>			
Are the tomatoes loaded to another BASKET	YES or NO	YES/NO	YES/NO	YES/NO

Survey tool: retail level

Observations research-team AT RETAIL LEVEL:		AT RETAILER
After sales: did the retailer observe differences in QUALITY between basket and crate? (YES or NO)		YES / NO
If YES, please explain:		
After sales: did the retailer observe differences in PRICE between basket and crate? (YES or NO)		YES / NO
If YES, please explain:		

Labels



Scales

Make sure how they work



Whatsapp group

- With data enumerators
- To share experience
- To update the team (IFDC, AGROFAIR and WUR)
- Take a lot of pictures!

Quality grading!

Exercise

