



2014 MCPI Annual Conference

Moving Beyond Microfinance

Breakout Session 1a

Financing and Developing Agricultural Value Chains

Anant Jayant Natu, *MicroSave*
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MicroSave
Market-led solutions for financial services

Introduction

Short Overview, and Products and Services

About *MicroSave*- in a Nutshell

- We are a Development Consulting with over 2 decades of experience
- Focus Domains: Digital financial services, microfinance and private sector development
- Our clients: include a variety of institutions like NGOs, MFIs, Banks, Corporates
- What is common to our client profile: All share the passion to work either directly or indirectly to serve the poor and the marginalised actors of the economy
- Nature of Consulting: From **Innovation to implementation**
- Key Technical Competence areas: Digital financial services, Microfinance and agri value chains

MicroSave in Numbers

17 projects to design and implement DFS across Africa and Asia

150+ plus banks, MFIs and MNOs which have improved operational efficiency with our advice

100 plus financial products developed across globe

16 countries across Africa and Asia with in-depth financial market intelligence

300 papers, focus and briefing notes, and other print and online published



PSD Work Streams & Focus Sectors

- Private Sector Development domain's consulting services are organised across five work streams in four sectors viz. agriculture (both farm and non-farm), Water, Sanitation & Hygiene (WASH), Energy and Housing. Our footprints span across multiple countries in Asia and Africa

Value chain Development

Analysing the product specific value chain (VC) through the study of activities across the VC, actors/players, channels, value creation.

Financial Products Development

Developing financial products for low income segments in any of the four sectors. Besides product development, it includes market research, and pilot test as well.

Institutional Development

Supporting institutions like producers company, CBOs, and MFIs through trainings, capacity building, organisation assessment, and donor support

Market Scoping and Development

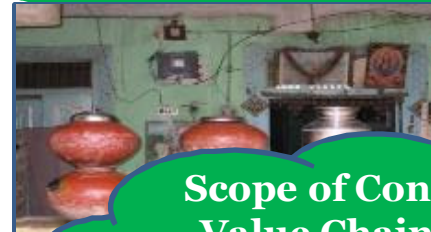
Conducting projects that aim to increase private sector's participation in sectors mostly serviced by public sector. It also include market scoping and assessment exercises.

Programme Evaluation

This includes, programme and project assessment s and evaluations, impact assessment on clients/beneficiaries, and monitoring of PSD related projects in the four sectors



AGRICULTURE



WASH



ENERGY



HOUSING

**Scope of Consulting in
Value Chain Finance
and Development
(VCFD) practice**

MicroSave

Market-led solutions for financial services

Our Funders and Clients

Funders

Citi Foundation



Rabobank



Clients



financing livelihood



Arthacharya

Context and objective

- Agriculture contributes about 11% to total GDP. Even though its contribution to GDP is declining it provides employment to 33%*
- Most of the producers (40%) are small holders or marginal farmers with land holding of about 1 hectare. Tenancy is very much prevalent
- Intersection of agriculture finance with MFI has following features:
 - MFIs offers finance mostly for **agriculture production alone**. Finance for better risk mitigation or better price realisation are missing/rare
 - **Standardised MFIs product design** limits their reach amongst other small producers involved in agriculture, horticulture, fisheries, dairy or processing of farm produce
 - **High transaction costs** to deliver such products in rural areas deters MFIs from approaching small farmers with anything more than a basic weekly repayment product

Objectives

- ✓ **Study the value chain and identify**
 - a. **Financing opportunity**
 - b. **Market linkage opportunity**
 - c. **Role of mobile technology**
- ✓ **Develop financing and intervention models that can be replicated in the field**
- ✓ **Develop resource book**



Selection of crop and Methodology

Value chain Selection

- Secondary research shortlisted livestock, palay, onion, vegetable, and calamansi based on the geography, local demand, export potential, and numbers of farmers engaged
- Discussion with the identified partner on conducting the detailed study – **onion, rice, and calamansi**

Tool

- Value chain analysis
- Focus Group Discussions (FGD)
- Individual Interviews
- Secondary research

Sample

During the course of value chain analysis the team conducted:

- 7 FGDs with different palay, onion and rice farmer groups
- FGDs with 2 Cooperative, 1 Association and 2 Processing Plants
- 24 Individual Interviews with retailers, rice mill owners, and cold storage owners
- 3 Expert Interview with NFA, Department of Agriculture
- Visited 4 markets

Location

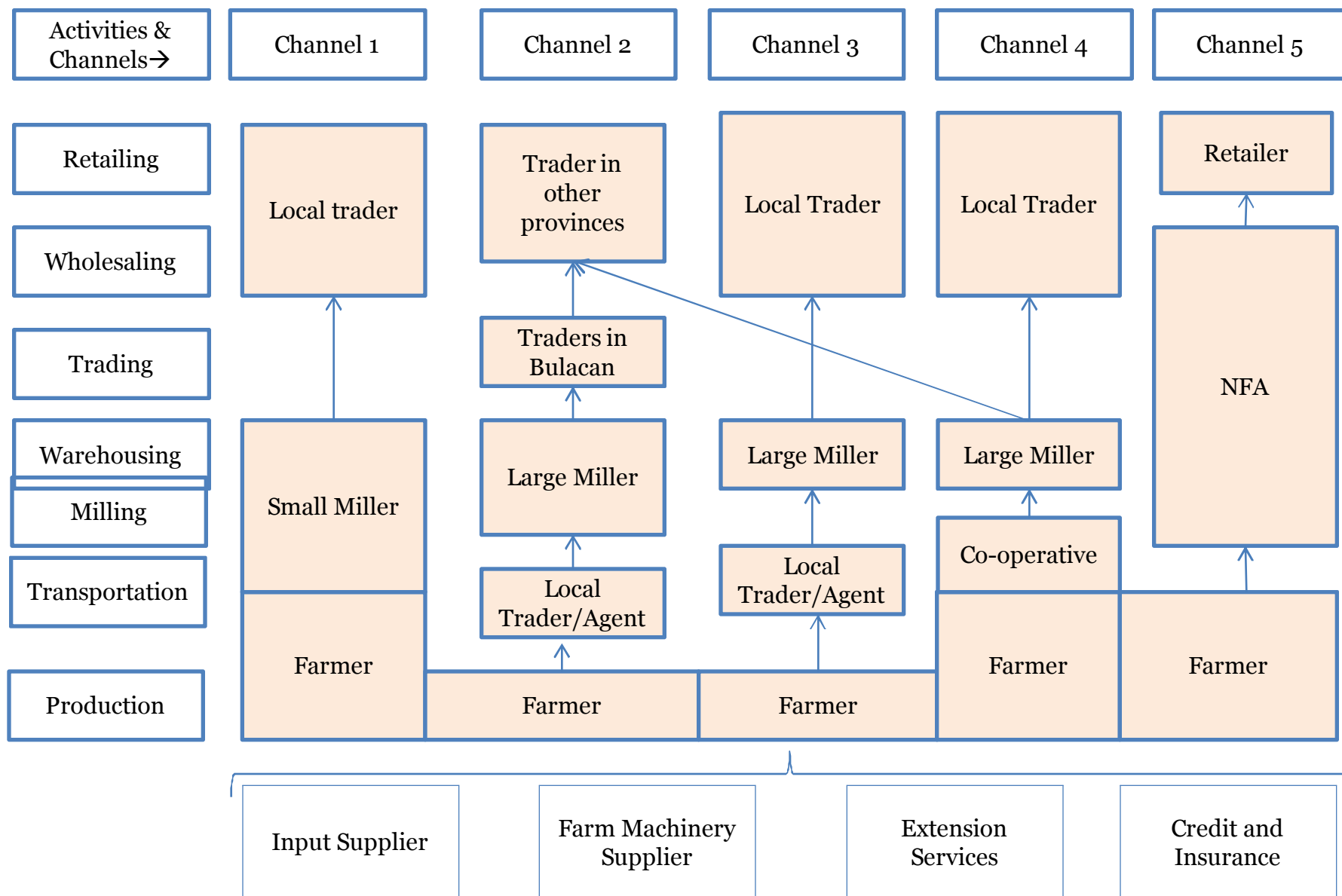
FGDs and Individual Interviews conducted in 7 branches of ASKI in Luzon (in Region 1 and 2)

Criterion	Parameter
Comparative advantages	Efficiency of production
Risk Profile	Susceptibility to environmental risk
Local demand	Consumption pattern
Scope of processing and export	Availability of processing facility
Pro-poor focus	Number of small holders engaged
Partner involvement	Number of clients

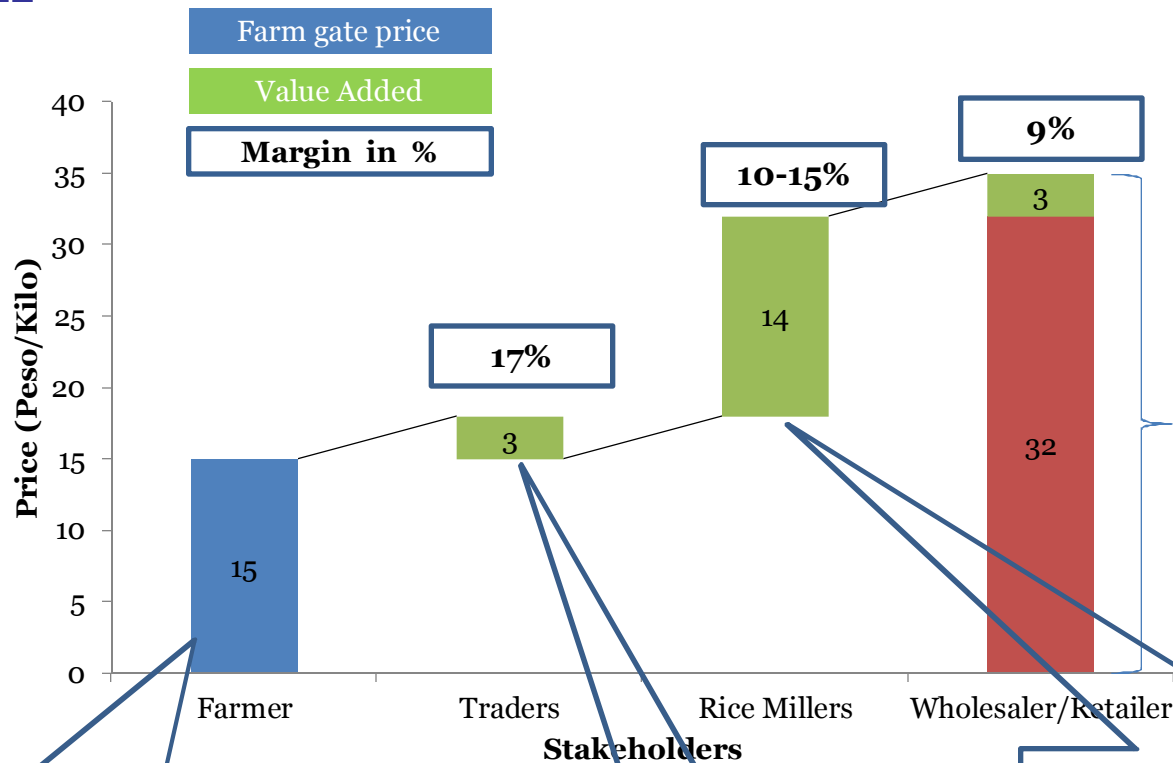


Findings of the Citi Foundation Study on VCF

Value chain map of Palay/Rice



Price variation and margin within the Rice value chain



Hints: Financing of drying units, aggregation at the producer level, facilities for warehousing and finance against the WRs

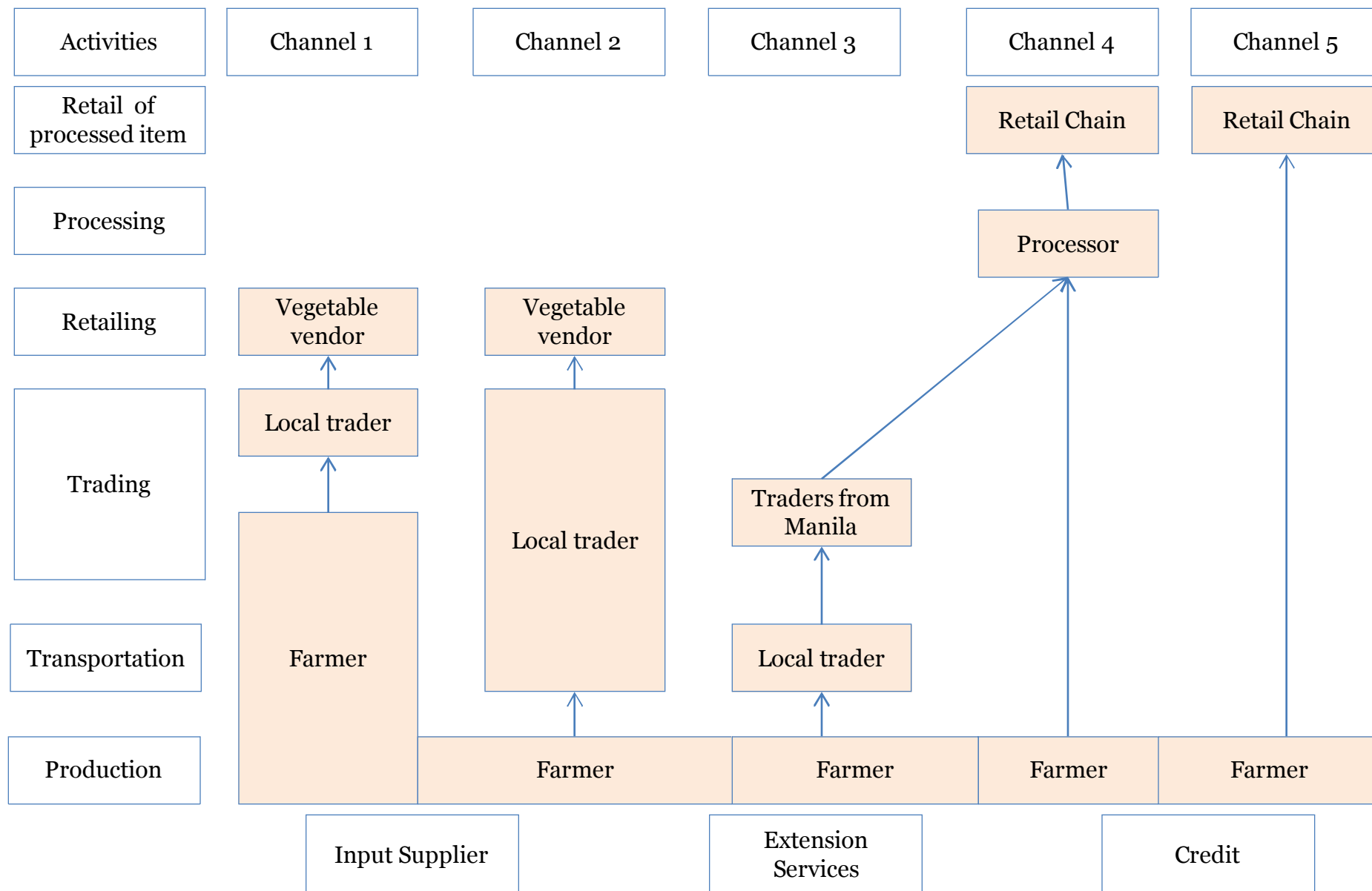
35 peso/kg is the selling price

The price is averaged. Farmer can get 1-1.50 pesos more if the palay is dried with moisture content of 14%. Also if the grain size is larger it will fetch a premium of 2-3 peso more for a kilo. Farmer can get higher price (about 20% more) if they can store it for 3 months.

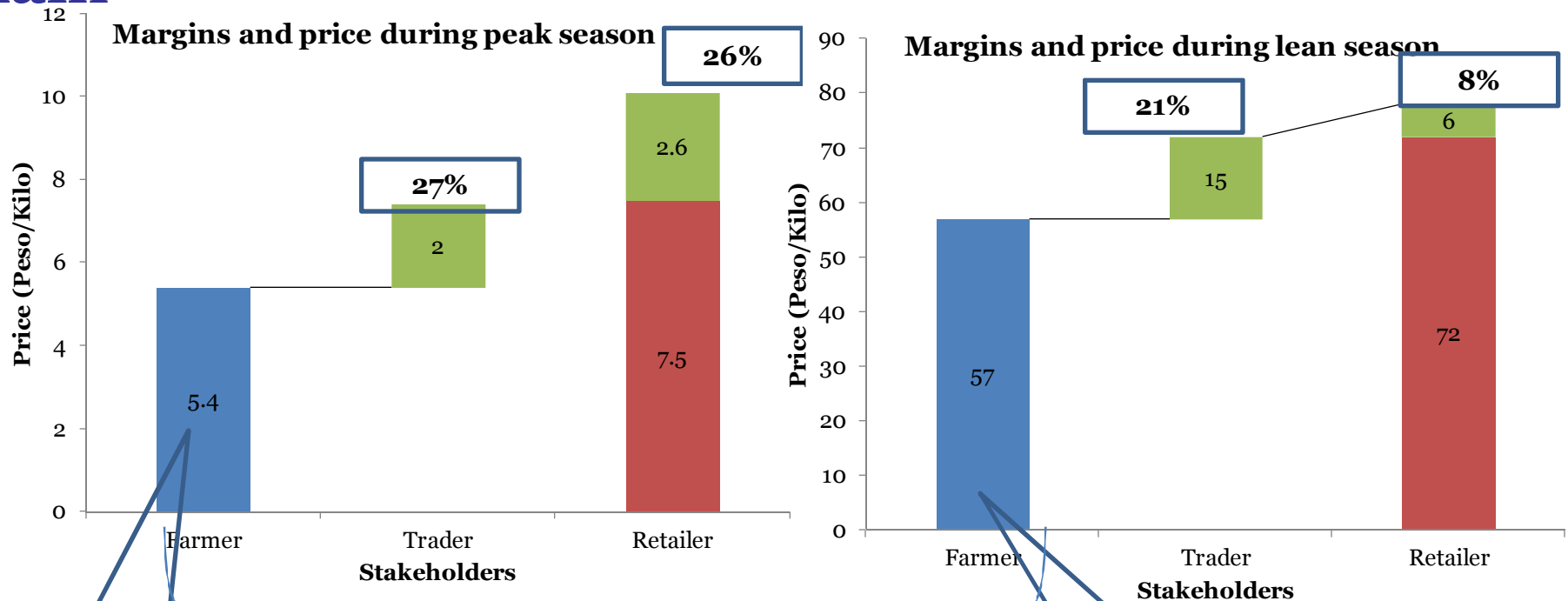
Traders play the role of aggregator and transports Palay to rice miller

The margin gets reduced because of the milling cost. They need palay in bulk and for them doing business with small holders is not possible. They generally trade with big farmers or the traders. They produce different grade of rice with varying price. The bran and husk are sold to the feed industry which can fetch another 2-7 pesos/kg

Value chain Map for Calamansi



Price variation and margin within Calamansi value chain

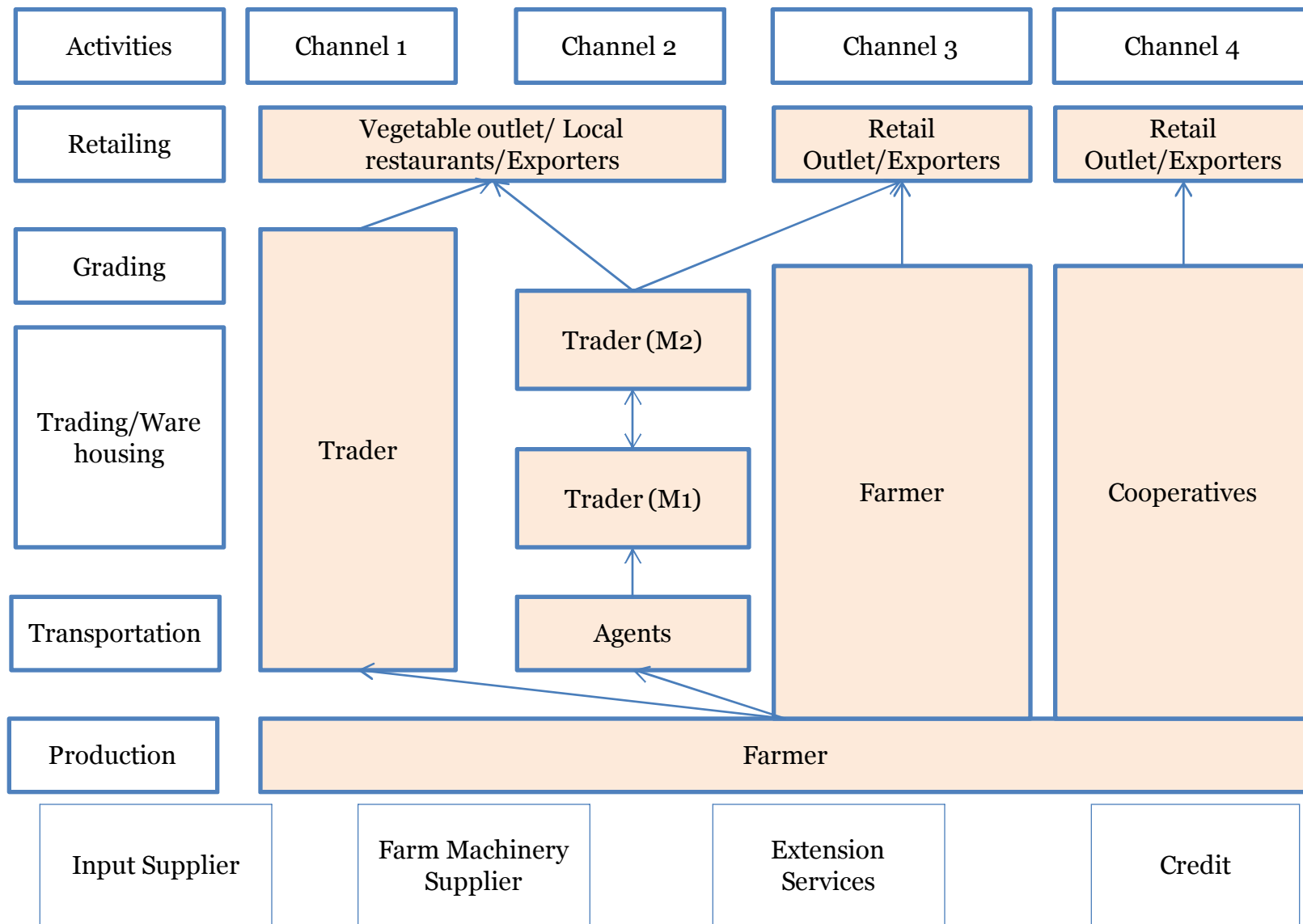


Huge wastage at the farm level as the prices are very low and farmers are not linked to the processors. Linkage to the processor can increase the income by 30%

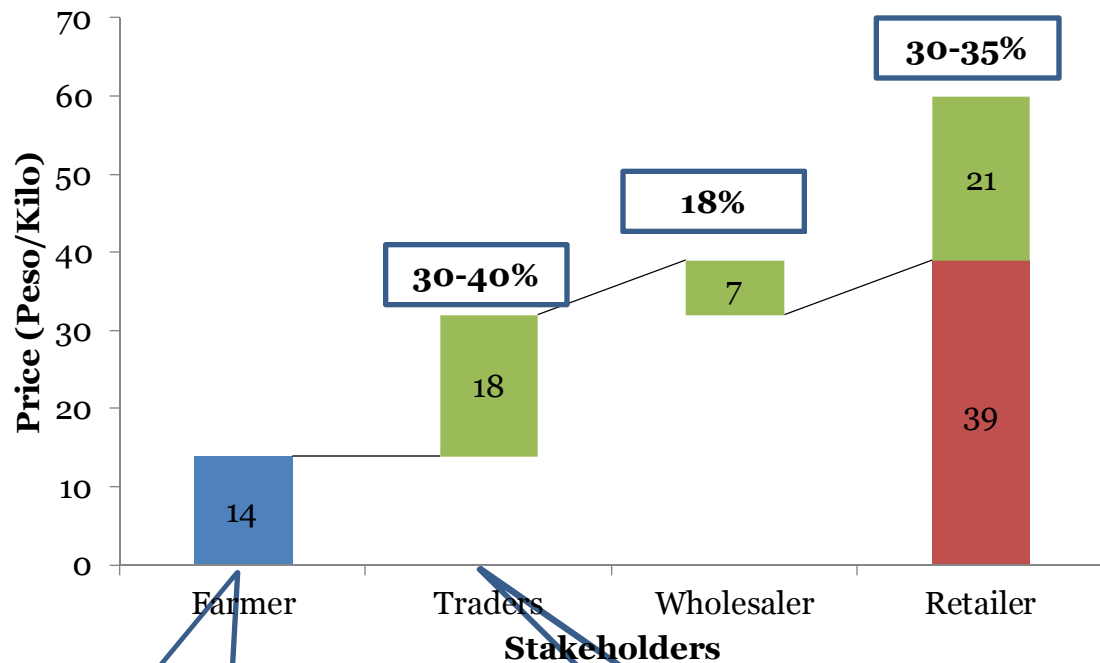
Since there is a huge price difference processor prefer to buy in the peak season, process it into pulp, and store it. Farmers can also prepare pulp at the farm level.

During the lean season when demand is high but production is very limited, farmers can actually save to ensure that they can get finance during the peak season

Value chain map of Onion



Price variation and margin within Onion value chain

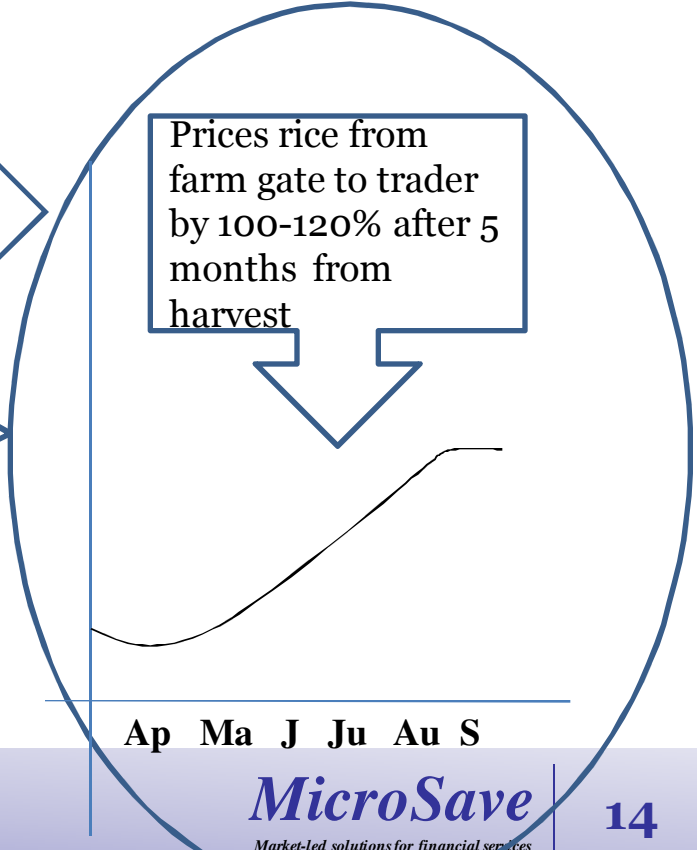


Hints: A receivable financing together with aggregation model can actually help small farmers to store the produce and take the advantage of the price difference

Farmers usually sell the produce immediately after harvest fetching very low price. The finance provided is not adequate

Some of the traders and co-operatives store the produce in the warehouse to get the price advantage

Time arbitrage



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Summary Characteristics of the 3 value chains

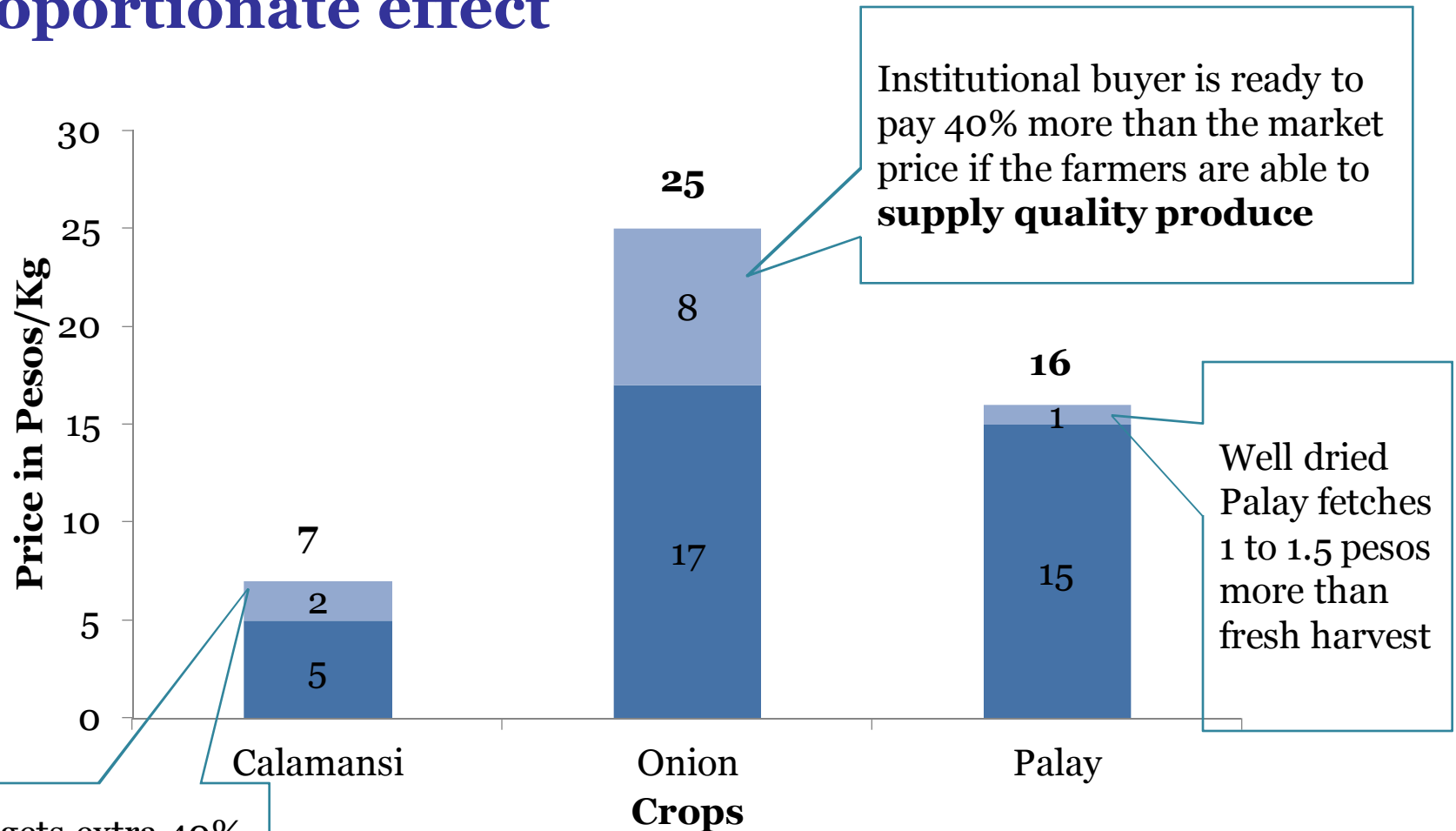
Value chain characteristic	Palay	Onion	Calamansi
Aggregation point	Agents, co-operatives, and association		Traders and associations
Value chain power	Large trader	Trader	Trader
Market characteristic	Domestic consumption Large markets	Export domestic consumption Formal channels	Export potential Domestic consumption Formal channels
Crop characteristic	Quality incentives Crop season varies with different region - round the year to twice a year	Quality incentive Can be stored to take advantage of time arbitrage Single crop in a year	Quality incentive Can be processed; value addition at farm level 2 distinct season (lean and peak) in a year
Market linkages	None	30-40% linked to co-operatives and buyers	None
Financing models	Direct to farmers; 5-6 months loan coupled with insurance Input and trade financing	Direct to farmer with no insurance Input and trade financing Contract farming	Direct to farmer with no insurance

Traders are the biggest influencers in the value chain. In well connected value chains it is mostly the exporters and institutional buyers that hold influence in the value chain



Emerging Themes

1. Credit coupled with other enabling factor can have disproportionate effect



Clients get extra 40% of the existing price if they are **linked directly to the processor**

Market linkage and quality improvement can result higher gain for small and marginal farmers

2. MFIs are financing various value chain actors and can strengthen the value chain by linking them together

Types of financing	External financing				Internal financing		
	Banks	Co-operatives	MFI	Money lenders	Processor/Institutional buyer	Input suppliers	Traders
Value chain actors							
Small holders/Marginal farmers	No	Yes	Yes	Yes	Yes	Yes	Yes
Traders	No	No	Yes	Yes	Yes	No	Yes*
Processor/Rice miller	Yes	No	Yes**	No	-	No	No
Wholesaler and retailer	No	No	Yes***	No	No	No	No
Input suppliers	Yes	No	Yes	Yes	No	Yes**	No

*Large traders financing small traders

** MFIs provides financing to some small rice miller

***MFIs provides finance to some of the small retailers and wholesaler

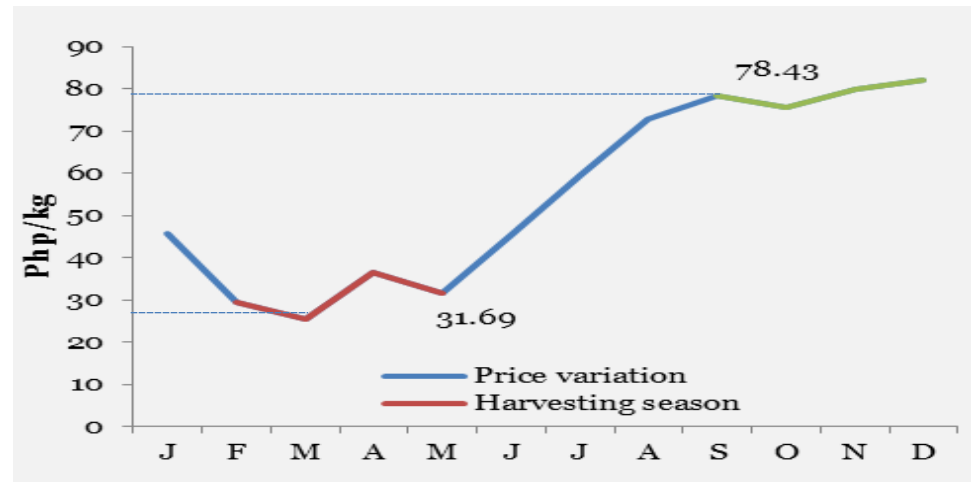
3. Marginal farmers need credit not only for production but to avoid distress selling as well

Phase	Production phase	Harvesting	Post-harvest storage/processing
Price trend		Palay – 14-16 peso/Kg Onion – 15-17 peso/kg	3 months Palay – 18-20 peso/Kg Onion – 34-50 peso/kg
Credit supply	MFIs, Traders, Input suppliers		
Income realised		Sell the produce immediately	
Outcome	Loans are inadequate Borrows from local traders or input credit at 3-5% per month	Low income realisation	The advantage of post harvest storage is taken by the traders or co-operatives with sufficient capital
What can be done	Adequate loan	<ul style="list-style-type: none"> ✓ Loan to improve the produce like drying facility for palay ✓ Receivable financing so that farmers can take advantage of price increase 	

Innovative financial products can help marginal farmers benefit from time arbitrage

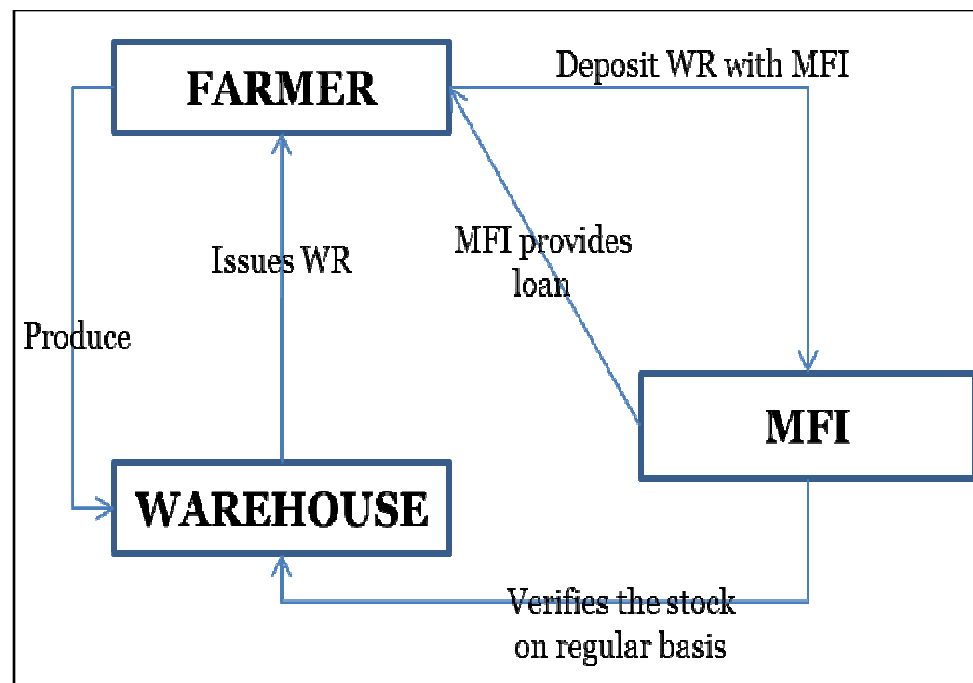
Model 1: Receivable Finance (1/2)

- Demand for the Commodity is year round, but product is seasonal
- Thus immense time value could be potentially captured
- As shown in figure, prices in lean season can rise by 200% as compared to the harvesting season



Process

- Farmers deposits his produce in MFI designate warehouse, against which a WR is issued
- WR indicates quantity, value, and the quality of the produce, against which an MFI can advances a credit (say 70% of the value of the WR) for a period of 4-6 months
- If the farmer wants to sell the produce in between, he has to return the entire loan or MFI can sell the produce at the existing rate.



Model 1: Receivable Finance (2/2)

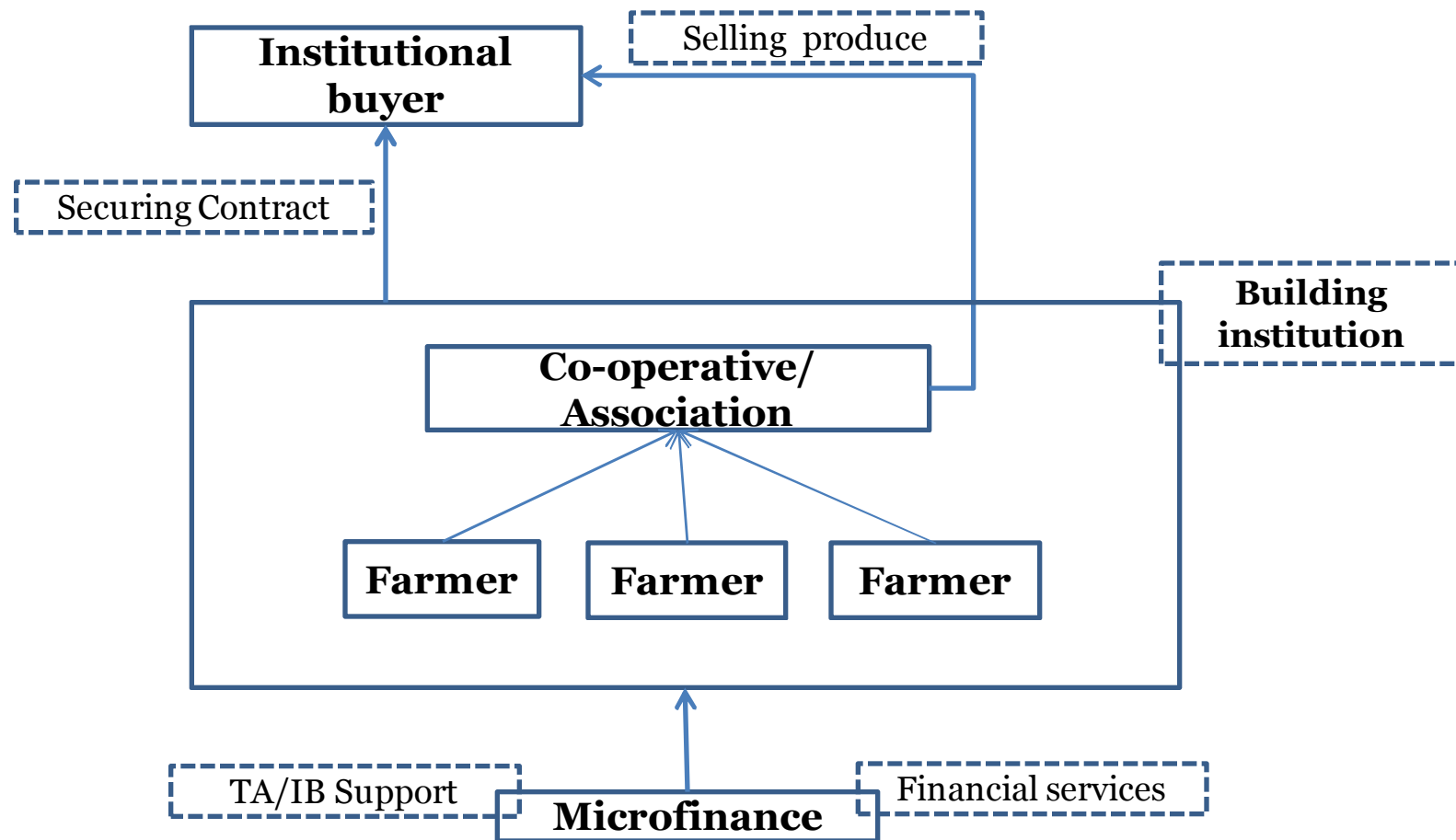
Benefits

- ✓ Small farmers who are in need of cash immediately after harvest get it without selling the produce
- ✓ Get higher realisation from same volume of produce that can effectively pay the interest and storage charges
- ✓ MFI gets a collateral which minimises risk of lending to small and marginal farmers

Challenges

- × Aggregation requires significant institutional effort
- × If price of product falls below the margin value, chances of wilful default by farmers
- × Quality of warehousing facility esp. storage and phyto-sanitary factors are critical as they determine loss in volume and weight which in turn impacts the product delivery
- × Government regulation may affect participation of MFIs in receivable finance
- × Success of RF will be contingent on macro-economic factors such as import policy, demand in international market etc.

Model 2: Institutional financing (1/2)



- MFI can finance association and co-operatives based on their systems, processes, and efficiency
- Also MFI can support these institution by providing institution building support and technical services
- MFI can help the association or co-operatives to secure market linkages

Model 2: Institutional financing (2/2)

Benefits

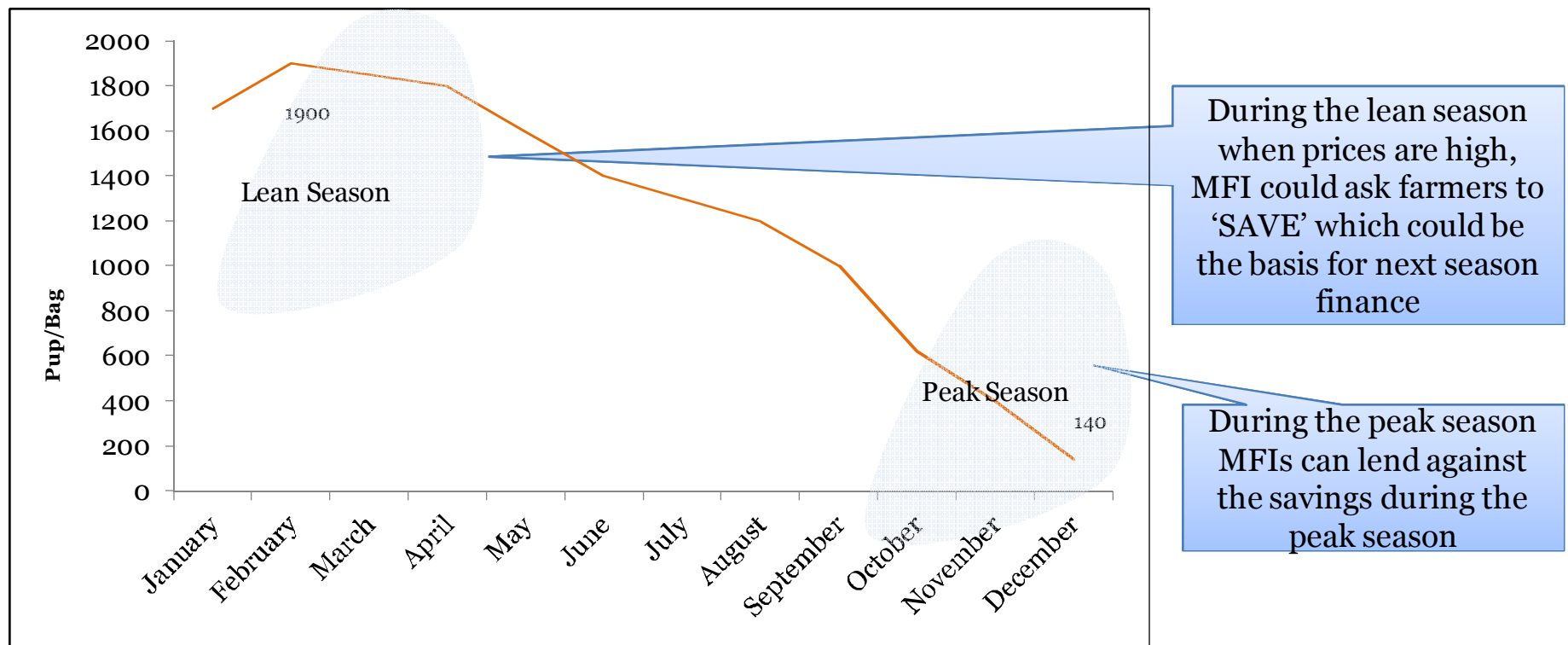
- ✓ MFI finances the farmer based on the contract secured by the farmer or the co-operative
- ✓ With the contract farming, the impact of price fluctuation can be minimised
- ✓ The collective bargaining power of the farmer will increase once they get into an association or co-operatives
- ✓ Dependency on trader will be reduced. The power dynamics will change
- ✓ Farmers gets technical input which will improve the production

Challenges

- × The model requires a gestation period during which it will have to be supported with grants
- × Requires investments of time in building relationships with the community
- × Quality parameters will have to be strictly adhered to avoid reputational risk

Model 3: Loan Against Savings (1/2)

- Prices of calamansi are extremely volatile (see figure- from Ps.140 in peak season to Ps.1,900 for a bag in lean season) due to its fluctuations in productions
- This creates a wide gap between the incomes realised by farmers in peak and lean seasons
- This model seeks to accumulate the surplus generated during lean seasons , so that it can be leveraged for additional loans to invest in value additions like arranging logistics for transportation, or to set up a small scale juice making facility
- MFI can partner with banks to park these savings in a bank



*A typical bag of calamansi weighs 25kg

Model 3: Loan Against Savings (2/2)

Benefits

- ✓ Calamansi grower can get adequate loan in the peak season which will reduce their dependency on other sources for finance
- ✓ Farmers can have a greater savings in the form of CBU which can help them in accessing larger loan
- ✓ The loan appraisal can be done more effectively by the Agriculture expert who understands the economics of calamansi
- ✓ MFI will effectively reduce the lending risk to these group of farmers, as the loan will be partially secured against the savings

Challenges

- × Farmers may refuse to repay the loan in spite of the savings parked with the bank. To avert this risk, bank will have to mark a lien on savings in favour of MFI, so that in the event of default savings can be used to settle the outstanding amount
- × Loan assessments will require people with skills
- × Good quality will have to be ensured

Capability required and its impact on small holders

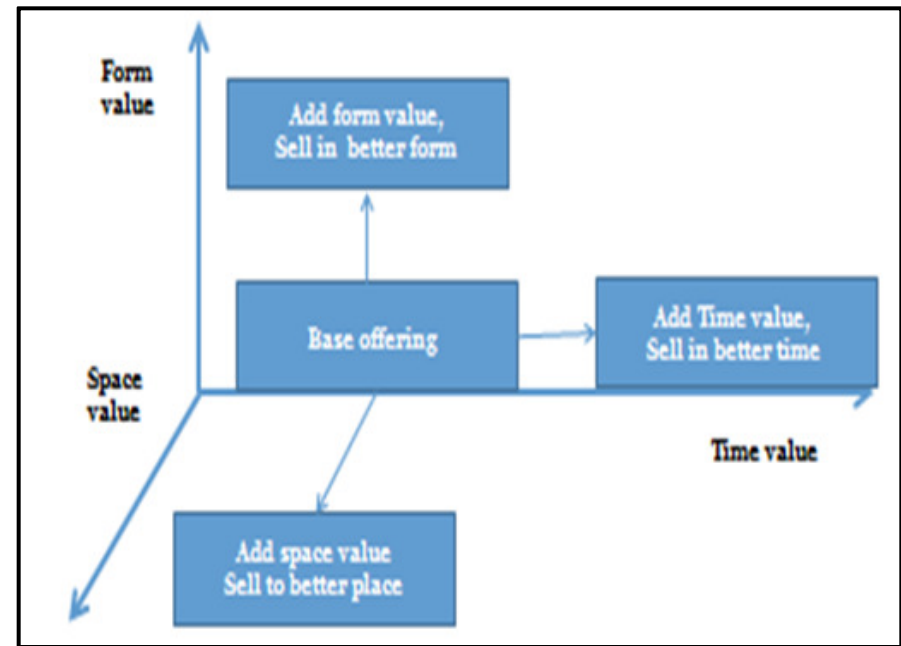
Options	Capability required	Expected Outcome	Requirement
Receivable financing for onion	<ul style="list-style-type: none"> ✓ Understanding of Receivable finance ✓ Risk management ✓ Monitoring of prices and advising the farmers accordingly ✓ Support of the community in implementing it 	<ul style="list-style-type: none"> ✓ Small onion farmers will be able to store the onion and get better price realisation 	<ul style="list-style-type: none"> ✓ Further research to develop the product
Institutional financing coupled with technical assistance	<ul style="list-style-type: none"> ✓ A strong team to develop market linkages, deal with the buyers and farmers ✓ A strong technical team to deliver the services at the field level ✓ Microfinance ✓ Collaboration with other actors 	<ul style="list-style-type: none"> ✓ Large number of farmers will be linked to the buyers with assured price and market for their produce 	<ul style="list-style-type: none"> ✓ Strengthening marketing team and its capability
Modifying the existing scheme for HVC (Calamansi)	<ul style="list-style-type: none"> ✓ Market research ✓ Microfinance services ✓ Product development 	<ul style="list-style-type: none"> ✓ Will help growers access adequate loan amount 	<ul style="list-style-type: none"> ✓ Product modification based on crop cycle and cash flow
Use of ICT in value chain	<ul style="list-style-type: none"> ✓ Strategy to deliver various services using mobile technology ✓ Team which can deliver services on mobile devices ✓ Collaboration with universities, and service providers 	<ul style="list-style-type: none"> ✓ Service related to agriculture practices, interaction with experts, and financial services at door step 	<ul style="list-style-type: none"> ✓ A strategic visioning exercise with a detailed market research



Why is VCF and VCD important?

Importance for VCF and VCD

- It has emerged as a powerful tool in creating an impact on the livelihood of the farmers
- The “value” gets created in three ways- space, form and time, shown as the three axes
- For instances a rice traders purchase palay, dries and mills it, stores it and transports it across the regions to take advantage of space, time and form arbitrage



- Financing plays a key role as farmers tend to lose value because of:
 - Lack capital to undertake one or more of the above value additions (e.g. vehicle for transportation, dryer for palay or warehouse to store it)
 - Existing terms of credit are skewed against the SMF that result in loss of their surplus and also disincentives to invest in technology, land and labour
 - Increase the capacity of players higher up the value chain

How will VCF affect the MF sector as it moves forward and goes beyond MF?

Affects on VCF on MF sector

- >50% of the microfinance clients are engaged in agriculture activities (both farm and non-farm). So any intervention is going to directly affect the majority
- VCF represents a “ecosystem approach” over “household approach” which shows a belated shift to a thinking that welfare of poor is inextricably linked to VCs of which they are a part
- Shift to SMF- centric product design by MFIs, i.e.:
 - finance for working capital
 - finance for capital assets
 - for a variety of activities including non-cereal crops, and other non-farm activities like horticulture, fisheries etc.
- Pressure on MFIs to:
 - reduce the cost and look for innovative channels
 - innovate products to increase their uptake

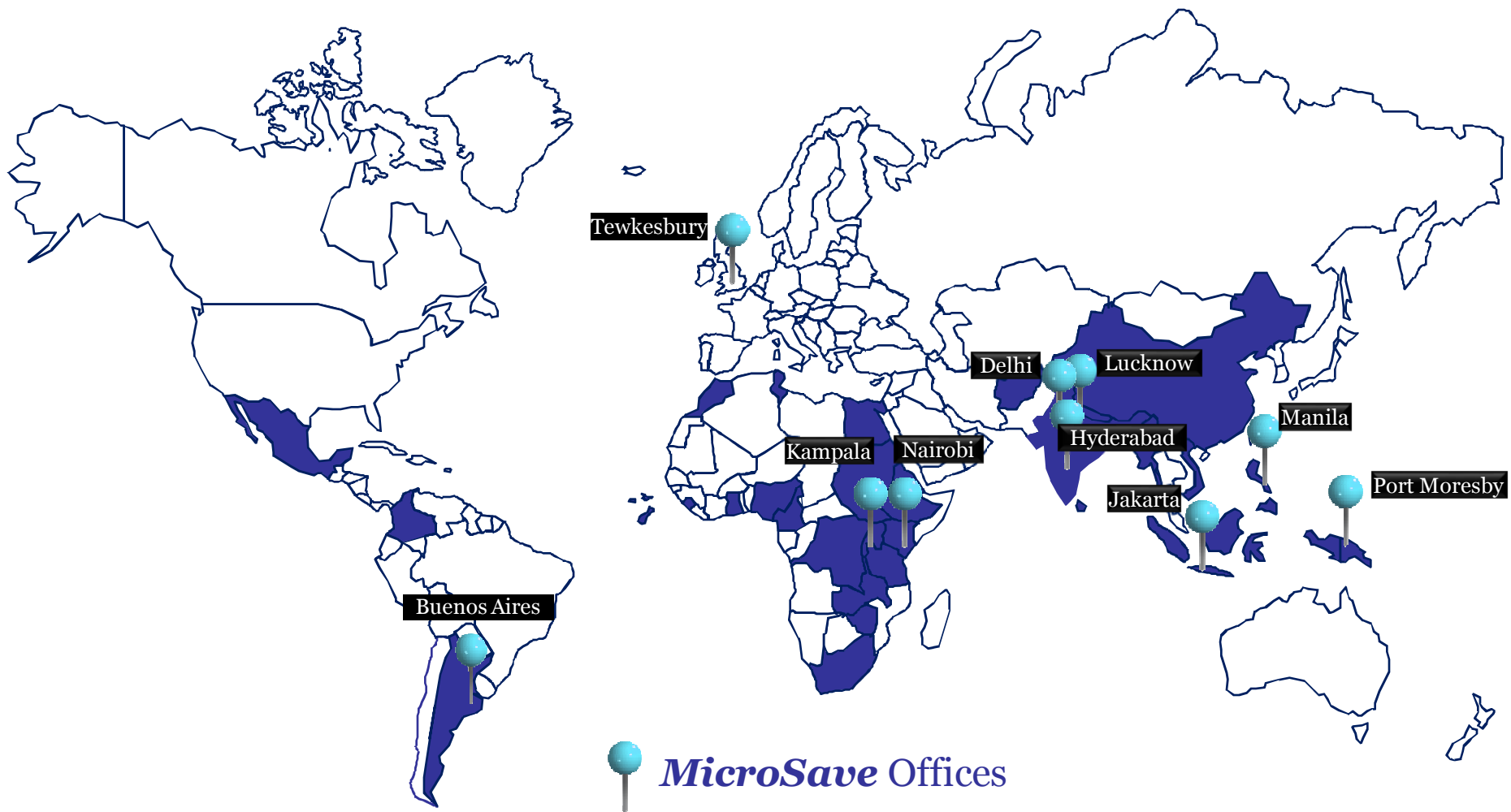
Annexure

Product Features (8Ps)- 1/2

8P's		Product 1: Warehouse receipt financing	Product 2: Institutional lending	Product 3: Loans against Savings
Product	Purpose	<ul style="list-style-type: none"> To benefit from the seasonality in prices and avoid distress selling at the time of harvest Reduce the credit risk for the lender by providing a loan secured against the produce stored in the warehouse 	<ul style="list-style-type: none"> To offer bulk loan to co-operatives and famers' association 	<ul style="list-style-type: none"> To provide a loan for crops with varying duration Leverage savings to offer credit products and thereby reduce lender's risk
	Loan Amount	40-60% of the total value of the commodity. Lower for the commodity with high price volatility	>Php200,000	Php30,000 to 60,000 in a season
	Mode of Loan Disbursement	Cash/bank transfer through mobile payments/cheque		
	Repayment frequency	One-time payment (principal and interest) at the end of the term	One-time payment (principal and interest) at the end of the season	One-time payment (principal and interest) at the end of the season
	Tenure	3-5 months depending upon the commodity	4-7 months	4-7 months
	Collateral	Warehouse Receipt	None	None, in absence of contract from buyer. However, if Purchase Order (PO) is provided then it can be taken as a collateral and rebate on interest rate provided
	Savings component	NIL	Depending on the MFI policy	Compulsory Build Up (CBU) @5-10%
	Insurance	Crop insurance from Philippines Crop Insurance Company (PCIC)	Crop Insurance from PCIC	Crop Insurance from PCIC
Other terms and conditions	Warehousing charges	Prepayment is allowed and interest will be charged only for the outstanding amount	Prepayment is allowed and interest will be charged accordingly	

Product Features (8Ps)- 2/2

8P's		Product 1: Warehouse receipt financing	Product 2: Institutional lending	Product 3: Loans against Savings
Price	Interest rate	0.5% to 1% basis point lower than existing because the loan is collateralized; range from 2-3% per month	2-3% diminishing balance	2-3% diminishing balance
	Processing charges	No processing fees	As per MFI policy	As per MFI policy
Place		MFI's branch		
Promotion			Direct marketing through contracts	
People		Agricultural officer, Field Officer, Branch Manager	Agricultural officer, Trading house or co-operative, credit officer, Branch Manager	Agricultural officer, Credit Officer, Branch Manager
Physical evidence		Warehouse receipt, payment receipt, loan application form	Loan application form, receipts, purchase order	Loan application form, receipts
Positioning		Higher price realisation over a period of time	Direct selling with higher price realisation	Loan based upon the crop duration
Process		As per MFI policy and procedure; Validation of WR; Validation of warehouse	As per MFI policy and coordination between the trading house and MFI	As per MFI policy;



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