

# **History and Lessons from India's National Dairy Development Board (NDDB)**

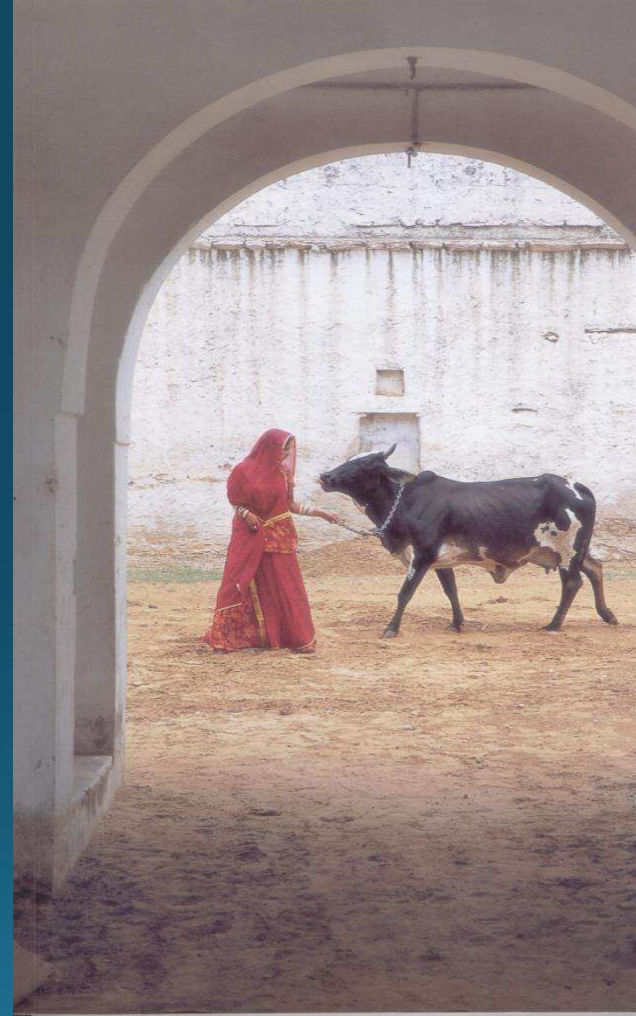
(Innovative strategies to strengthen  
producer owned enterprise)



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**26-27 October 2107**

# Indian dairy sector

- India is the largest milk producing country – 155.5 million tones (2015-16)
- Accounts for a sixth of world's production
- Milk is the single largest agricultural commodity in India, larger than even rice and wheat in value terms
  - Rs 4700 billion (About US \$ 73 billion)



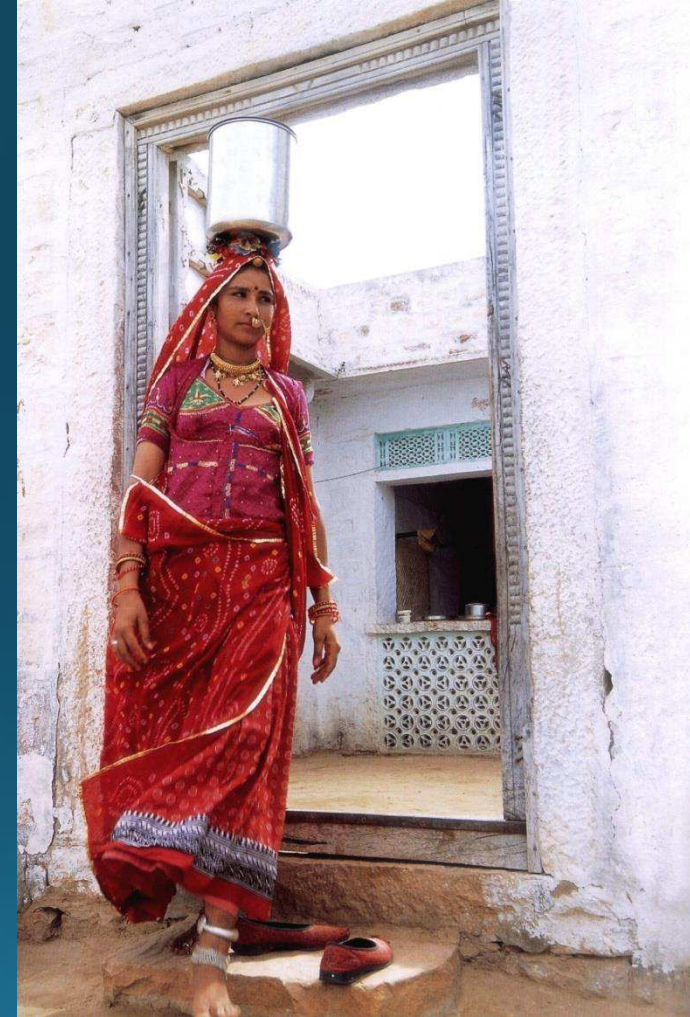
# Indian dairy sector

- The share of buffalo milk is around 51% in total milk production followed by cross bred cows 25% and indigenous plus non-descript cows 20%. The remaining 4% is contributed by goat milk.
- The in-milk yield of buffalo is 5.15 kg/day and that of cross bred and non descript cow is 7.15 kg/ day and 2.54 kg/day respectively.
- The in-milk yield of buffalo was the highest in the state of Punjab (8.72 kg/day).



# Indian dairy sector

- Dairying in India is more than a business; it has broader social and economic dimensions
- About 70 million rural households are engaged in dairying, one of every two rural households
- Dairying offers a relatively stable stream of income vis a vis crop production



# Profile of milk production

<b>Resource ownership</b>	<b>Feeding practices</b>	<b>Labour use</b>
<ul style="list-style-type: none"><li>• 75 per cent of India's farmers are marginal or small. They own almost 60 per cent of female bovines, but only 30 per cent of farm land</li><li>• 70 million milk producers are predominantly small scale farmers with 1 to 3 animals</li></ul>	<ul style="list-style-type: none"><li>• Animals fed largely on agricultural byproducts and crop residues</li><li>• Less than 3 % of livestock feed is from grains and concentrates</li></ul>	<ul style="list-style-type: none"><li>• Family labour carry out most operations</li><li>• Women contribute significantly</li></ul>

Dairying adds economic value to feed and labour resources that otherwise have limited economic value

# Sustainable elements in Indian dairy sector

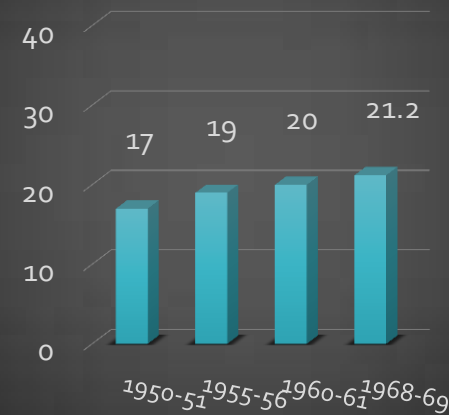
- Low input: low output model has elements that are environmentally sustainable
  - Use of crop residues and byproducts for animal feed avoids conflict between man and beast for scarce land needed for growing food grains for humans
  - Use of dung for manure recycles crop nutrients

# The Indian dairy sector in 50's and 60's

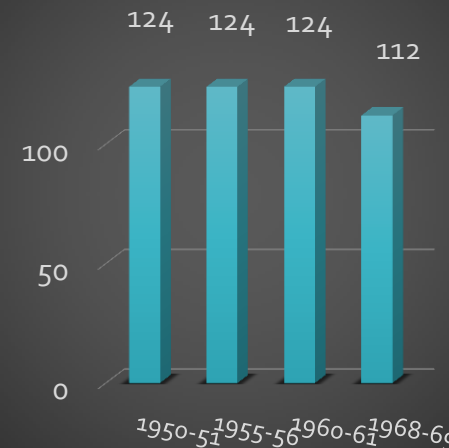
Stagnation in domestic milk production

- Milk production hovered around 20 million tones
- Per capita availability in fact declined during the period
- Import of dairy commodities constituted about 60 % of throughput of domestic dairy industry in 50s

Milk production in million tonnes

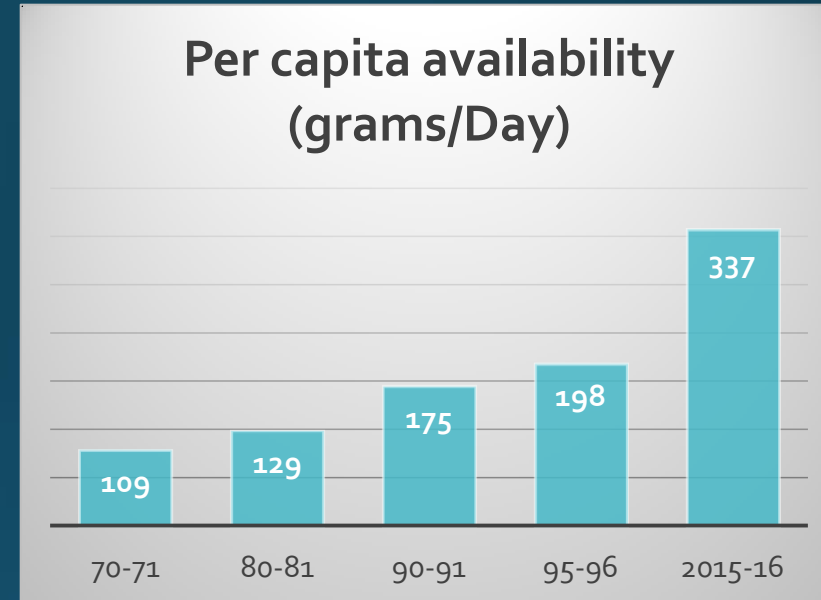
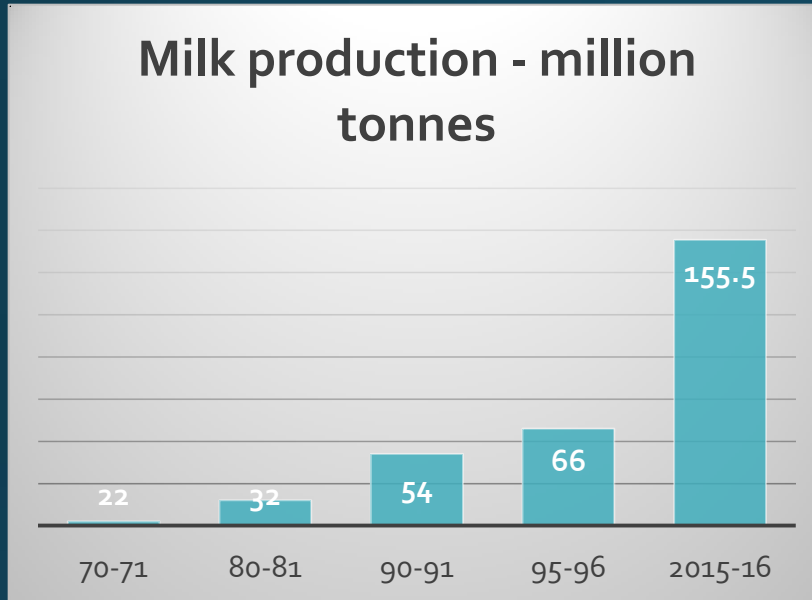


Per capita milk availability in gms/day



# Milk production and per capita availability

NDDB's Operation Flood - '1970-71 to '1995-96 and beyond



## Between 1970-71 to 2015-16 India has:

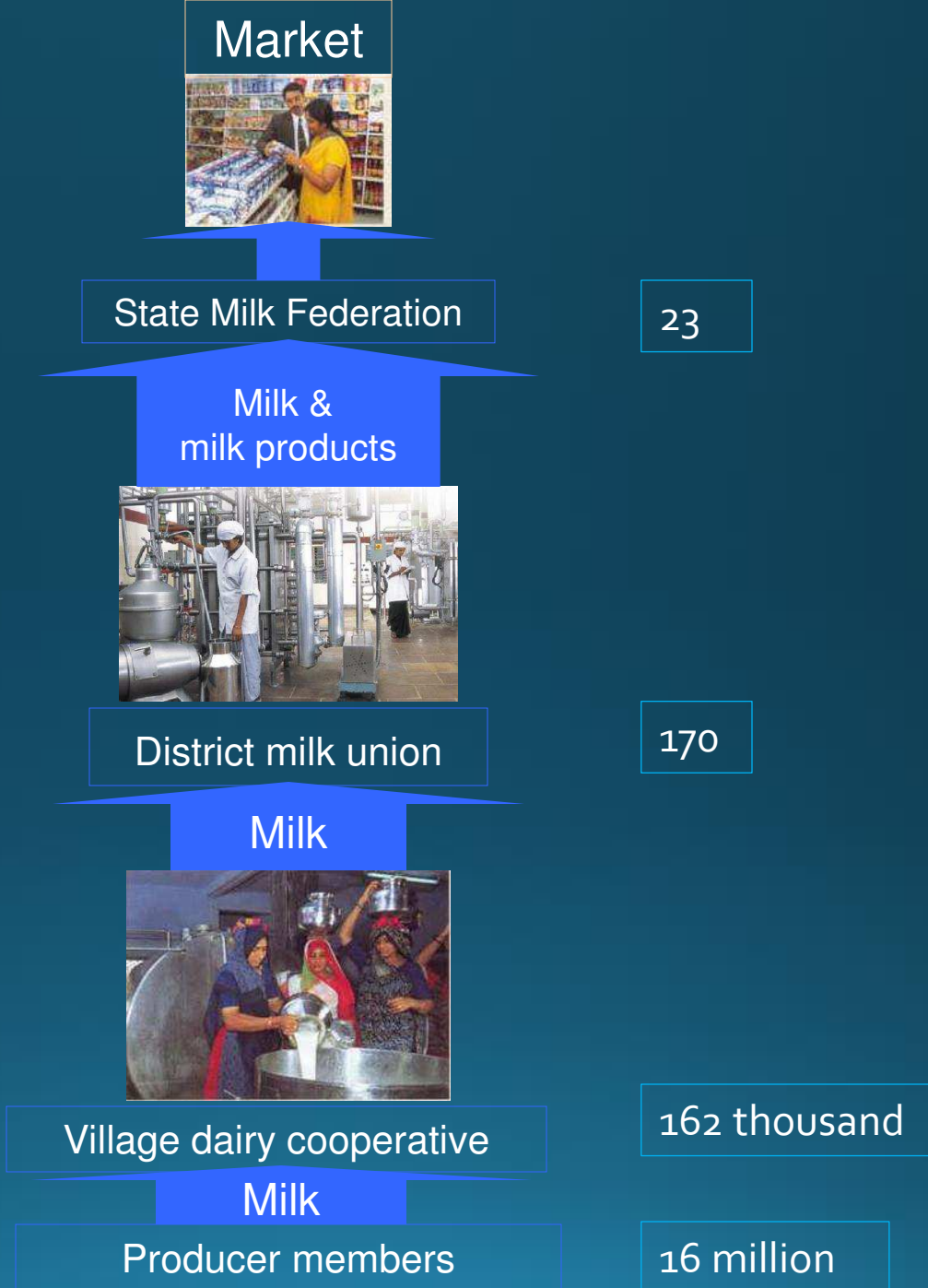
- Increased production: 22 to 155 million tons
- 4.4% compound annual growth during the period
- Per capita availability nearly trebled in spite of population growth



# Operation Flood – key strategies

- Linking production centre to market in an efficient manner that may require setting up infrastructure facility at strategic location
- Provide year round remunerative market to milk producers
- Arrange timely and reliable quality input services like
  - Cattle feed
  - Artificial Insemination facility
  - Animal health care
- Create institutions owned managed and controlled by the producers themselves i.e. cooperatives
- Invest heavily on capacity building of people

# Current Institutional structure of Dairy Cooperatives in India



## National milk scenario: 2015-16

Domestic milk production

426 million kg/ day\*

Milk consumed/ used  
in production areas itself

196 million kg/day ~ 46%

Surplus milk sold from  
production areas

230 million kg/day ~ 54%

### Surplus handled by:

**Unorganised Sector**

**142 million kg/ day**

**~ 62% of surplus**

**Organised Sector  
(Coop + Private<sup>+</sup>)**

**(44 +44) million kg/ day**

**~ 38% of surplus**

# Cooperative Coverage 2015-16

<b>Sr. No.</b>	<b>State</b>	<b>Milk proc. (LKgPD)</b>	<b>Proc. as % of prod.</b>	<b>Proc. as % of surplus</b>	<b>Functional DCS as % of total villages</b>	<b>Rank Proc. (Prod.)</b>
1	Gujarat	<b>174.8</b>	<b>52.0</b>	<b>73.9</b>	<b>89.8</b>	<b>1(3)</b>
2	Karnataka	<b>64.8</b>	<b>37.3</b>	<b>55.0</b>	<b>48.5</b>	<b>2(11)</b>
3	Maharashtra	<b>36.5</b>	<b>13.1</b>	<b>17.3</b>	<b>27.7</b>	<b>3(7)</b>
4	Tamil Nadu	<b>30.4</b>	<b>15.3</b>	<b>17.1</b>	<b>56.8</b>	<b>4(10)</b>
5	Rajasthan	<b>26.0</b>	<b>5.1</b>	<b>11.3</b>	<b>23.1</b>	<b>5(2)</b>
6	Bihar	<b>17.3</b>	<b>7.6</b>	<b>14.6</b>	<b>36.3</b>	<b>6(9)</b>
7	Punjab	<b>13.9</b>	<b>4.7</b>	<b>8.5</b>	<b>53.9</b>	<b>7(6)</b>
8	Andhra Pr.	<b>13.3</b>	<b>4.5</b>	<b>6.1</b>	<b>17.0</b>	<b>8(5)</b>
9	Kerala	<b>11.0</b>	<b>15.1</b>	<b>29.1</b>	<b>100.0</b>	<b>9(14)</b>
10	Madhya Pr.	<b>10.3</b>	<b>3.1</b>	<b>4.8</b>	<b>10.9</b>	<b>10(4)</b>
11	Telangana	<b>7.1</b>	<b>5.8</b>	<b>7.9</b>	<b>16.6</b>	<b>11(13)</b>
12	Odisha	<b>5.3</b>	<b>9.9</b>	<b>17.4</b>	<b>8.1</b>	<b>12(16)</b>
13	Haryana	<b>4.5</b>	<b>2.0</b>	<b>3.0</b>	<b>52.1</b>	<b>13(8)</b>
14	Uttar Pradesh	<b>3.2</b>	<b>0.4</b>	<b>0.9</b>	<b>7.3</b>	<b>14(1)</b>
15	West Bengal	<b>1.6</b>	<b>1.1</b>	<b>2.0</b>	<b>4.1</b>	<b>16(12)</b>

# Coverage by dairy coops is quite inadequate

## Dairy Cooperatives in India

**Have a presence  
in**

about 23%  
villages

**Reach out to**

Around 22%  
milch animal owning  
households

**Procure**

Around 19%  
of marketable surplus  
(= 9.5 % of milk  
production)

# Areas of concern in Cooperatives

- Government equity in cooperatives
- Government interference in business operations increased
- Government nominee on the cooperatives' board
- Political influence in election of board members on the board
- Cooperatives are regulated by a restrictive cooperative law
- Audit often not conducted on time

# Producer Company Legislation- Historical Background

- Economic liberalisation opened up Indian markets to competition
- Producer-owned enterprises are important as they provide a powerful countervailing force against any possible exploitation of smallholder producers by investor-owned corporations
- State cooperative regulations are subject to political & bureaucratic interference and restrict the flexibility and autonomy required to compete in the prevalent market economy
- Based on the interactions the then Chairmen of NDDB had with GOI, the Companies Act was amended incorporating provisions for incorporation of a Producer Company

# What is a Producer Company?

**Producer Company is a business enterprise registered under the provisions of the Company Act, and is run on the basis of *Mutual Assistance Principles*.**

*These principles are largely the same as Cooperative Principles adopted by the International Cooperative Alliance (ICA) for the cooperatives.*

*Thus a Producer Company combines the institutional strengths of the Cooperative Principles with the liberal regulatory framework of Company Law.*



# Salient Features of Producer Companies and Cooperatives

Features	Producer Company	Cooperative
Legal Framework	Central Act and enabling in nature	State Act and restrictive in nature
Area of operation	Not restricted	Restricted
Share holders	User members only to hold shares	Non users can also hold shares
Voting rights	One member one vote, but PCs having only Producer Institutions as its members shall have patronage based voting rights	one member one vote for all types of cooperatives
Active members	PC legislation has explicit active members provision. Removal of inactive member is easier.	No provision of active members
Audit	Regular audit by a Chartered Accountant	Audit by Cooperative audit department or govt. empaneled auditors and often audit is delayed.
Professional management	Explicit provision in Act for experts on Board	No provision for experts on board
Govt. Nominee on Board	No provision for Govt. nominee	Explicit Provision for Govt. nominee

# Producer Company vis-à-vis other Companies

Even though a Producer Company is a company there are certain features which differentiate it from other companies

<b>Producer Company</b>	<b>Other Companies</b>
Only producers can be members/ shareholders	Anyone can be a shareholder
Owned by user members	Owned by investors
One member, one vote or patronage- based voting	Voting rights based on shareholding
No trading of share is permitted. However transfer of shares among members is permitted.	Trading of shares is permitted
Limited dividend	No limit on dividend
Patronage-based returns	Capital-based returns

# Producer Companies Registered

- As of March 2017 there are over 4000 Producer Companies registered in India.
- Of these, about 150 Producer Companies are dealing in milk and milk products.
- NDDB dairy services a wholly owned subsidiary of National Dairy Development Board, India has already facilitated formation of five large Milk Producer Companies and is in process of formation and strengthening of many more.

# NDDDB Dairy Services








- **NDDDB Dairy Services (NDS), a wholly owned subsidiary of the National Dairy Development Board (NDDDB), is a not-for-profit company under Section 25 of the Companies Act**
  - A team of about 60 specialists drawn from the cooperative, private and developmental sectors. The team has technical skills and expertise to setup Producer owned Institutions in rural areas. Subject matter experts supplement the team as and when required
- NDS under the World Bank Funded National Dairy Plan I has in the recent past set up of five PCs- Paayas in Rajasthan, Maahi in Gujarat, Shreeja in Andhra Pradesh, Baani in Punjab and Saahaj in Uttar Pradesh



## MPCs at a glance as of March 2017

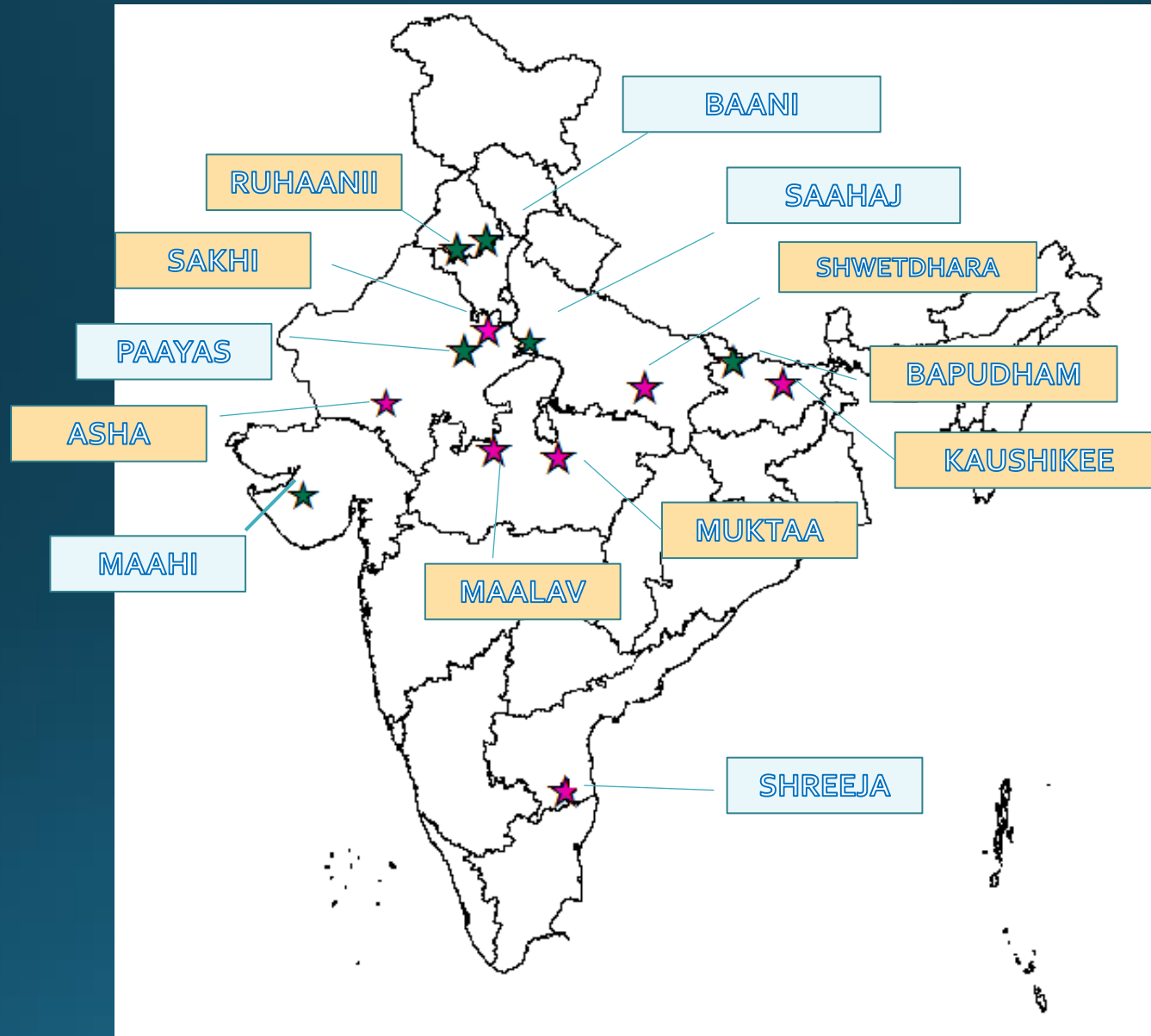


Particulars	 PAAYAS पंजाब महिला प्रोड्यूसर कंपनी	 maahi™ माही मिल्क प्रोड्यूसर कंपनी	 Shreeja Mahila Milk Producer Company	 Baani MILK PRODUCER COMPANY	 Saahaj	Total
Total No. of MPPs	<b>3444</b>	<b>2792</b>	<b>2235</b>	<b>1347</b>	<b>2924</b>	<b>12,742</b>
No of Members	<b>1,12,460</b>	<b>99,913</b>	<b>67,883</b>	<b>43,023</b>	<b>91,085</b>	<b>414,364</b>
Women Members	<b>45,254</b>	<b>20,818</b>	<b>67,883</b>	<b>9,083</b>	<b>25,720</b>	<b>168,758</b>
women membership as % of Total members	<b>40%</b>	<b>21%</b>	<b>100%</b>	<b>21%</b>	<b>28%</b>	<b>41%</b>
Small holders\$ as % of total members	<b>37%</b>	<b>58%</b>	<b>92%</b>	<b>47%</b>	<b>59%</b>	<b>57%</b>
Paid up Share Capital (Rs* in million)	<b>307</b>	<b>306</b>	<b>65.8</b>	<b>76.1</b>	<b>153.3</b>	<b>908.2</b>
Average Milk Procurement (‘000 Kg Per Day)	<b>650</b>	<b>633</b>	<b>270</b>	<b>180</b>	<b>345</b>	<b>2,078</b>
Turnover 2016-17 (Rs in million)	<b>10,400</b>	<b>11,590</b>	<b>2,830</b>	<b>2,580</b>	<b>4,960</b>	<b>32,360</b>
Net worth (Rs in Million)	<b>600</b>	<b>718</b>	<b>106</b>	<b>184</b>	<b>304</b>	<b>1,912</b>

\$ Holding up to three milch animals.

\* 1 US \$ is about Rs 64.7

# MPCs supported by NDDDB Dairy Services



# Core Design Principles of MPCs being setup by NDS

Membership

Operations and  
Management

Governance

- Business only with members
- Continuity of membership on meeting minimum quantum and period requirement – No free riders
- Member equity in proportion to patronage – ‘building skin in the game’
- Fair and transparent transactions - Automated recording of members’ transactions and all payment through bank account

# Core Design Principles of MPCs being setup by NDS

Membership  
Operations and  
management  
Governance

- Enterprise is managed by hired professionals having Performance linked incentive/compensation to ensure SOP based efficient value chain management
- Continuous capacity building of all the stakeholders
- Robust database system
- Appropriate mechanism for two way communication between members and the company –
  - Village Contact Groups
  - Toll free number
  - Field staff

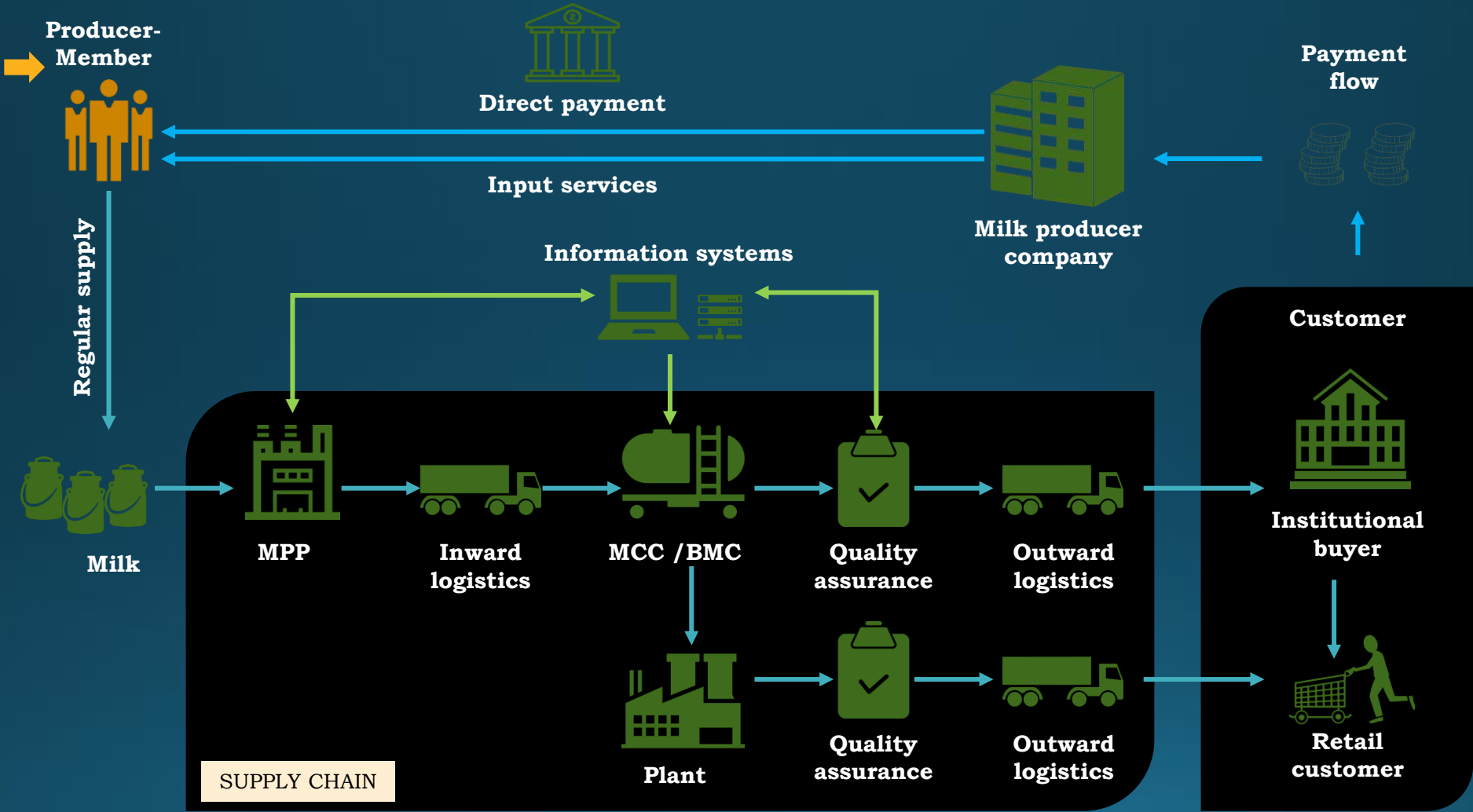


# Core Design Principles of MPCs being setup by NDS

Membership  
Operations and  
management  
Governance

- Patronage based member classes and member class representation on the Board to ensure inclusiveness in governance
- Apolitical board
- Expert Directors on the Board
- Policy Based governance by the Board

# Business Model: Flow diagram



# Business Model .....

- The Milk Producer Companies have a low asset base with a high asset turnover – asset light strategy
- Negative Cash conversion cycle ensures positive working capital – Continuous Cash generation
- Cost structure neutralizes the business risk of sales slow down – Variable cost model
- Healthy retention rate drives the future growth – building of healthy reserves & net worth will give strength to Balance Sheet leading to higher creditworthiness

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# Capacity Building

- Board of Directors
- Senior Professionals
- Field staff
- Field functionaries – Sahayak, Local Resource Persons etc.
- Village Contact Group/ Member Relations Group
- Members and potential members (emphasis on Women)
- Youth
- School Children



# Productivity Enhancement activities initiated in these MPC

1. Animal Breeding
  - Doorstep Artificial Insemination Delivery
  - Infertility Management
2. Animal Nutrition
  - Ration Balancing Program
  - Fodder Conservation – Silage Making
  - Quality Cattle Feed & Area Specific Mineral Mixture
4. Preventive Health - Mastitis Prevention/Diagnosis
5. Capacity Building
  - Mobile AI Technicians Orientation Program in SOPs
  - PES Facilitators Training
  - Data Management – Implementation of INAPH
  - Dairy Management Training for Producer members
  - Farmers Workshops
6. Extension and Promotion

## **Key understandings on which NDS works with Facilitating Agencies**

- Facilitating Agencies to provide financial assistance in the form of grant for Setting up Producer Company(s) and also meet the operational deficits during the initial period
- Assurance that Milk Producer Company(s) shall have complete autonomy in all matters with respect to its operations.
- Assurance that financial support shall not result gaining ownership or control of the company or the assets created under such funding.
- Assurance that the NDS will enjoy full autonomy in all matters with regard incorporation of the Milk Producer Company(s) and implementations of the projects

# Way forward for Producer Owned Enterprises in Indian Dairy Sector

- Private sector is rapidly expanding their operations in the Indian dairy sector.
- While the private sector will grow – it is important in the interest of ensuring livelihoods and inclusiveness that co-operatives together with producer companies retain 50 per cent share of the milk handled by the organised sector.
- It is expected that Producer Companies together with Cooperatives will grow in the dairy sector and keep providing the powerful countervailing force required against likely exploitation of producers by the private sector.



**Thank You**

