





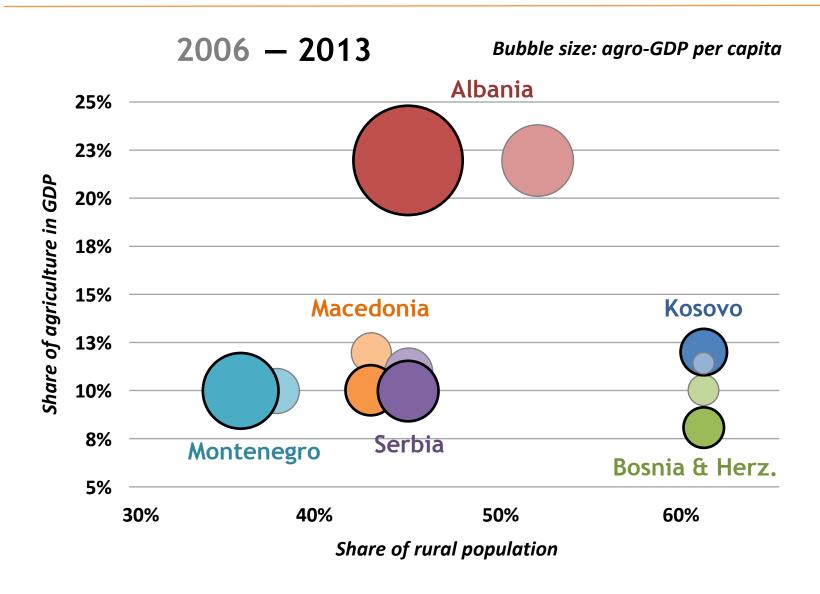


Agricultural finance in Kosovo: Potential and challenges



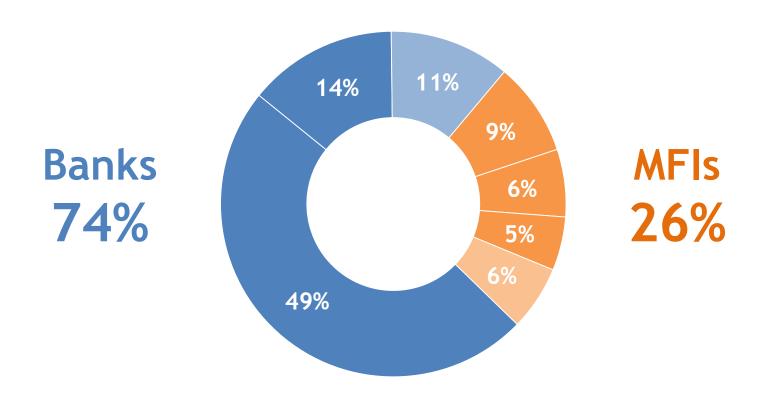


Role of agriculture in the region



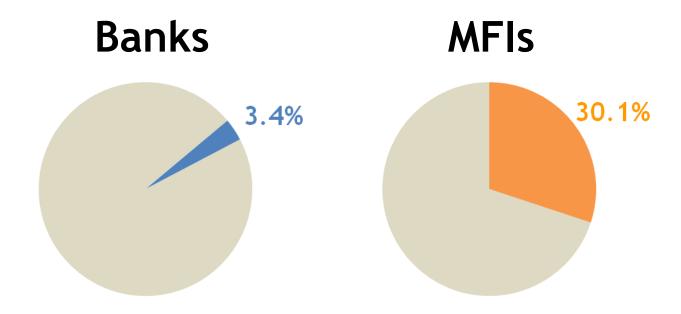


The agri-lending market is very concentrated



Source: 2012 Annual Reports, survey of financial institutions, own estimations







...while demand for finance is strong





6x more











IF NOT NOW, WHEN?







— You fear also what you don't know!

Kosovo's agriculture has a significant growth potential









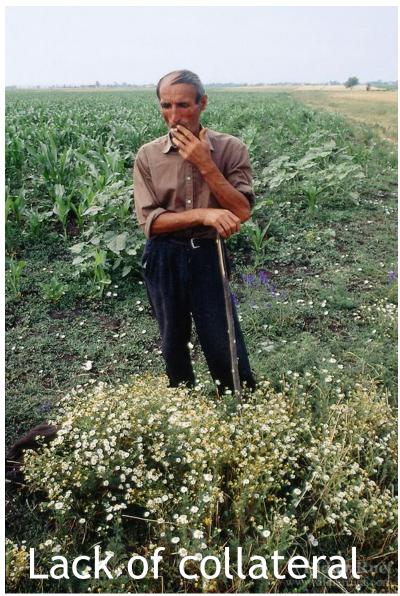
۶



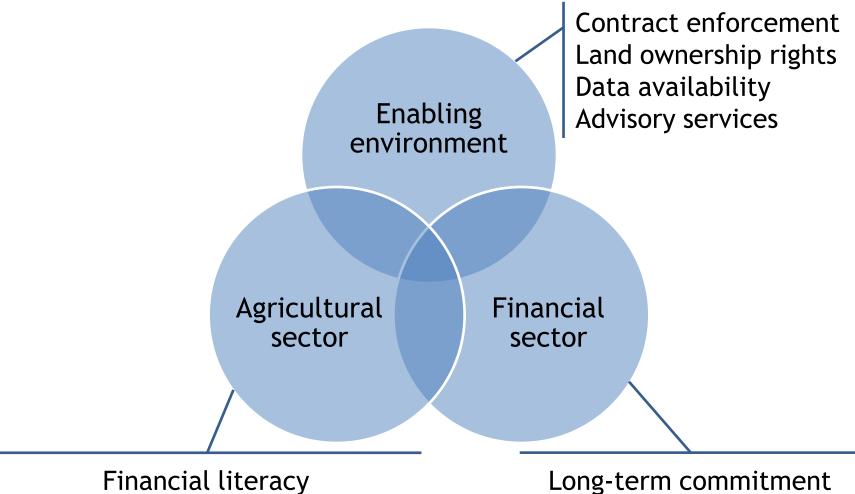
Challenges can be solved when understanding specifics of the sector











Financial literacy
Agricultural knowledge and skills

Long-term commitment Right business model

Contradicting messages from the market players





















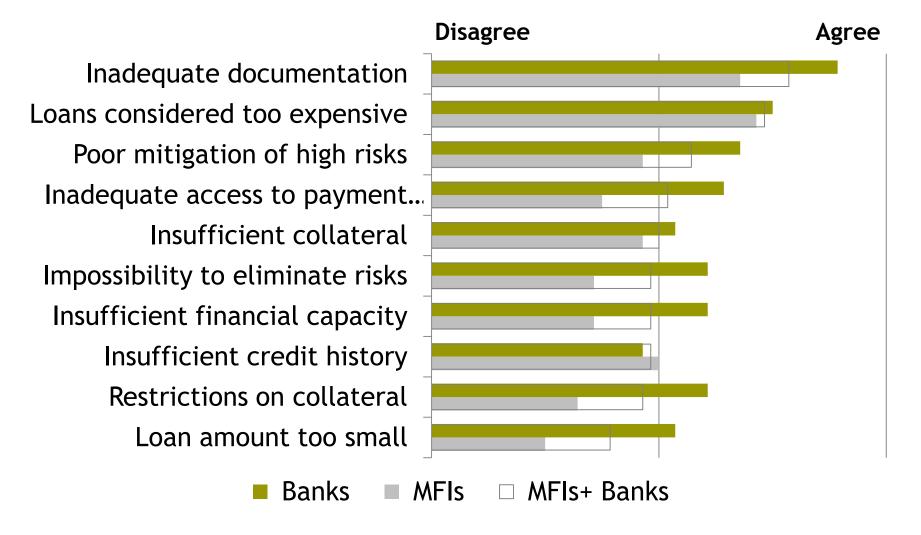




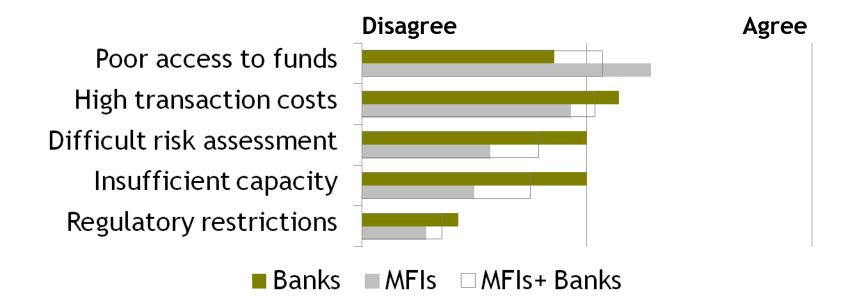
Coffee break 15 min



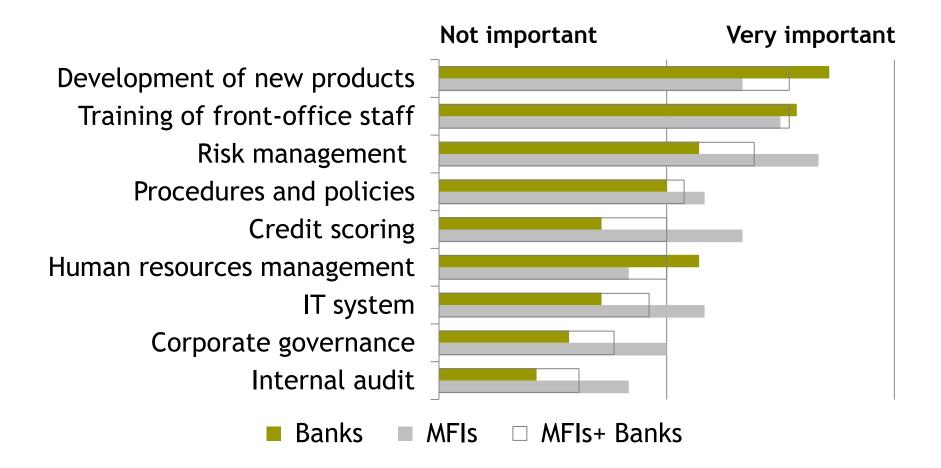
Study results: problems related to <u>agricultural clients</u>



Study results: problems related to <u>financial institutions</u>



Study results: importance of various areas to develop agri-lending





Efficiency challenge



Risk challenge







Agricultural finance

How to make it work?



I. Introduction

II. Market Challenge

III. Risk Challenge

IV. Efficiency Challenge

Knowledge, tools, passion...







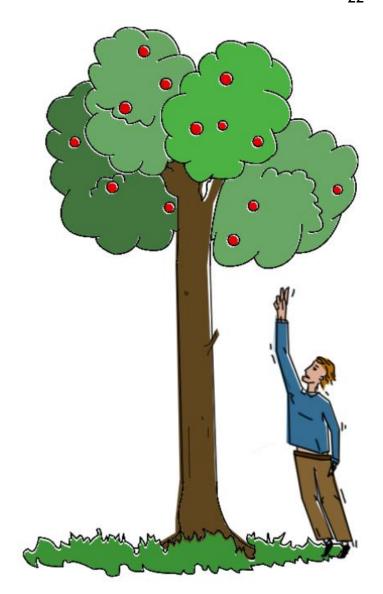




Agri-lending has never been a "low hanging fruit" for lenders

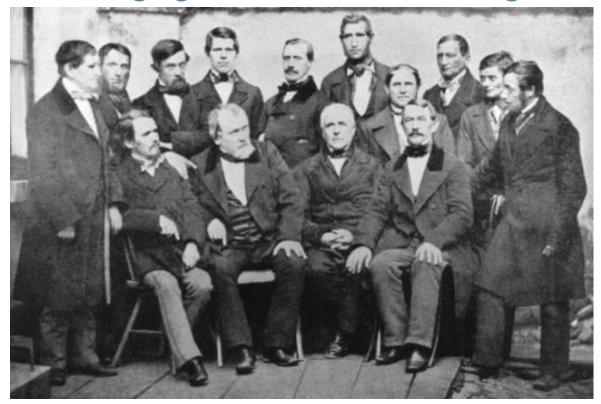
but...

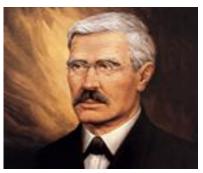
with proper tools and knowledge, one can get "up there"



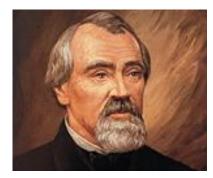


Financing agriculture: Reinventing the wheel...





Friedrich Wilhelm Raiffeisen March 30, 1818 – March 11, 1888



Franz Hermann Schulze-Delitzsch August 29, 1808 – April 29,1883

...or constructing a new one?



Commercial Banking SME Banking

Retail Banking

Agricultural Banking

Agricultural Banking SME Corporate Banking Commercial Retail Banking Banking Banking MARKETING

I. Introduction

II. Market Challenge

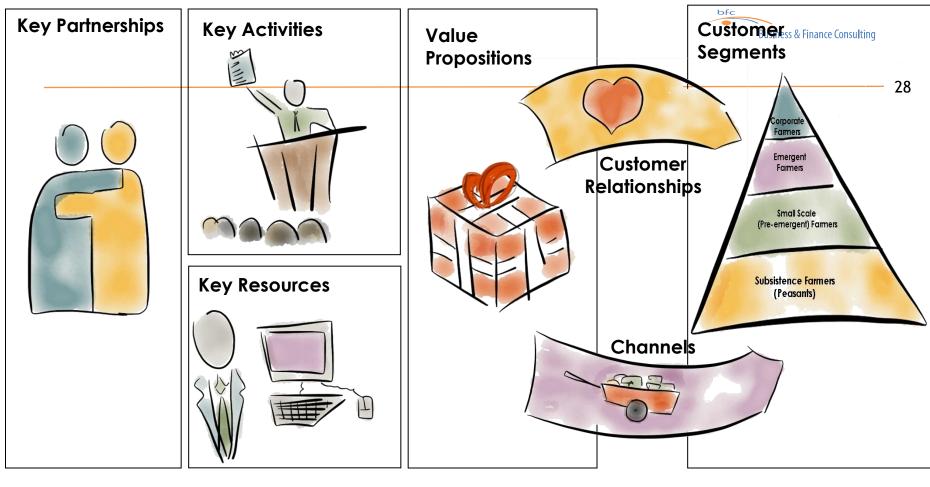
III. Risk Challenge

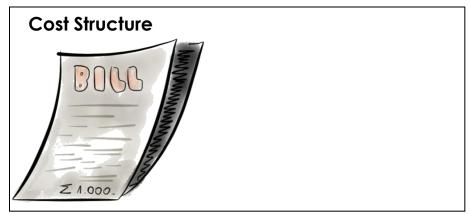
IV. Efficiency Challenge

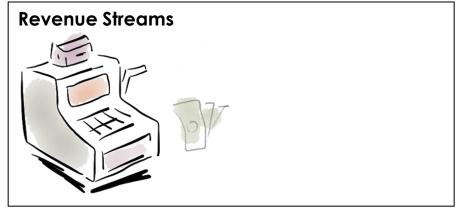


Alexander Osterwalder: The Business Model Canvas

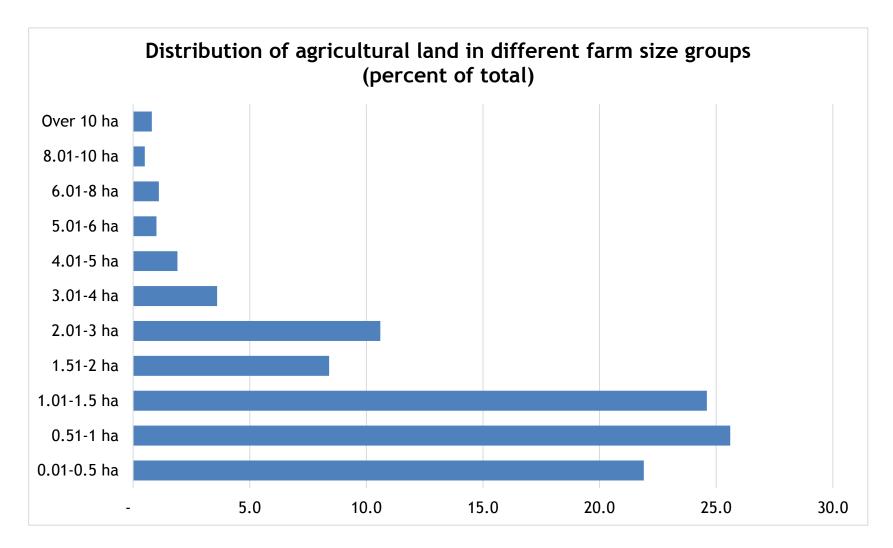
YOUTUBE URL: http://goo.gl/ZV3CJ (3:32 min)





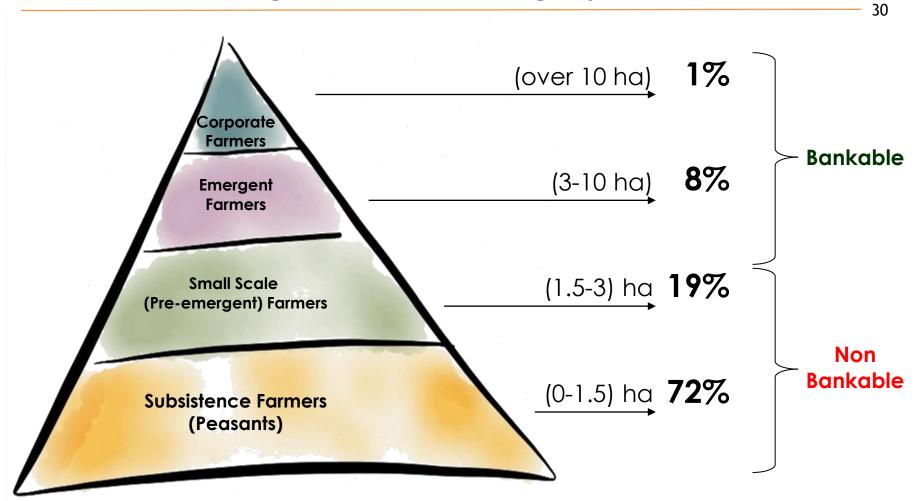


Based on the farm size ...



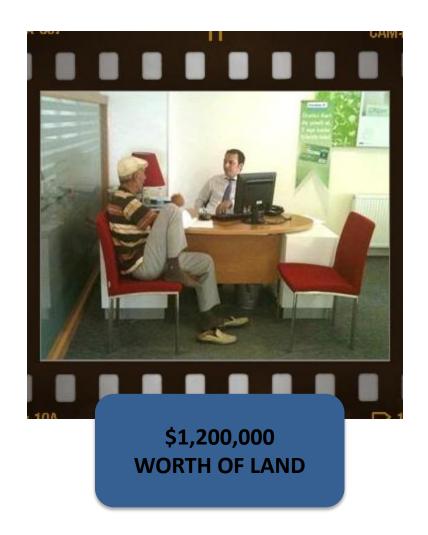
Source: Agricultural Household Survey 2008

...customers can be segmented in the following way





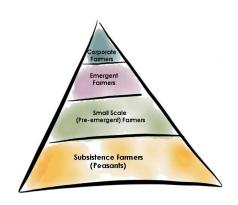








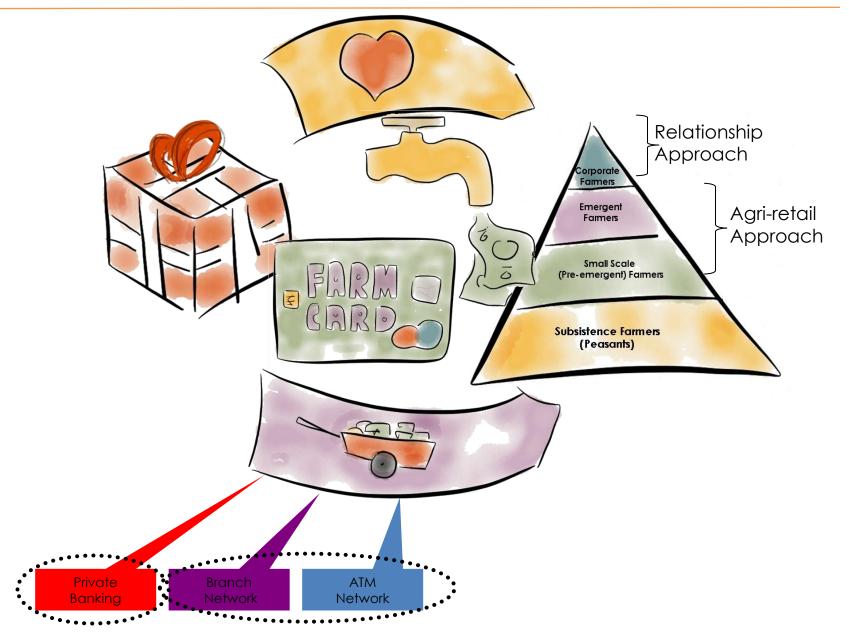


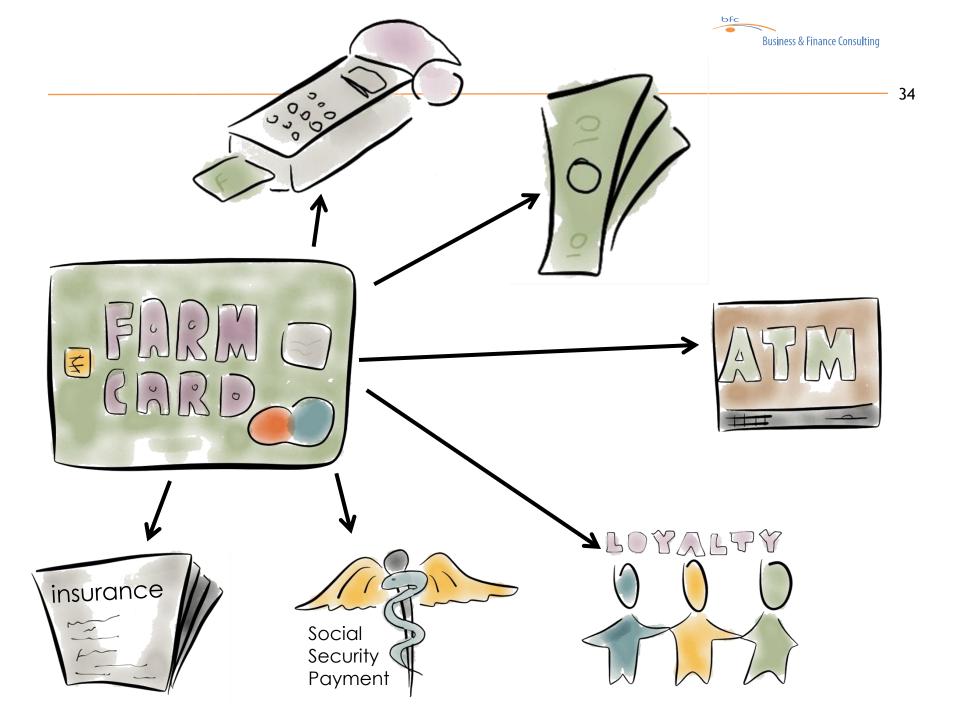


Working Capital (Cost Driven) Fixed Assets (Profit Driven)



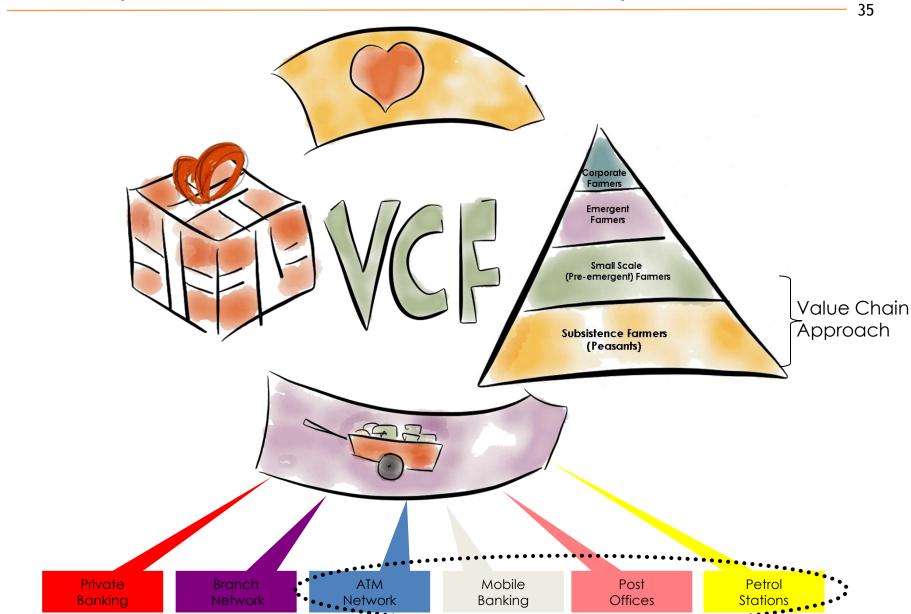
Value Propositions & Channels & Customer Relationships





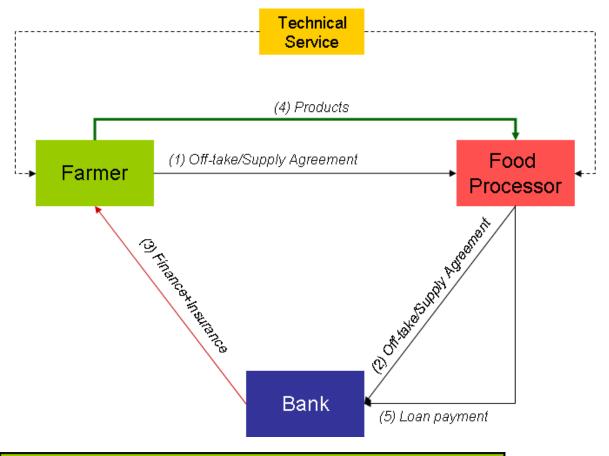


Value Propositions & Channels & Customer Relationships





Business Models in Value Chain Financing: Model 1

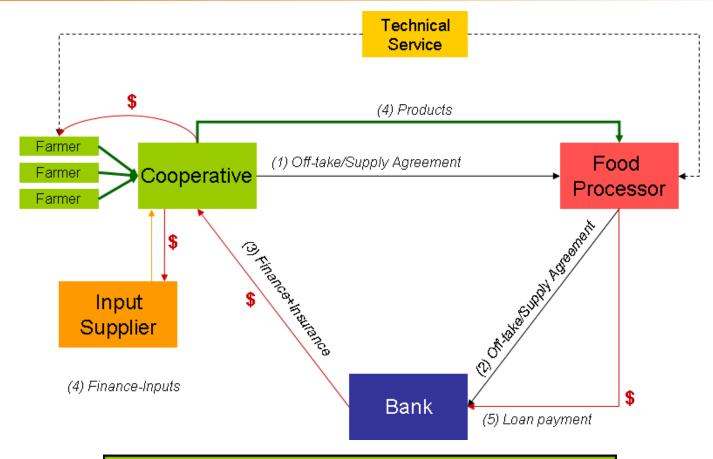


PROS •Transparency •Relation is with the final borrower •Not depending on admin capacity of coop. •Easy to extend working capital loans with equipment loans PROS •Administration burden for bank •Transaction cost •Mistake sensitive •Individual out grower default hits bank immediately





Business Models in Value Chain Financing: Model 2



PROS •More efficient, lower transaction cost •Large loan amounts •Individual out grower default is absorbed by the cooperatives •Risk of admin mistakes by coop





3 important keys for successful VCF

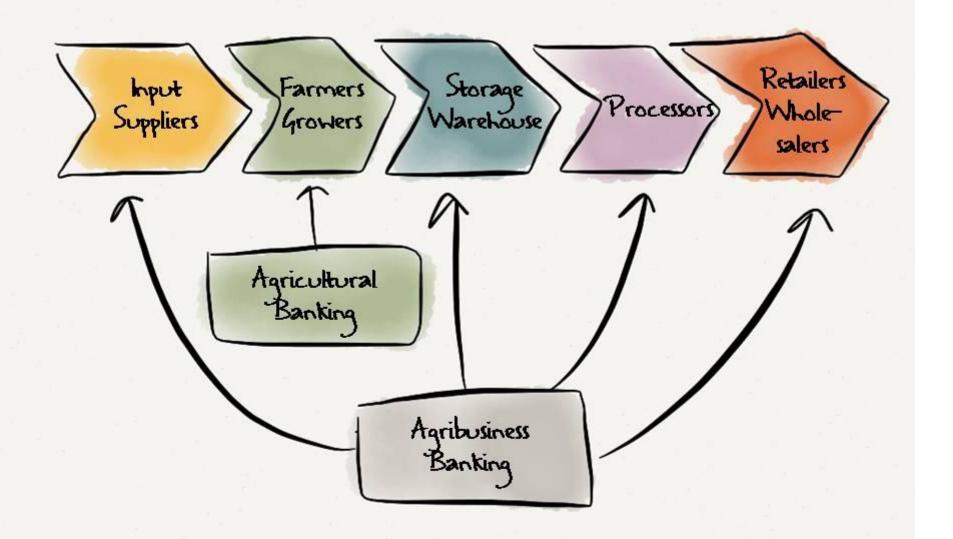


Buyer/food processor with good credit reputation

2 Good cooperation within bank's departments

3) Make it desirable







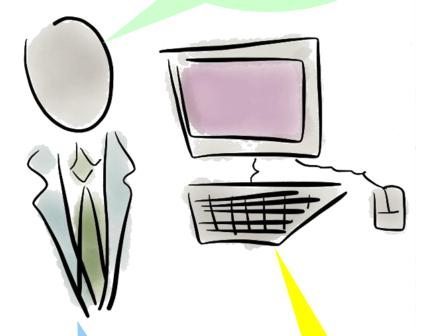


Value Propositions & Channels & Customer Relationships



Key Resources

Agronomist Bankers



Local Staff Practical & Effective IT







Agricultural Trade Fairs

> Local **Festivals**

Social Responsibility **Activities**

Easier Loans For Special **Events**

Key Partnerships



Agricultural **Unions**

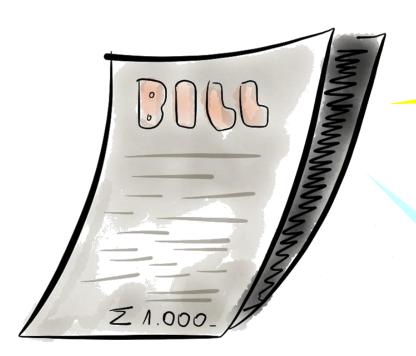
> Agricultural Cooperatives

Universities

Input Suppliers

Farmers' Chambers



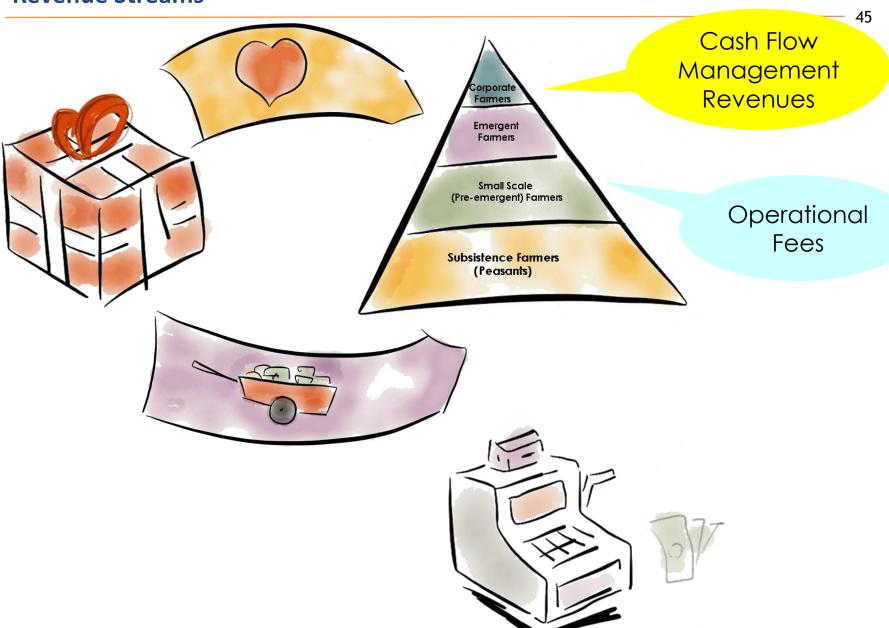


Value Driven for corporate farmers

Cost Driven for small scale



Revenue Streams







- Agri-unions
- •Agri-coop.
- Universities
- Farmer chambers

Key Activities

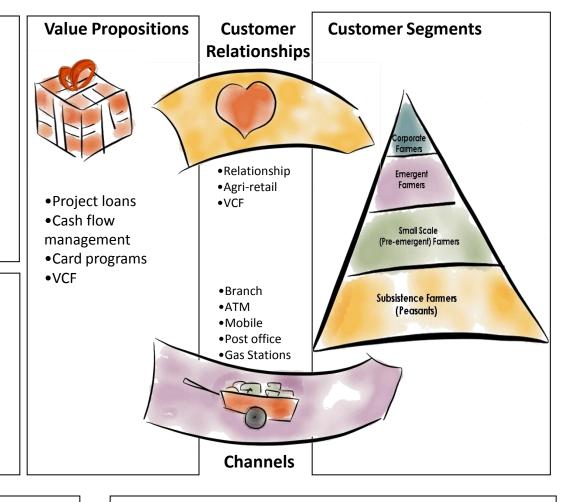


- Village visits
- Trade fairs
- •Local Festivals

Key Resources



- Agronomist Bankers
- Smooth Process
- Agrilending Scoring



Cost Structure



- Value Driven for corporate farmers
- •Cost Driven for small scale farmers

Revenue Streams



- Pricing the risk
- Pricing operational costs in small scale farmers
- •Corporate farmers cash flow



Questions & Answers 5 min



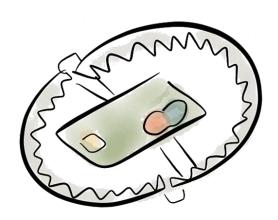


II. Market Challenge

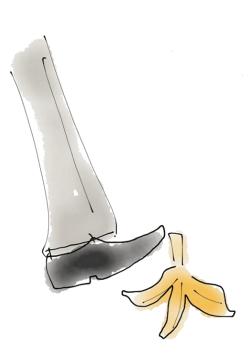
III.Risk Challenge

IV. Efficiency Challenge





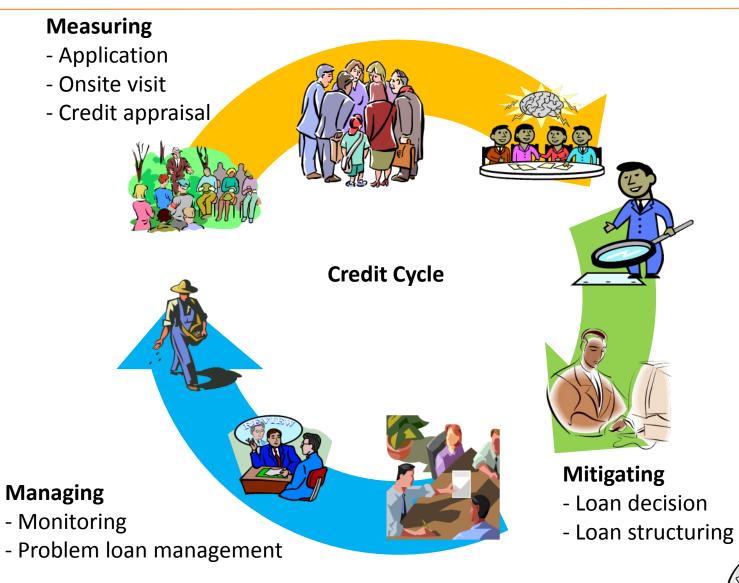
Credit Risk (Default Risk)



Operational Risk

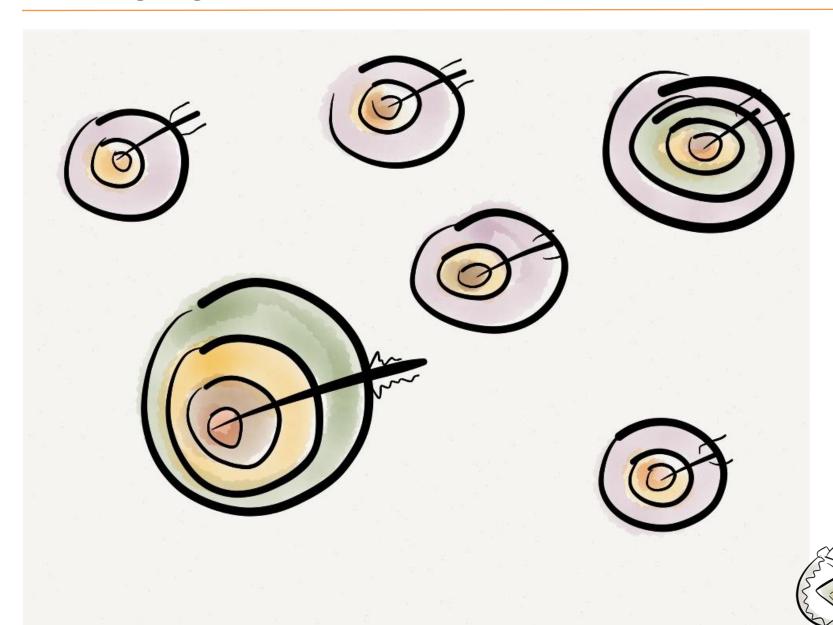


Credit cycle





Measuring: target market









No Agrilending
System

OUT ST

Over lending

Not enough lending





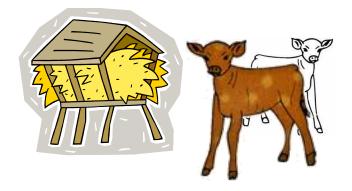




Assets

Liabilities

Working assets



Fixed assets



EQUITY



Technological card

Operation

Time

Resources

Cost of services

Cost of technological operation



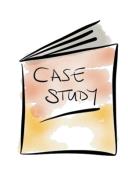








TOTAL COST





Benchmarking

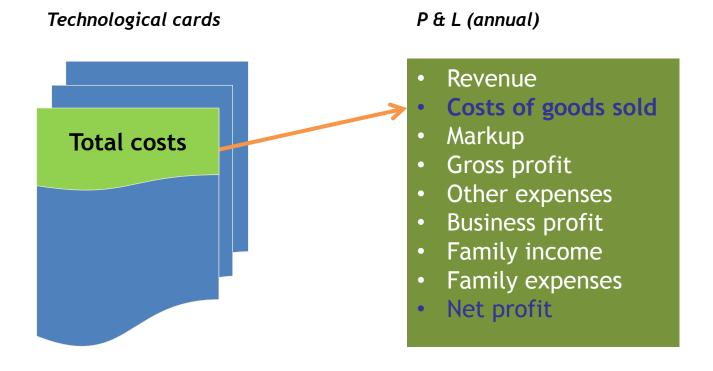
Agriculture	High	Yield (tons /1 ha) Medium	Low
	7	E	
	7	5	4
	55	20	4
College Colleg			
	45	20	4

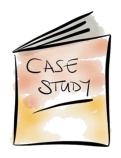
Key factors

- Regional characteristics
- Historical temperatures
- Farm specifics







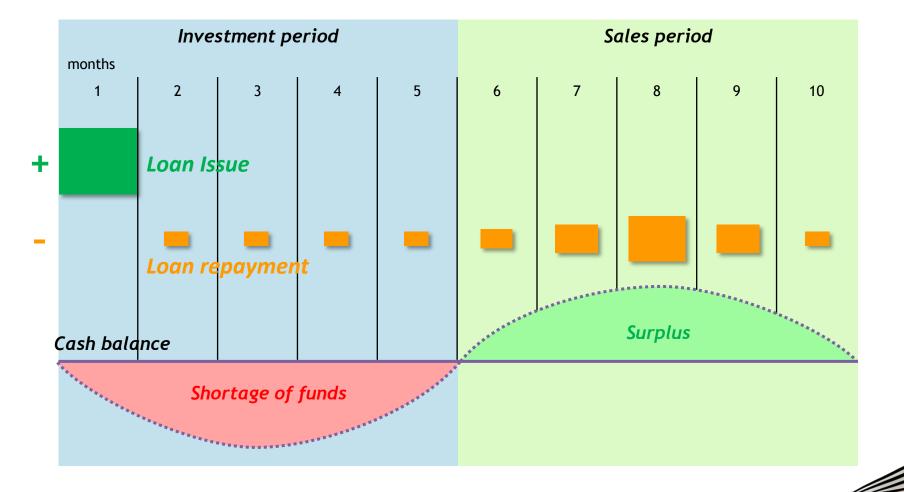


60

CASE STUDY

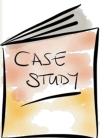
Cash flow







Balance sheet	Loan ÷ Equity	<100%
Profit and loss statement	(Loan + %) ÷ Net profit (annual)	<70%
Cash-flow	Installment ÷ Cash at the end of period	<50%





Connections between statements

Type of activity: Cultivation of Wheat, Tractor lease

ASSETS	Oct-11	LIABILITIES	Oct-11
1. Cash	50	9. Payables	0
2. Savings	200	10. Loan	0
3. Receivables	0	11. Other	0
4. Fuel	250		
5. Seeds	200		
Total current assets	700	Total borrowed funds	0
6. Equipment	1,200		
7. Tractor	2,500		
8. Land	7,000		
Total fixed assets	10,700	Equity	11,400
Total assets	11,400	Total liabilities	11,400

Technological card: Wheat

Area (ha):

4	\sim	
1	11	
- 1	11	

	Technological operation / used material	Month	Consumption kg or liter / ha	Price for kg / liter	Cost of mechanized services per ha	Cost of technological operation / ha	Total cost for the whole area
1	Plowing (fuel)	October	25.00	1.00		25.00	250.00
2	Seeds	November	200.00	0.40		80.00	800.00
3	Sow (fuel)	November	12.00	1.00		12.00	120.00
4	Harvesting	August			25.00	25.00	250.00
						142.00	1,420.00

62

10

Area (ha):

Connections between statements

	Technological operation / used material	Month	Consumption kg or liter / ha	Price for kg / liter	Cost of mechanized services per ha	Cost of technological operation / ha	Total cost for the whole area
1	Plowing (fuel)	October	25.00	1.00		25.00	250.00
2	Seeds	November	200.00	0.40		80.00	800.00
3	Sow (fuel)	November	12.00	1.00		12.00	120.00
4	Harvesting	August			25.00	25.00	250.00
						142.00	1,420.00

Profit and Loss Statement

Items	Total per year	
Revenue from wheat		7,500*
Revenue from service		600
Total Revenue		8,100
Product Costs		1,420
Gross profit		6,680
Family income		1,200
Family expenses		1,200
Net profit		6,680
Loan amount + Interest		
Loan installment/Net Profit		

63

		Technological card: Wheat					Area (ha): 10								
_		Technological operation / used material	N	/ Ionth		sumption		ice for k liter		Cost o mechani services po	zed	Cost technolo	gical	Total co	
	1	Plowing (fuel)	Octobe	er		25.00		1.00				25.0	0	250.	00
	2	Seeds	Novem	nber	:	200.00		0.40				80.0	0	800.	00
	3	Sow (fuel)	Novem	nber		12.00		1.00				12.0	0	120.	00
	4	Harvesting	August	t						25.00		25.0	0	250.	00
												142.0	00	1,420	.00
						Cas	h Flow	,							
ts	Pei	riod		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	/ Jun	Jul	Aug	Sep
statements	Mc	onths		0	+1	+2	+3	+4	+5	+6	+7	7 +8	+9	+10	+11
E	Cas	sh balance at the begining of perio	od	250	400	-170	-170	-179	-170	0 -20	13	0 130	130	130	-120
ate	Cas	sh from sales													7 500
	Cas	sh from services		150	150				150	0 150					
etween	Fue	el costs			-120										
Ve	See	eds costs			-600										
	Ha	rvesting costs												-250	
S	Cas	sh flow from operations		150	-570				150	0 150				-250	7 500
ONS	Loa	an issue													
7	Loa	an repayment													
nnec	Cas	sh flow from financing													
On	Far	nily income		100	100	100	100	100	100	0 100	10	0 100	100	100	100
Ö	Far	nily expenses		100	100	100	100	100	100	0 100	10	0 100	100	100	100
	Cas	sh balance at the end of period		400	-170	-170	-170	-170	-20	130	13	0 130	130	-120	7 380

Technological card: Wheat	Aron (ha):	10	
reciliological cara. Wheat	Area (ha):	10	

_	Technological operatioused material	on / Month	Consumption kg or liter / ha	Price for kg / liter	Cost of mechanized services per ha	Cost of technological operation / ha	Total cost for the whole area
_	Plowing (fuel)	October	25.00	1.00		25.00	250.00
2	2 Seeds	November	200.00	0.40		80.00	800.00
3	Sow (fuel)	November	12.00	1.00		12.00	120.00
4	Harvesting	August			25.00	25.00	250.00
						142.00	1,420.00

Cash Flow

ts	Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
en	Months	0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11
em	Cash balance at the begining of period	250	400	190	170	150	130	260	390	370	350	330	60
ate	Cash from sales												7 500
St	Cash from services	150	150				150	150					
en	Fuel costs		-120										
Ne	Seeds costs		-600										
etl	Fuel costs Seeds costs Harvesting costs											-250	
S	Cash flow from operations	150	-570				150	150				-250	7 500
On	Loan issue		360										
Ct	Loan repayment			-20	-20	-20	-20	-20	-20	-20	-20	-20	-213
nec	Cash flow from financing	0	360	-20	-20	-20	-20	-20	-20	-20	-20	-20	-213
O	Family income	100	100	100	100	100	100	100	100	100	100	100	100
<u>3</u>	Family expenses	100	100	100	100	100	100	100	100	100	100	100	100
	Cash balance at the end of period	400	190	170	150	130	260	390	370	350	330	60	7 347

Balance

ASSETS	Oct-11
1. Cash	50
2. Savings	200
3. Receivables	0
4. Fuel	250
5. Seeds	200
Total current assets	700
6. Equipment	1,200
7. Tractor	2,500
8. Land	7,000
Total fixed assets	10,700
Total assets	11,400

LIABILITIES	Oct-11
9. Payables	0
10. Loan	0
11. Other	0
Total borrowed funds	0
Equity	11,400
Total liabilities	11,400

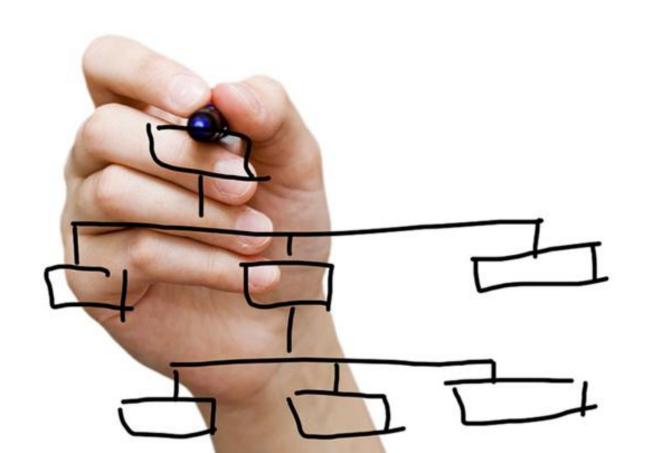
Profit and Loss Statement

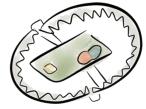
Items	Total per year
Revenue from wheat	7,500*
Revenue from service	600
Total Revenue	8,100
Product Costs	1,420
Gross profit	6,680
Family income	1,200
Family expenses	1,200
Net profit	6,680
Loan amount + Interest	413

	Coefficients	
Balance sheet	Loan ÷ Equity	3,15%
Profit and loss statement	(Loan + %) ÷ Net profit (annual)	6%
Cash-flow	Installment ÷ Cash at the end of period	4,9%



Content of the Loan Structure







| January | February | February | January | Ja

2012

March

5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

pril	Α									
Sun	Sat	Fri	Thu	Wed	Tue	Mon				
1										
8	7	6	5	4	3	2				
15	14	13	12	11	10	9				
22	21	20	19	18	17	16				
29	28	27	26	25	24	23				
						30				
	A									

					Augu		
Mon	Tue	Wed	Thu	Fri	Sat	E	
		1	2	3	4		
6	7	0	0	10	11		







Mitigating: loan structuring

<u>January</u>

Potatoes Broccoli Tea

February

Oranges Lemon Olives (Oil)

March

Bananas Greenhouse Rose Greenhouse Carnation

April

Carrot Sugar Beet Olives

May

Strawberry Plums (Early)

June

Greenhouse Tomatoes Greenhouse Melon Greenhouse Aubergine

July

Potatoes (Early) Wheat (Early) Almonds

August

Watermelon (Early)
Melon (Early)
Cucumber (Early)

September

Wheat (Dry)
Table Grapes (Early)
Cherries

October

Tomatoes Apricot Parsley

November

Sunflower Pepper Cotton

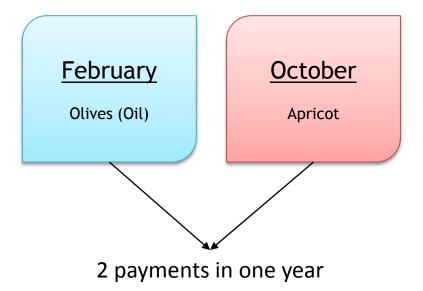
December

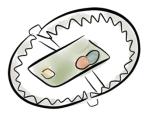
Pears Rice Kiwi





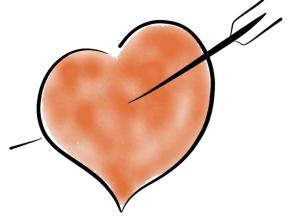
Mitigating: loan structuring



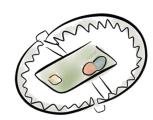












Inappropriate needs...











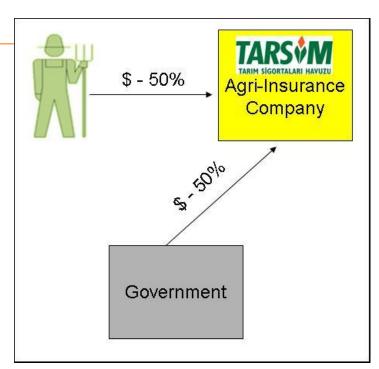


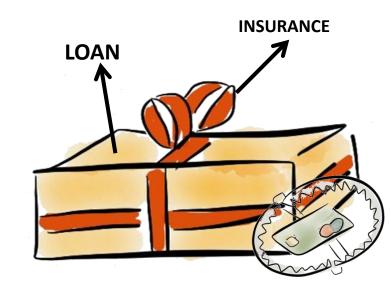
Mitigating: flood, drought, frost...





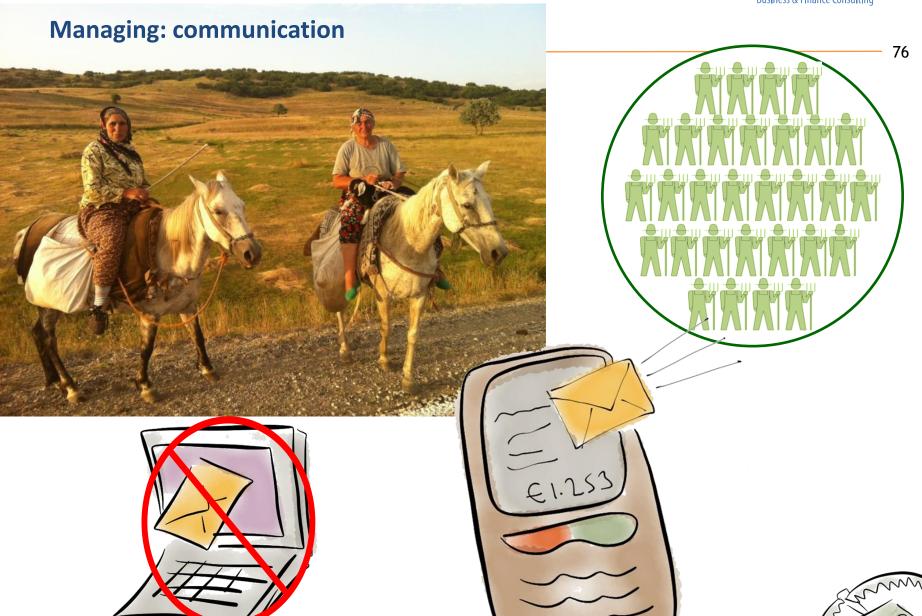






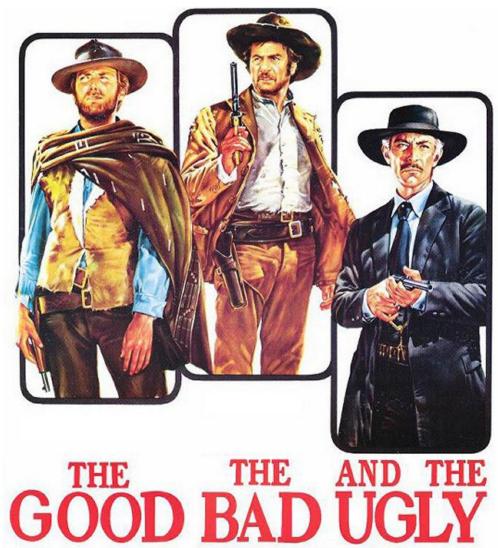


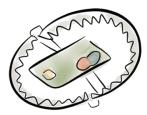






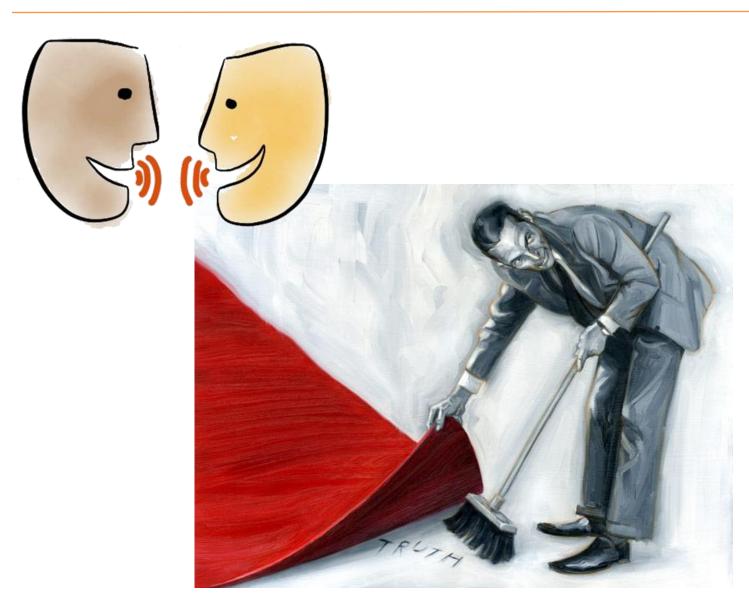








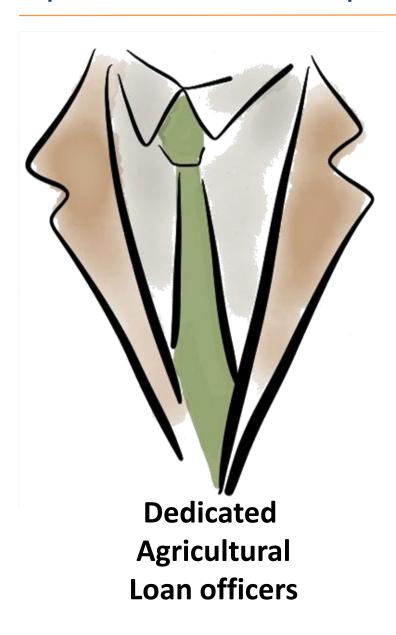
Operational risks: open communication

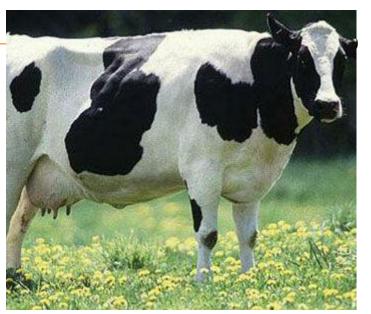






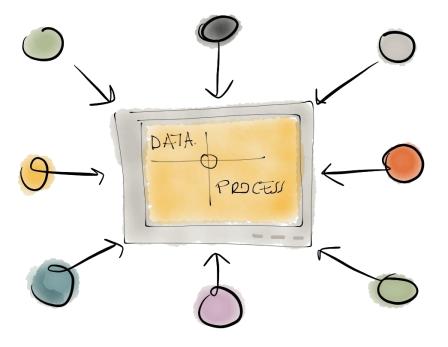
Operational risks: dedicated personnel







Operational risks: centralized data processing





Fully Authorized Agricultural Portfolio Manager



internal fraud





Operational risks: collusion









83

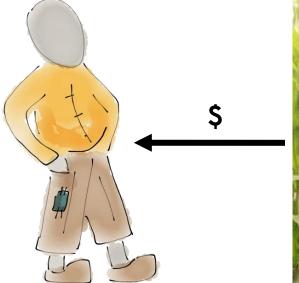








Indirect Loans









Questions & Answers 5 min





Coffee break 15 min

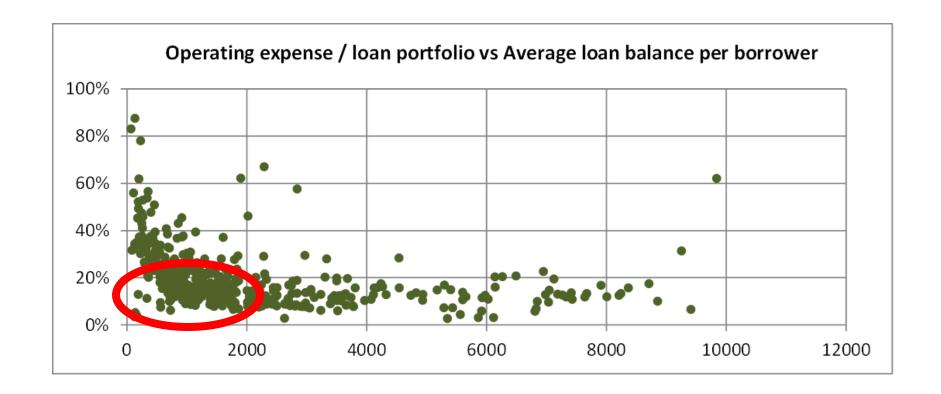


I. Introduction

II. Market Challenge

III. Risk Challenge

IV. Efficiency Challenge



...how to increase efficiency



Distance issue



Farmer profile issue



Scale issue



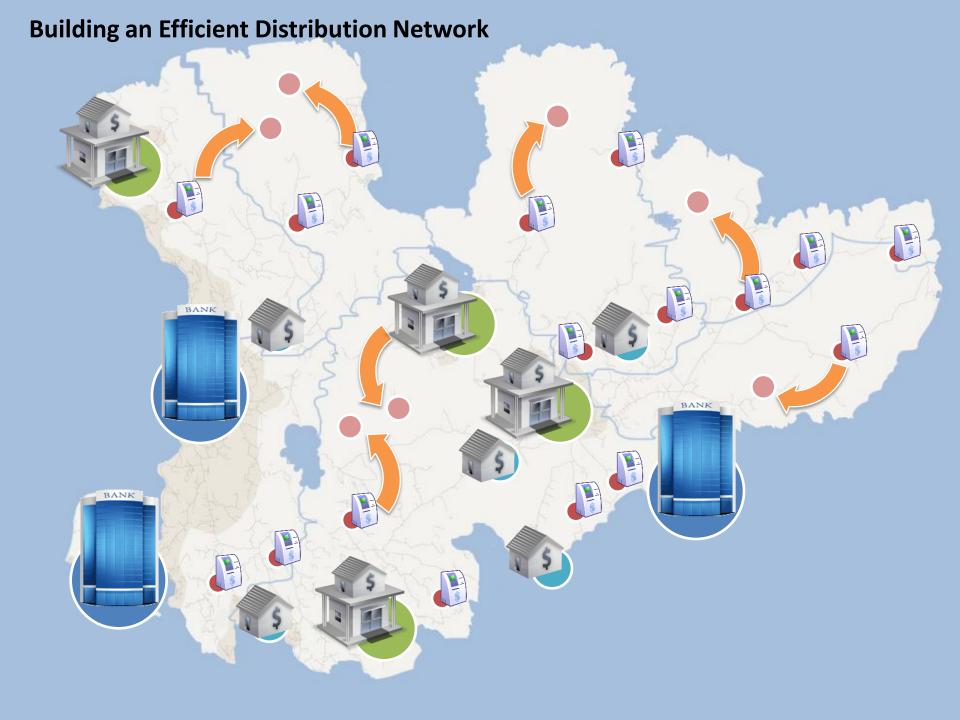
Business analysis issue





Coping with the distance issue

















Uzbekistan: "Credit Mobile"





Kenya: M-PESA











How does M-PESA make a difference?





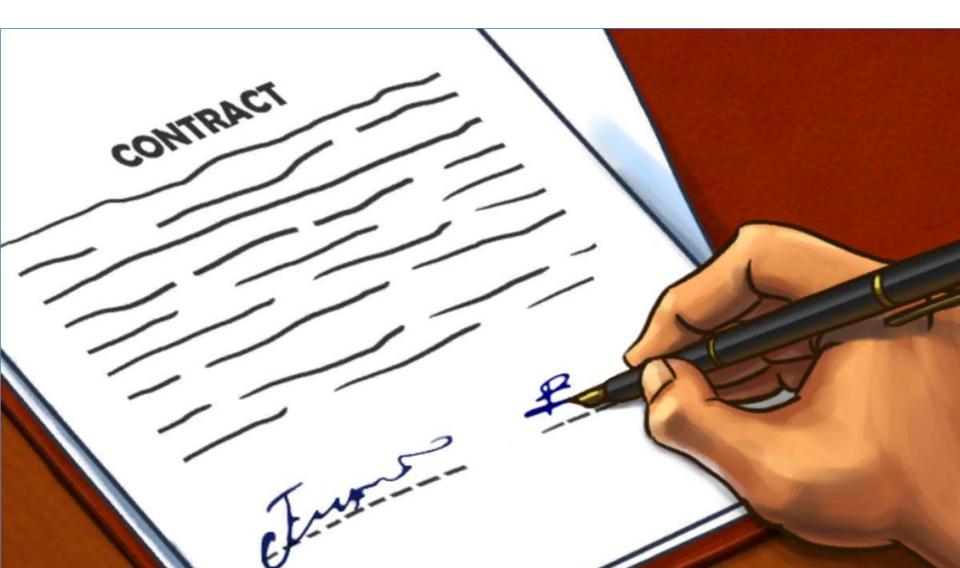


Coping with the farmer profile issue



96





Educate the market



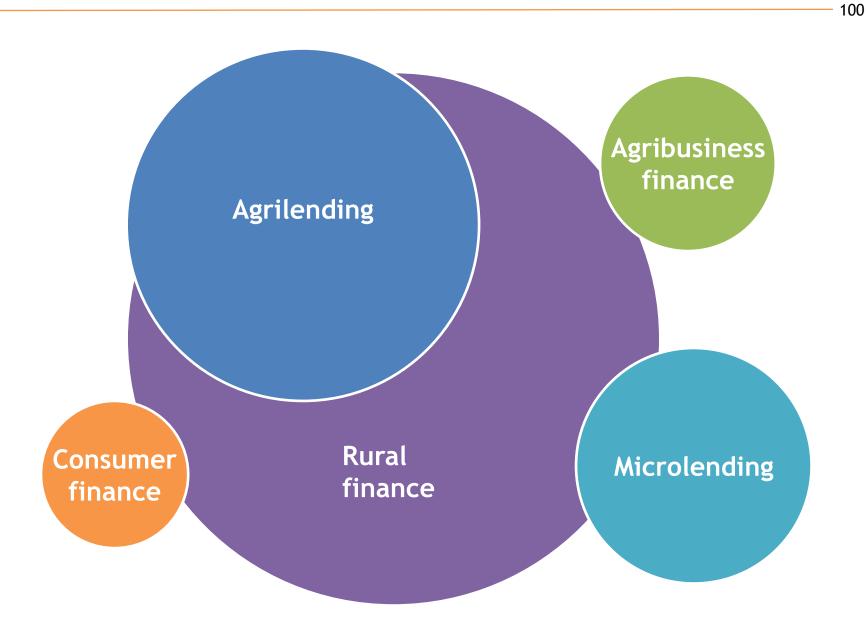


Coping with the scale issue





Growing agrilending into Rural Finance

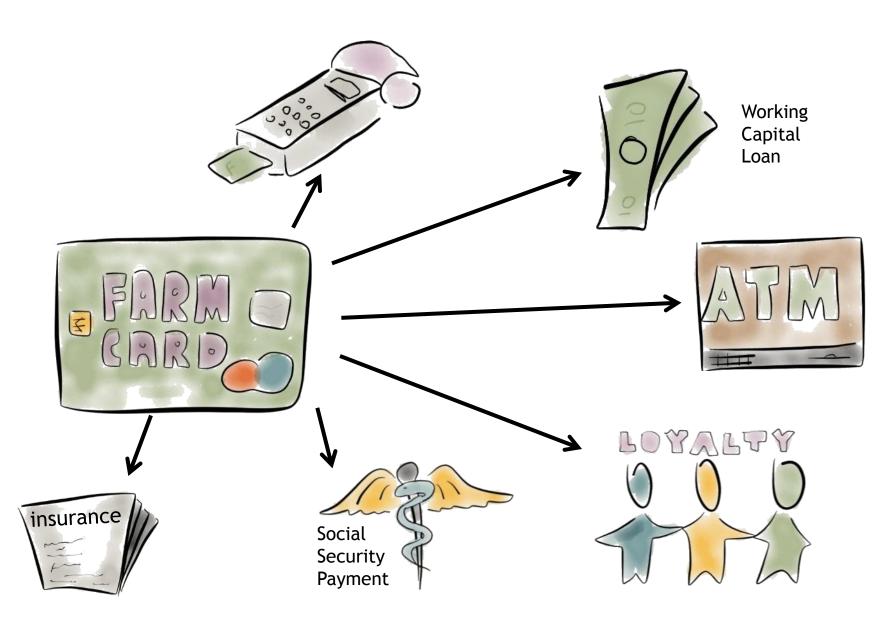


101

"Universal" Loan Officers



Farm card programme





Coping with the business analysis issue



Business & Finance Consulting

Improving the efficiency and quality of credit decisions through Credit Scoring



Are new clients riskier than repeat clients?



105



New clients paying better than repeat clients in this bank

Ratio of loan amount to client equity:

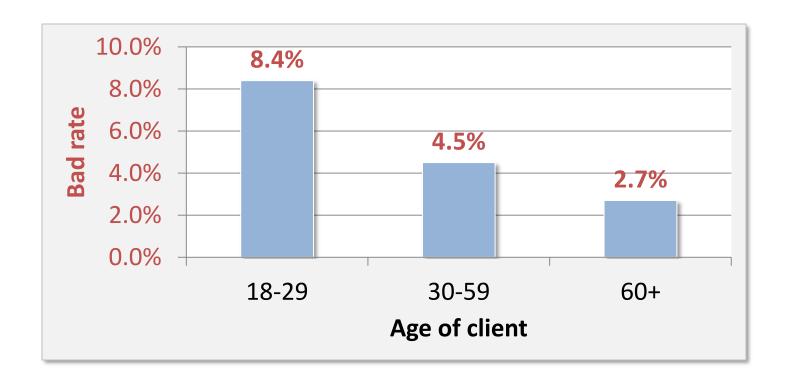
New client:	44%
Repeat client:	81%

Too aggressive with repeat clients

Are older clients more risky than average?



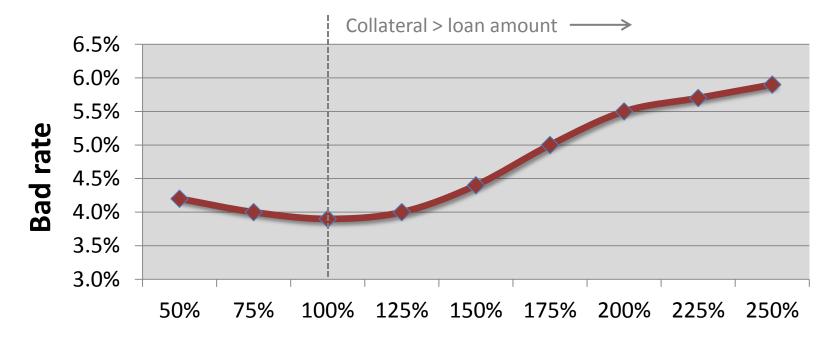
106



Younger clients pay worse

Older clients pay better





Collateral value to loan amount

Taking lots of collateral not helping to control delinquency



Sufficient number of bad loans

Minimum 500 Preferably 1000+

Staff who can monitor the system

Client and loan data in electronic format for past 2 years

Low-tech, low-cost solutions (like Excel) can work





Sales

- Data collection
- Initial screening
- Disbursement

Loan officer



Underwriting

- Analytical crosschecking
- Loan validation
- Loan approval

Underwriter



Monitoring & Collection

- Monitoring
- Collection
- Work with delinquent client

Call-center specialist



Training

- Recruiting
- On-going performance monitoring
- Skills improvement

Trainer









Productivity increase 35%

Operational costs decreased 18%

PAR decreased (from 3.5%) 1.8%

Client loyalty 95%



Questions & Answers 5 min











GROUP WORK







