



**University of the Philippines Mindanao**  
**SCHOOL OF MANAGEMENT**



# Net Margin Analysis of Selected Fruits and Vegetables in Southern Mindanao, Philippines

*C5 Team*

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# Rationale

- Agriculture as one of the driving force behind Mindanao's economy
- Improve a particular fruit or vegetable Industry
- Assess the performance of the supply chain
- Use Net Margin Analysis to analyze the distribution of benefits
- Identify policy implications

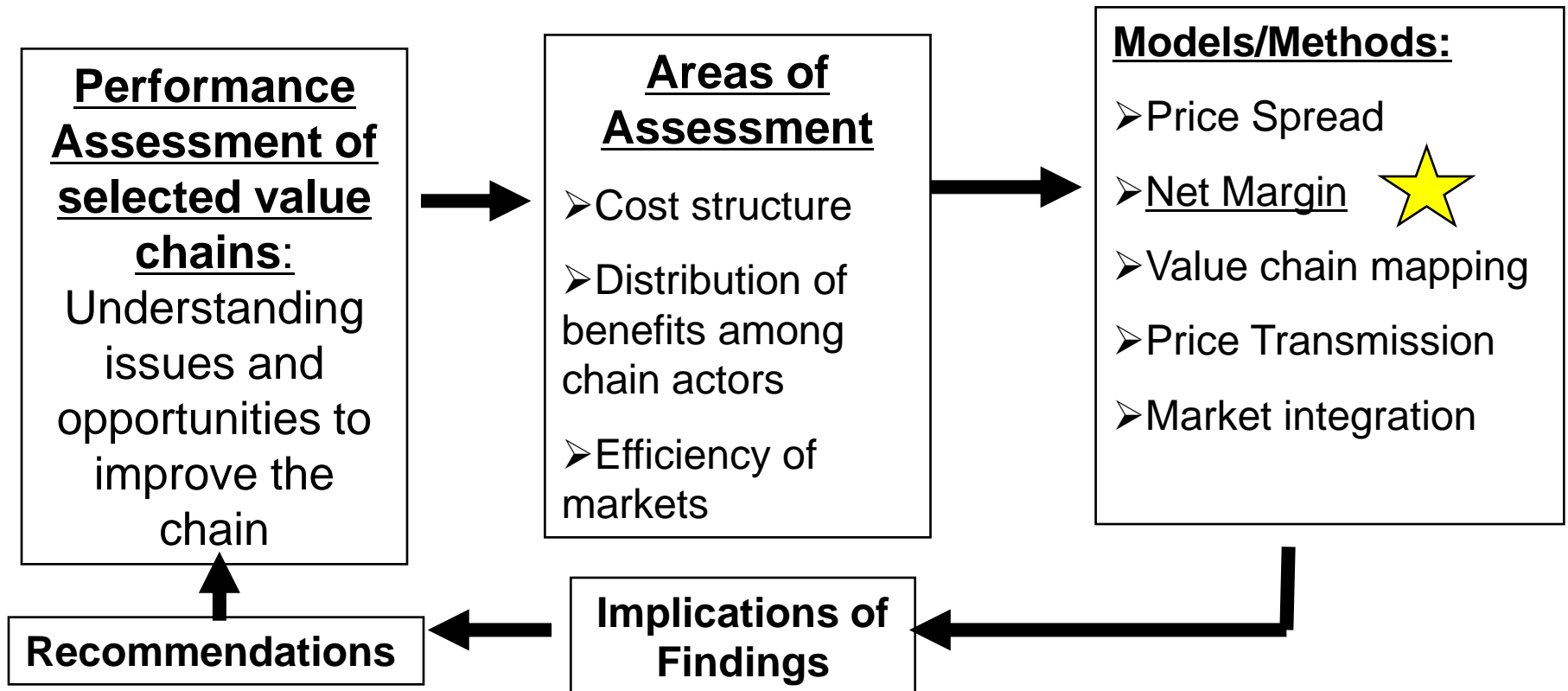


# Objectives of the Study

- To assess the distribution of benefits among the actors in the supply chain;
- To compare and analyze the variations in net margins among fruits and vegetables;
- To identify policy implications that are focused on enhancing the performance and productivity of small farmers in Southern Mindanao.



# Framework of Analysis



# Net Margin Analysis

- To examine the distribution of benefits among players in the value chain and identify different areas of improvements by checking cost distributions and net margin shares.
- $Nm = Gm - MC$

Where:

$Nm$  is the net margin;

$Gm$  is the gross margin;

$MC$  is the vector of marketing cost



# **Results and Discussions**

## Summary of net margins/kg across different actors for fruits

Marketing Levels	Recorded Net Margin/Kg						
	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Average
<b>Durian</b>							
Farmer (Davao)	11.2	58.95	-10.81				<b>19.78</b>
Wholesaler (Davao)	7.29						<b>7.29</b>
Retailer (Davao)	50.32	3.66					<b>26.99</b>
<b>Jackfruit</b>							
Farmer (Davao)	3.5	14.25	14.09	13.61	13.44	1.27	<b>11.33</b>
Wholesaler (Davao)	8.28	7.26	16.74	1.25	0.83		<b>6.87</b>
Retailer (Davao)	12.83	19.48	48.27	4.81			<b>21.35</b>
<b>Mango</b>							
Farmer (Davao)	25	-2.71	-1.16				<b>7.04</b>
Farmer (Digos)	3.23						<b>3.23</b>
Wholesaler (Davao)	0.57	4.72	5.56	-0.17			<b>2.67</b>
Wholesaler (Digos)	6.19						<b>6.19</b>
Retailer (Davao)	4.88	4.03	11.93				<b>6.95</b>
Retailer (Manila)	1.05						<b>1.05</b>
<b>Papaya</b>							
Farmer (Cotabato)	1	2.21					<b>1.61</b>
Farmer (Panabo)	5.04						<b>5.04</b>
Wholesaler (Davao)	1.55						<b>1.55</b>
Wholesaler (Davao-Manila)	4.10						<b>4.1</b>

## Relevant cost items with highest contribution to total cost for fruits



Fruits	Level		
	Farm	Wholesale	Retail
<b>Durian</b>	Fertilizer (32.11%)	Material Inputs (70%)	Transportation (45.60%)
	Materials (25.78%)	Transportation (10%)	Losses (19.13%)
<b>Jackfruit</b>	Transportation (64.60%)	Acquisition Cost (55.89%)	Losses (44.16%)
	Material Inputs (15.63%)	Labor Cost (6.89%)	Acquisition Cost (33.55%)
<b>Mango</b>	Pest Control (57.10%)	Material Inputs (47.25%)	Labor Cost (39.36%)
	Labor Cost (21.85%)	Transportation (21.13%)	Losses (35.62%)
<b>Papaya</b>	Fertilizer (34.64%)	Transportation (60.57%)	No Retail Cases
	Farm Chemicals (24.44%)	Labor Cost (15.14%)	No Retail Cases



## Average post harvest losses for fruits across marketing levels

Fruits	Level		
	Farm	Wholesale	Retail
Durian			
Farm	(carried by retailer)		
Wholesale		1.00%	
Retail (Davao-Manila)			6.50%
Jackfruit			
Farm	(carried by retailer)		
Wholesale		11.65%	
Retail (Davao)			16.65%
Mango			
Farm	(carried by retailer)		
Wholesale		(carried by retailer)	
Retail (Davao)			4.13%
Retail (Manila)			5.00%
Papaya			
Farm (Cotabato)	1.33%		
Wholesale		10.00%	
Retail (Davao)			No cases

# Distribution of Benefits

- On the average, recorded net margins for farmers are higher than wholesalers and retailers;
- So farmers are generally acquiring higher benefits over the other actors in the chain;
- However. . .



# Variability in Net Margins

- Across Crops
- Across Marketing Levels
- Attitudinal Factors



# Key Findings

## Farm

1. High cost of fertilizers and pesticides
2. High cost of labor

## Wholesale

1. High cost of transportation

## Retail

1. High cost of labor (storekeepers)
2. High operating cost for some markets



# Key Findings

## Plausible Causes:

### Farm

1. Inadequate knowledge on the use of farm inputs
2. Intensive land preparation

### Wholesale

1. Poor road conditions and increasing fuel cost

### Retail

1. Low volume of transaction
2. Poor market regulations



# Opportunities and Policy Implications

On the issue of high cost of fertilizers, pesticides and labor;

1. Orientation and Capacity Building on Soil and Disease Management
2. Providing Support Systems
3. Access to Credit



# Opportunities and Policy Implications

On the issue of low farm revenue and high transportation cost,

1. High volume of transaction
2. Marketing assistance



# Opportunities and Policy Implications

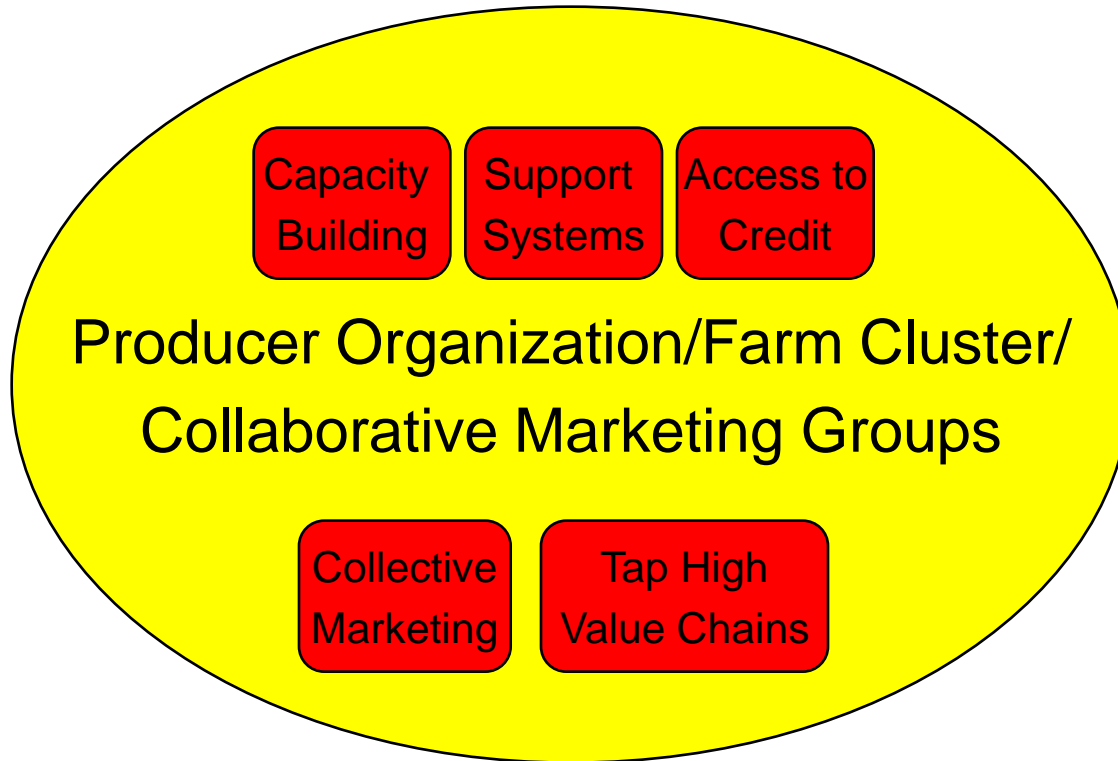
On the issue of post harvest losses,

1. Improving road condition
2. Assistance on post harvest technology





# Integration



- Interdependence
- Trust relationships
- Increase social capital
- Increase income

Identifying a solution and planning might be easy  
but implementation is an entirely different thing.



Thank you very much for your  
attention!

