Agricultural Finance
From Private Sector Bank Perspective

Michael Andrade
Senior Vice President HDFC Bank
Contents

• Introducing HDFC
• HDFC Bank Initiatives
• Agriculture in India
• Industry structure
• Understanding Agri. Business
• Crop Production
• Warehouse receipt loans
• Food processing Industry
• Summary
Introduction - HDFC Bank

- Incorporated in August 1994
- Mission - To be a World-Class Indian Bank
- Business philosophy based on four core values
  - Operational Excellence
  - Customer Focus
  - Product Leadership
  - People
- Presence of 1412 branches, 3295 ATM’s across 528 locations (including 2 overseas branches)
- Balance sheet size of USD 49,435 Million and Net Profit of USD 655 Million on March 31, 2010
Demo of HDFC Bank Initiatives

- Video clip of Business Correspondent operations
- Dairy Supply Chain Model
- Contract Farming supply Chain model of a sugar mill
- National Spot Exchange – settlement bank, backward integration of the supply chain
- Input side supply chain intervention in a Fertilizer distribution system.
Agriculture Scenario in India

• Among the Largest producers of wheat, rice, pulses, milk, fruits & vegetables, in the world

• 35% of GDP, employs 65% of the Population

• Agriculture expected to grow 4 times its existing size of $577bn

• Agri Exports at $9 bn, poised to grow to $18bn in next 5 years

However, the true potential of Indian agriculture is not being realized and growth is restricted by the industry structure
Industry Structure

- Crop Production characterized by
- Small land holding,
- Low levels of mechanization,
- Fertilizer subsidies and Govt. Support prices

Resulting in

Inefficient and unscientific farming practice coupled with deterioration of soil and water
• Outdated and insufficient post harvest management practices

• Inadequate Warehousing and logistic infrastructure resulting in wastages

• Traditional Markets set ups with multiple layers of intermediation and limitations on price discovery

• Food processing concentrated in the hands of small and medium sized industry

• Financial coverage through multiple agencies
Agriculture remains unbanked as:

- There is a dearth of cash flow documents (most transactions take place in cash).
- Lending is primarily mortgage/collateral based, which is cumbersome.
- High transaction cost leading to low profit margin.

Despite having the lowest % of willful defaulters, the agriculture sector remains underbanked and requires Govt. mandated solutions.
Questions before us…

• Is Agricultural Business

• Only about lending to farmers or all forms of rural business?

• Targeted at the bottom of the pyramid?

• Need for developing business Model that can cover risk and distribution cost and generate revenues?

• Role of banks in bringing about change in the Industry structure

• Role of other stakeholders
Understanding Agricultural Business

Agricultural Business involves:

- Crop Production
- Post Harvest Management
- Agricultural Markets
- Food processing and its supply chain
- Payments systems

- Each segment approached in isolation making it unsustainable
- Need for developing a holistic approach for looking at the problems thereby developing superior product offerings

However, the present industry structure lacks an integrated approach. This is where banks need partners...
Crop Production Loans

Characterized by

- Small value loans (USD10,000/-) against mortgage of agricultural Land
- Cash Credit, Term Loan and Consumer loan component
- Credit Assessment based on land holding & input costs
- Requires monitoring at every harvest to ensure accounts are serviced and kept regular
- Product offerings basic in nature and compete on interest rates and quantum of loans
- Benefits land owners which is approximately 75% of the farming community
Crop Production: Risk Involved

Performance risk due to

- Climate
- Crop Health

- **Price Risks** - Borne entirely by the farmer due to lack of forward markets and warehousing facilities
- Banks insulated from these risks by maintaining good relationship with the farmers
- The real problem for banks is the risk of Fraud. These are the only real losses that come to the bank in crop funding.

Customer relationship and fraud prevention management are key to doing this business successfully.
Crop Production : Income Profile

- High risk coupled with low returns
- State Govt. banks enjoy interest subsidy
- Distribution costs are high due low customer density and small value loan
- Risk is high in this segment even though the losses are low, because of standard accounting practices banks have to provide for the loans which could be as high as 25% -30% of the revenues
- Gross profits currently range between 15-20% which is lower than most other segments
Warehousing Loans

• The warehousing system specifies a minimum lot size for stocking hence does not cater to small farmers

• Limited warehousing space generally occupied by larger players and Govt. Departments

• Non standardized grading and assaying system make banks vulnerable to quality related risks on their lending

• Collateral Management is yet to evolve at inland warehouses
Price Risks: commodities are stocked over a period of 6-9mths. During this period, ability to collect margin calls is important to sustain this business.

Collateral Management risk: quality and quantity of the commodity being financed and ability to monitor both over the tenor of the loan. Risk of frauds in quality and quantity are the cause of most losses.

Distress sales results in loss to the bank.

Monitoring of markets and collateral and ability to physically liquidated stocks is key to sustaining this business.
There is better risk reward in this business. However, most corporate borrowers are unrated requiring higher capital allocation and thus lower return on equity.

Distribution costs are slightly better than crop loans accounting for 25% of revenues. However, an additional amount of 12-13% is required on Collateral management and supervision.

Risks and losses are lower in this business in the range of 5-7%.

This business enjoys better operating profits in the range of 40-45%.
• This segment is more organized and enjoys better banking services

• Being handled in isolation, the industry is assessed in line with other SME’s in the manufacturing sector. Accordingly bank limits limit their operations and ability to take price advantages

• Financial statements do not adequately represent the business worth and hence have not been able to expand and enjoy economies of scale
<table>
<thead>
<tr>
<th></th>
<th>AAA rated Corporations</th>
<th>SME</th>
<th>Salaried Class</th>
<th>Agri – Post Harvest</th>
<th>Farmer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Information</td>
<td>Highly Quality Information and accounting standards</td>
<td>Not very detailed or transparent</td>
<td>Bank Statements &amp; Income Tax Returns</td>
<td>Not very detailed or transparent</td>
<td>No Information</td>
</tr>
<tr>
<td>Money in Business (networth)</td>
<td>High</td>
<td>Medium</td>
<td>NA</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Returns (Gross Profit %)</td>
<td>10-20%</td>
<td>10-12%</td>
<td>100%</td>
<td>1-2%</td>
<td>30-50%</td>
</tr>
<tr>
<td>Production / Performance Risk</td>
<td>Low</td>
<td>Medium</td>
<td>low</td>
<td>Nil</td>
<td>High</td>
</tr>
<tr>
<td>Price Risk</td>
<td>Low</td>
<td>Low</td>
<td>Nil</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td>Probability of Default</td>
<td>Medium</td>
<td>High</td>
<td>Medium</td>
<td>High</td>
<td>Low</td>
</tr>
</tbody>
</table>
Why is it becoming attractive now?

- In the Indian banking context the rural markets are positioned exactly the same way the middle class segment was in the mid ‘90’s.
- Food demand supply mismatches are ensuring better wealth in the hands of the farmers.
- Food inflation is expected to trigger reforms in the Industry structure to bring in more efficiency and savings intermediation.
Need of the hour

- Development of Agri supply chains right to the farmer levels: FDI in retailing will bring investment and more private investments.

- Efficient warehousing system: The warehousing development Act that provides for grading standards / assaying standards and co-mingling of stocks is in the process of being implemented. Investment in quality warehousing has picked up.
• Development of spot and terminal markets: Spot markets have been started by MCX/Reliance and other participants.

• Payment systems and bank accounts for farmers. Electronics / ATM’s and use of Business Correspondents is moving fast.
What can banks do now?

• Payments systems: payments systems ensure better cash flow based risk management, transactional revenues and total relationship with the borrowers

• Supply chain. In recent times RTGS & NEFT have enabled payments in rural area’s however last mile delivery into farmer accounts remains a challenge

• Banks can initially target closed looped supply chains on the input side / output sides in the interim

• Effective use of Business correspondents to reach out and service farmers in villages.

• This model helps better relationship with the customers, lower distribution costs, better credit profiles, lowers the risk of fraud
Input side Supply chain

- Fertilizer companies reach out to farmers with ‘soil nutrient based’ activity and advice
- They use own or franchise outlets along with agronomists to reach out to a set of loyal customers running loyalty programs
- Banks can reach out to customers under the ‘loyalty program’ and provide a complete range of banking products and services
- Business Correspondents operating out of these outlets of the fertilizer company can be used to service these customers nearer to their doorstep
Output side – supply chain

• These operate under ‘contract farming’ type of environments such as sugar mills, milk collection centers. The model of using a BC is replicated here.

• Spot Exchanges & Terminal Markets can also be approached on the output side
  – Farmers who are supply side members on the exchange required to be registered with the exchange
  – Require to have an account with the settlement bank for transaction done on the exchange
  – Settlement bankers can complete the supply chain by offering a full range of bank products including warehouse receipt loans pending trades on the exchange
• Farming is small value SME business that is subject to many external risk without adequate hedging mechanisms.

• Farming communities are under banked under insured. Banks have not invested in developing products, or invested in technology for better delivery on the lines of consumer loans or credit cards due to the apparently low margins. Farmers fall somewhere in between SME & Consumer loans

• By partnering with others banks can bring down the distribution cost and offer products and services that are required by this segment
Savings Accounts & FD’s:

- Farmers need to be able to access their accounts easily.
- A good BC net work is an important part of the product delivery system.

Wealth Management:

- Farmers should be able to invest savings in good years in insurance linked investment schemes.

Weather Information:

- Needs to be made available on mobile phones.
- Banks can distribute weather information as well as price information.

Weather insurance can be a part of the product bundle.
• Extending life insurance and health insurance to the farming population
• Extending financial services along with other supports in form of
  – Agri advice,
  – certified seeds,
  – soil testing facilities

Improves the viability and sustainability of these services
• Tie ups with Farm equipment suppliers and water management systems and providing loans for the equipment distributed through the same BC model

• Spot and terminal markets can then be linked to this network providing the farmers more selling options, and providing the markets more suppliers.
Banks deal with a wide range of customers who manage supply chains in the Agri. Space.

By bringing all these together on a common distribution platform facilitated through business correspondent the proposition for all stakeholders becomes very powerful.

Thus banks can become game changers and induce change in the Industry Structure.
The agri business vertical in HDFC Bank includes Farm Lending, Warehouse Receipt and Correspondent Banking thus covering preharvest / post harvest and payment system within the same business vertical.

**Farm lending Distribution**

- Direct Sales accounts for 90% of the business at present
- Branches account for another 9%
- Corporate and other alternate channels account for 1%
- This mix is being changed in favour of the bottom two in the coming years
• Credit is as independent unit and consists of a central credit policy team along with a decentralized line credit assessment team

• Risk Intelligence is a unit under credit that is involved in fraud control on a pre disbursement, post disbursement and remedial management

• Collections consists of a legal team and a collections unit – being a relationship based product (unlike consumer loans) these units are managed by the business team.

• Operations is partly decentralized
HDFC Bank – Farm lending

• Started in 2006 using a direct sales team

• The merger with Centurion Bank of Punjab in 2008, brought in the earstwhile Bank of Punjab agri books. This had many learnings for HDFC bank. FY 2009-10 was used for consolidation

• 2010-11 we started building on this base

• Branch channel was brought into the business in Sep 10

• We began experimenting with alternate channels such as corporate farm activities, sugar mills and dairy in 2010-11 and developed a scalable model
Sugar Mills:

- Sugar mills in India work on a contract farming model.
- Banks have been doing this business for years.
- HDFC Bank approached this business by addressing the pain area's of the sugar mill i.e. effecting their periodic payments to the farmers.
- Farmer accounts have been opened and BC operations have been set up at the mill to provide banking services.
- With the payment system leading the customer acquisition the bank gets total customer relationship from day 1.
- We currently work with 5 sugar mills in North India.
Dairy Farming

- The co-operative dairy farming followed in India has been very effective in aggregating milk from small and marginal farmers
- The pain area remains the payment mechanism
- HDFC Banks intervention is providing an end to end payment system, reducing the financial transaction cost at the collection center and generating Biz Correspondent revenues for the collection center
- This is followed up with cattle and crop lending
- Currently we work with co-operative societies in Gujarat, Punjab and Haryana
• Many corporates involved in distribution of fertiliser, F&V cash and carry etc..
  – Farm extension activities
  – Own our outsourced set ups
  – Some retail other products to enable viability

• HDFC Bank has set up BC’s at these outlets

• BC’s source relationships from the customers attached to the outlets
• HDFC Bank runs a fulfillment team that completes each lead

• Between the BC and the HDFC Bank customers relations are managed and serviced

• HDFC Bank has initiated such channels with Tata kissan Sanchars (Farmer’s Broadcasts) by (Tata Chemicals), Haryali Kissan Bazar (Green Farmer Market) of DCM Haryali, Mana Gromore (Our Gromore) by Coramandel Fertilizers) and Venkateshwara hatcheries
• BC’s service individual customers for SB accounts FD’s and all types of loans (this is unlike BC’s set up under Micro finance)

• We have perfected our Business correspondent selection, operating and audit process over the last 3 years using a range of BC’s including co-operative societies, individuals and Corporate
• Cash points for withdrawal /deposits are done using a standard POS machine on an online basis using a customer PIN

• Further developing imaging and monitoring systems through one of our group companies to help processing
Thank You