

Using Innovative Mechanisms & Technology to enable flow of funds to Small holder farms

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Lending to Small holder Farmers

Information Asymmetry

Arising from

- Many Crops
- Climate Conditions
- Cultures
- Disorganized Markets
- Cash dominated transactions

Traditional Approach

Collateral Based Lending

- Higher Reliance on Collaterals Mortgages, Jewelry, etc...
- Focus on perfecting collaterals
- Use of Guarantors

Innovation

Knowledge Based lending

Leverage Info available with off takers

- Crop Specific
 Customer Profiles
- Region culture /
- Market information

High Operating Cost

Arising from

- Operating in deep geographies
- Small holdings
- Cost of cash &, collections
- Cost of managing collaterals
- Cost of supervision& monitoring

Larger Ticket Sizes targeted

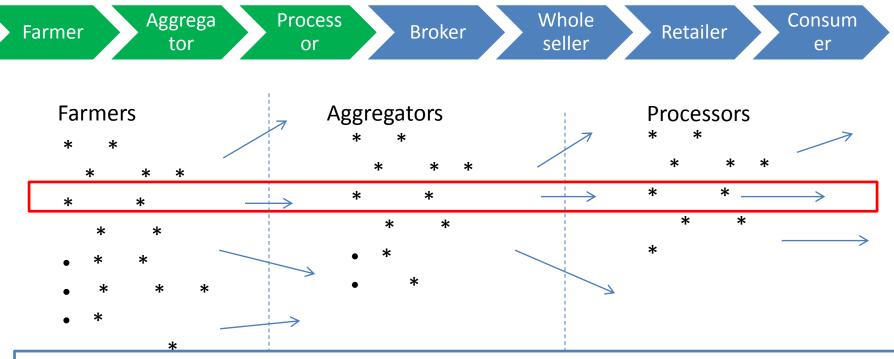
 The cost of disbursement, creation of collateral, supervision, Monitoring , results in break even in a ticket range of 5 Acres – for field crops like Corn, Wheat

Economic Density readymade

- Created by the VCF partners
- Build Payment
 Systems around
 them
- Shared monitoring & supervision Data / early warning

Identify supply chains





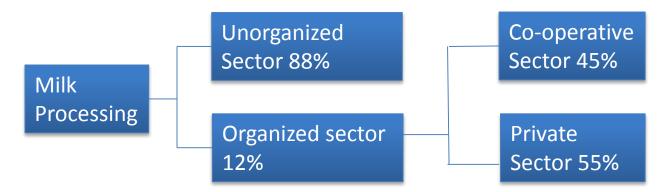
- Banks are looking for progressive borrowers & their cash flows
- Farmers are looking for stability and suitable profit margins
- Traders love volatility it is their interest to keep the markets disorganized and restrict the flow of information to fuel volatility

Can we use technology to change some of this? Is the market ready and willing?



For e.g the Dairy supply Chain in India

- India is the largest producer of milk in the world with a 16% share 135MMt
- 300 million heads of milk cattle managed by rural households producing a mere 3 lts a day against a global average of 6.
- India is also the largest consumer of milk with consumption growth of 5% and production growth of 3%.
- Quality issue remain residue & contamination (antibiotic, metal) and general hygiene

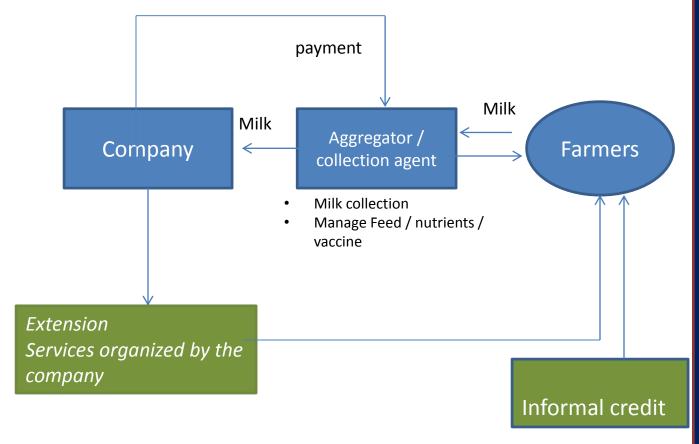


Most company's operate a Mop up operation thru aggregators

Value Add – includes feed and animal health, IVF etc...
Currently managed through aggregators by most company's

Company's are keen to go direct to farmers – to improve quality productivity and sustainability requirements of overseas markets, but with minimal disturbance to the aggregators

Traditional Model



In the traditional model the company Transacts only with the aggregator.

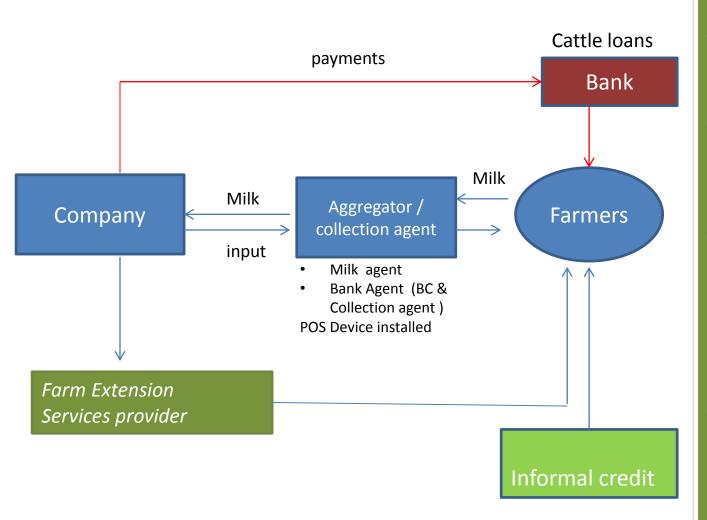
Aggregators manages supplies by extending small credit to farmers

Farmers Purchase cattle through own savings or approach informal sources

Company's are highly dependent on these aggregators which is a big risk

They are also have no control on quality, traceability and sustainability

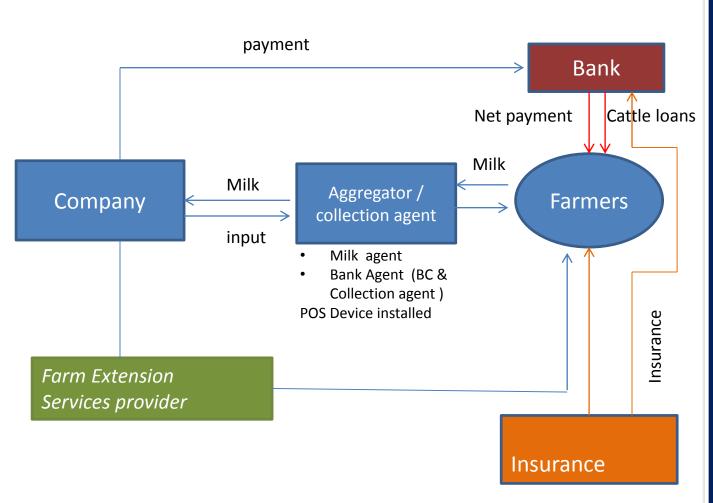
Entering the supply Chain



Enabling Payments

- Enter MOU with company to do payments to farmers
- Open farmer accounts.
- Aggregator made BC obtaining by-in using Company support
- POS Device installed to handle transactions online with the bank system & Training
- Standard bank products cross sold to generate revenues

Credit model

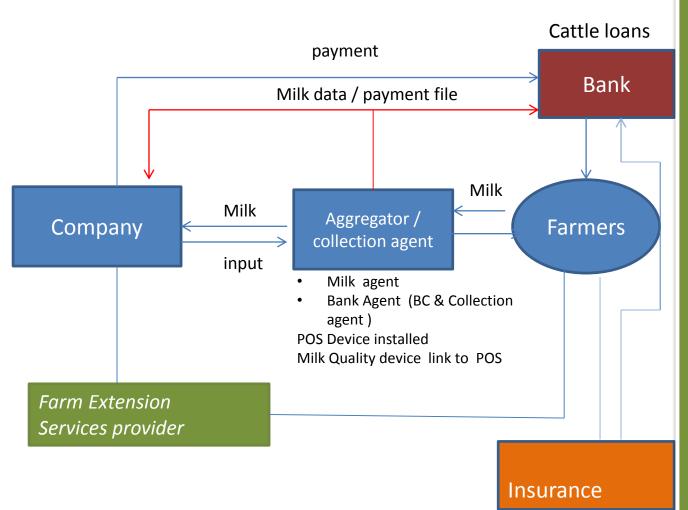


Credit Phase

- Cash flows thru the payment model assessed
- Aggregator made BC & loan collection agent provides a First Loss Guarantee
- Insurance Process: Vet

 examine new animal uploads health report with Photo of animal into the Insurance Co's system thru a Mobile phone app
- Bank officer visit
- Insurance data downloaded & bank officer data matched at sanction stage

Tech intervention



Monitoring Phase

- Milk quality and quantity at the collection center converted to a data file by Milk to Money device
- P Data transfer to the Company's ERP system (provides transparency and traceability)
- Generates a payment file provides STP Payment processing at the Bank end
- Uses the communication device in the POS to transmit data
- Provides CRM data

Risk Coverage Assessment

Farmer

Aggregator

Processor

Payment Risk

Covered by the payments model

Performance

Cash flows analysis provides Insight to the farmers track record

Know the cattle breeds that best perform in the environment adjust product

Side selling risk

Entrusted to the aggregator

Supply Risk (Aggregator risk)

Supply Track record with the company

Security taken to cover First loss guarantee acts as a deterrent

Off taker Solvency

Credit worthiness of
The processor / off-taker
Is an important success
& Sustainability criteria

End use of loan

Insurance process
Ensures end use

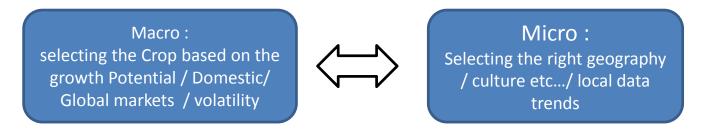
Information helps convert
Credit risk to operating Risk
Operating risk can be
Automated which gives
Major cost savings

Value chain finance – general principal

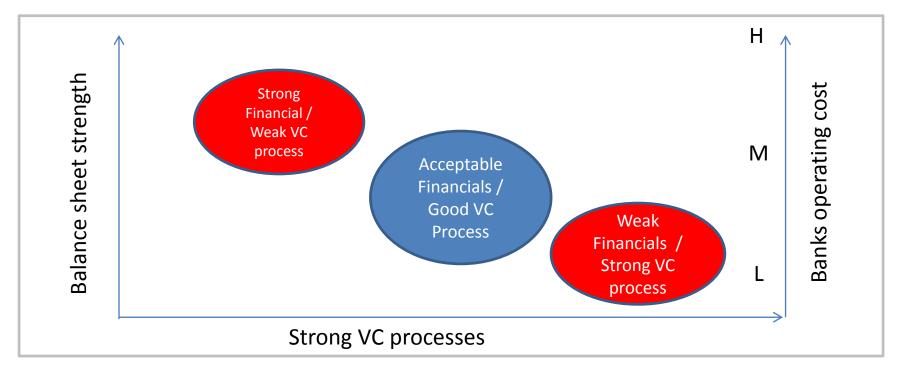
The actors in a VC Farmer Aggregator **Processor** Information Principle of VCF **Payments** Cash flow behind the Commodity – Follow the Money **Standard Products** Mop up VC **Modified Standard Products Structured Products** Value added VC First Loss structure Structured product

Selecting a VC

A. Macro & Micro Analysis



B . Selecting the right Off Taker /Anchor Company





Progress so far & looking ahead

- 7000 farmers , US\$16 MM funded in the first phase
- Delinquencies of under 2%
- Product tweaking incentives & disincentives based on "cattle breed performance", tweaking installments for lean and flush season and strengthening bank & insurance process.

Impact analysis:

On a sample basis farmer savings account balances were examined from the pre-loan days to post loan over a period of 12 months. Farmers having availed loans recorded a Savings balance growth of a multiple of 4 on an average

The future lies in Smart phones and mobile Apps for related payments in the eco system with decreasing Data and Handset costs ..

Reduces the delivery cost on the model and the same time increase business from other sources in the eco system using the data available



About HDFC Bank

- Vintage: 20 years
- 2nd Largest Pvt Sector Bank in India (largest by Market Cap)
- Balance Sheet : \$ 79bn (Dec 14)
- Branches: 3403 (Dec 14)
- ATMs: 11,256
- Cities /Towns / Villages : 2171
- Agri Business: \$ 3.8bn

- Asiamoney: Best of Best Domestic Banks India
- Barron's List of World's Best CEOs -Mr Aditya Puri, HDFC Bank MD, named in list of Top 30 Global CEOs
- BrandZ TM Top 50 Most Valuable Indian Brands study by Millward Brown
- India's Most Valuable Brand Business Today KPMG Study 2014
- Best Large Bank Overall Businessworld-PwC India Best Banks Survey 2014 Fastest Growing Large Bank
- Dun & Bradstreet Polaris Financial Technology Banking Awards 2014 Best Bank - Managing IT Risk (Large Banks)
- Euromoney: Private Banking and Wealth Management Survey 2015
- Finance Asia Country Awards 2014 Best Bank India
- Finance Asia's poll on Asia's best managed companies Best Managed Company in India
- Finance Asia's poll on Asia's best managed companies
- Best CEO in India (Mr Aditya Puri) Rank 1
- Best Corporate Governance Rank 3
- Forbes Asia: Fab 50 Companies List for the 8th year



Thank you