COOPERATIVE INNOVATIONS & STABILISATION OF PRODUCERS' ACCESS TO MARKET: THE CASE OF INDIA

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INRA SCIENCE & IMPACT

cirad LA RECHERCHE AGRONOMIQUE POUR LE DÉVELOPPEMENT

LEREPS TOULOUSE

Dairy market liberalisation

1991 Gradual liberalisation

PROTECTIONNISM

Tariff + **channeling of products and investments**

Cooperative societies Act 1912

Industry act 1951

Essential commodity act 1955

NDDB Operation flood 1965

1991

Milk and Milk Products Order 1992

2003

Producer Company Foreign Direct Investment 2012

1946 Kaira strike

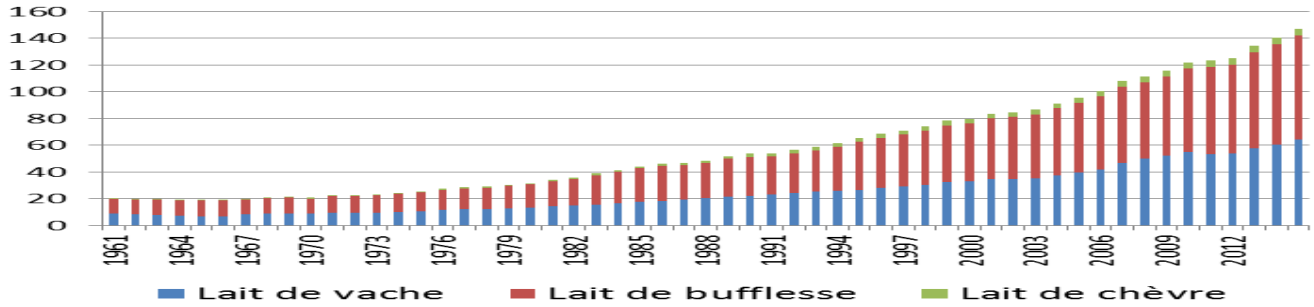
1955 Creation of the « Kaira District Cooperative Milk Producers' Union »

COOPERATION As driver of dairy development

COOPERATION remains the way of development (exclusion zones)

COMPETITION + diversification of the cooperative models

Indian dairy production (millions tonnes)



Emerging questions

- **Growth of the inner demand**
  - 180 million tons en 2022
  - -> + 5 million tons /year over the next 15 years

- **Increased competition** with private dairies since 2000
- A cooperative model in evolution: **Milk Producers Company**

- **Will the very small farm remain at the heart of the dairy sector development model?**
  - 70 millions dairy farmers including 15 millions cooperative members
  - Less than 3 bovines or buffalos per farm on average, including 1 or 1,3 female (Livestock Census)

Methodology

- **Institutional framework of dairy chain analysis:**

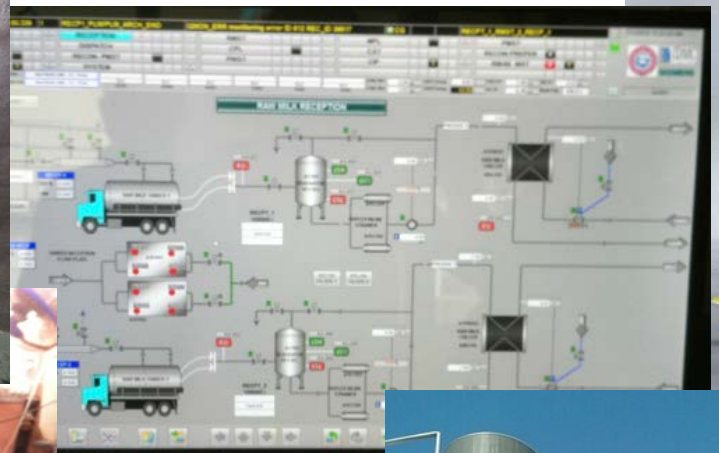
An analysis of coordination devices to shed light on value creation and sharing (Fligstein, 1996; Dervillé et Allaire, 2014)

  - Rules of exchange
  - Conception control & market structure
  - Governance structure
  - Property right

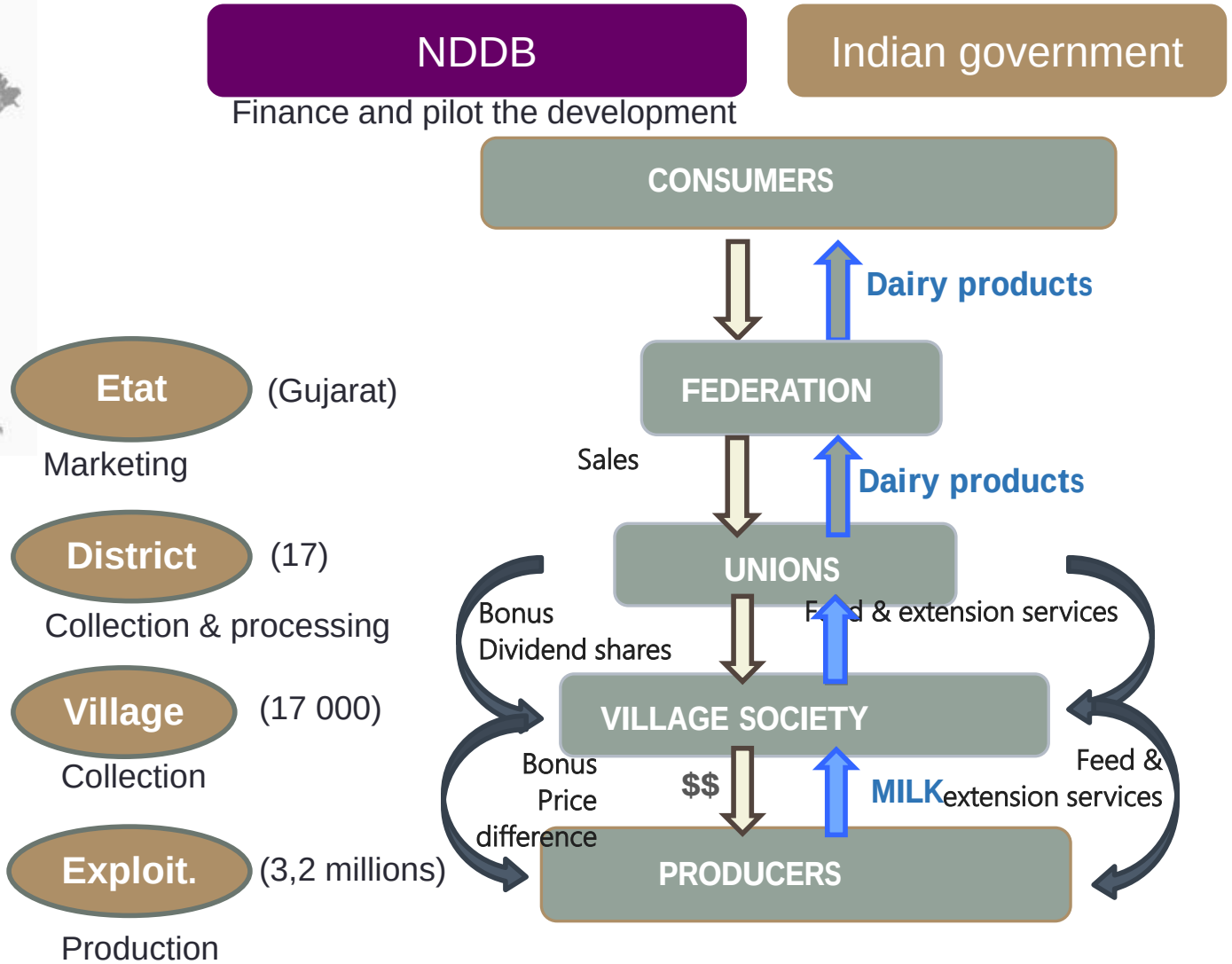
- **Farmers inclusiveness thought in terms of rights and duties**
  Property right: « right to undertake certain actions » (Commons, 1925) ; a bundle of rights at the origin of various status (Ostrom, 1990)
  - Market access
  - Access to the value created
  - Right to take part in collective choice rules elaboration

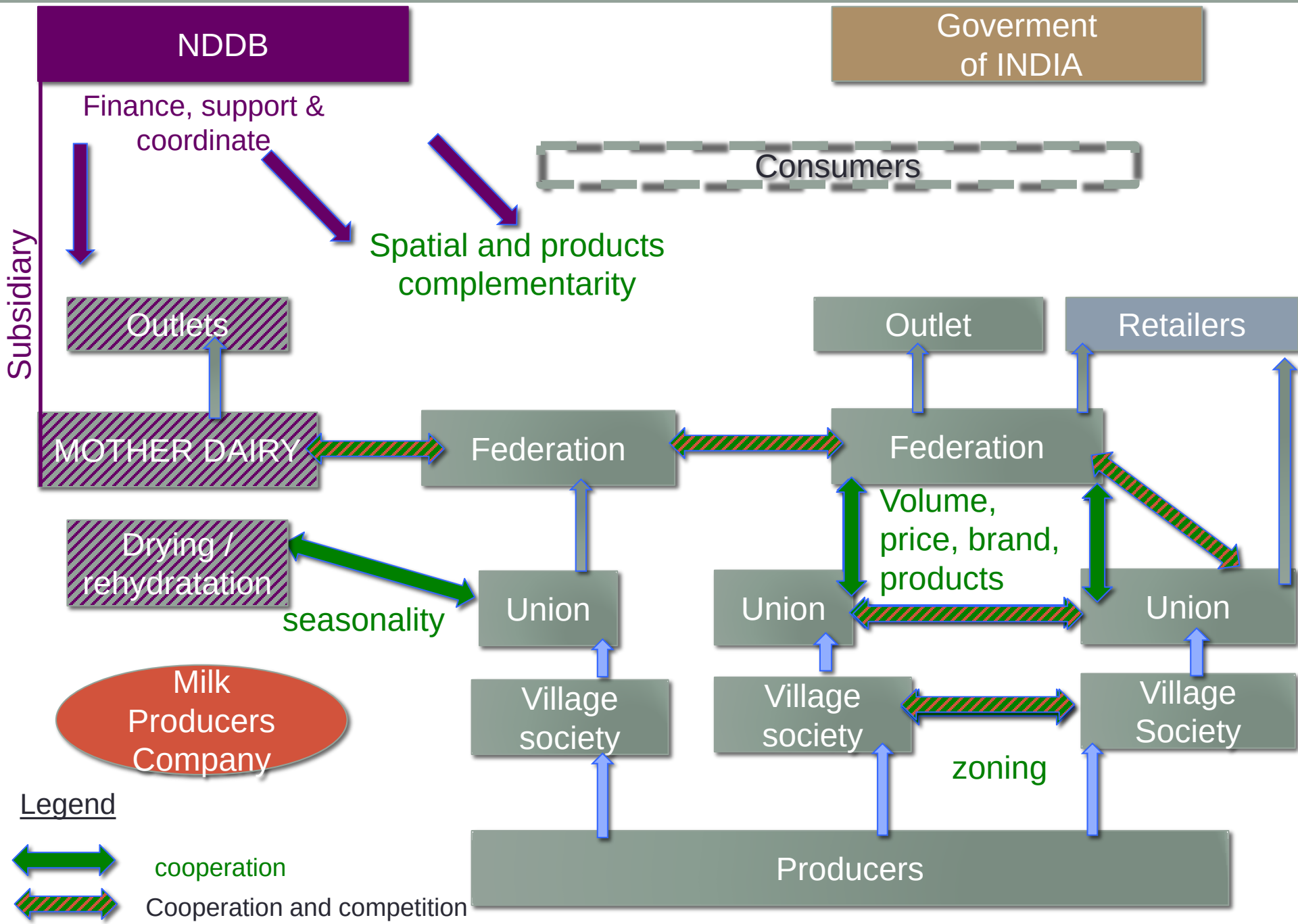
- **Literature** (including activity reports) **+ 70 interviews**

Result 1: Cooperatives' organisational innovations and value creation

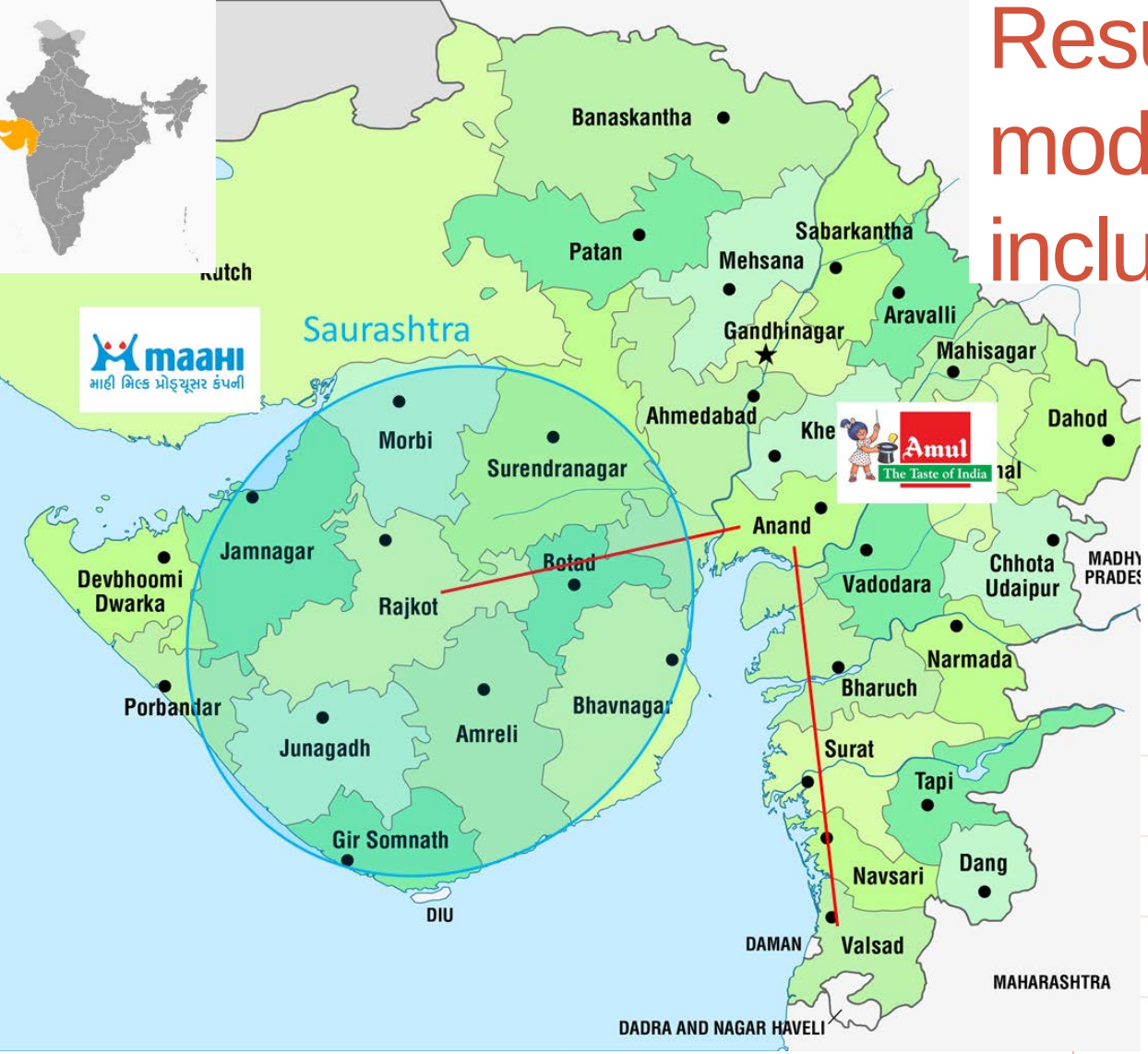


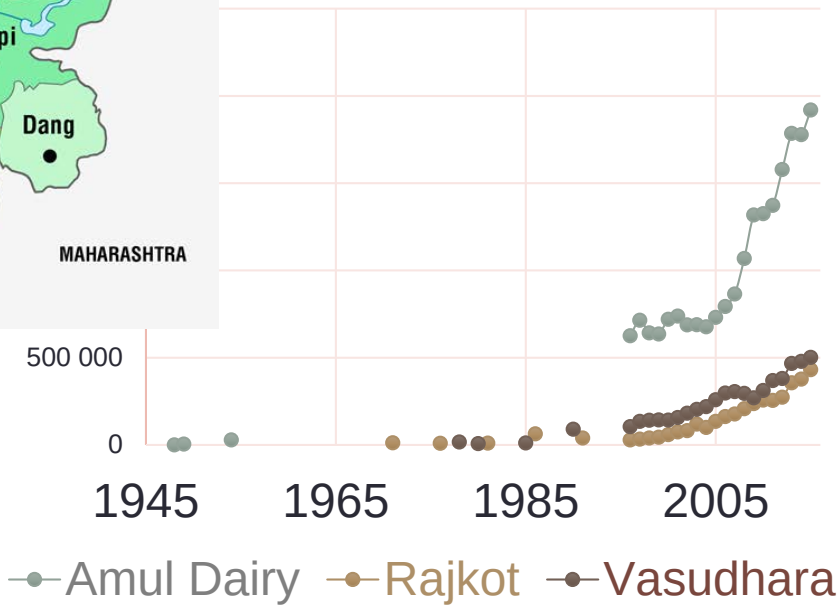
3 tiers model




NDDB
Goverment of INDIA
Finance, support & coordinate
Consumers
Spatial and products complementarity
Subsidiary
Outlets
Outlet
Retailers
MOTHER DAIRY
Federation
Federation
Volume, price, brand, products
Drying / rehydratation
seasonality
Union
Union
Union
Milk Producers Company
Village society
Village society
Village Society
zoning
Producers
Legend
cooperation
Cooperation and competition

Result 2: Diversity of models as a driver of inclusiveness





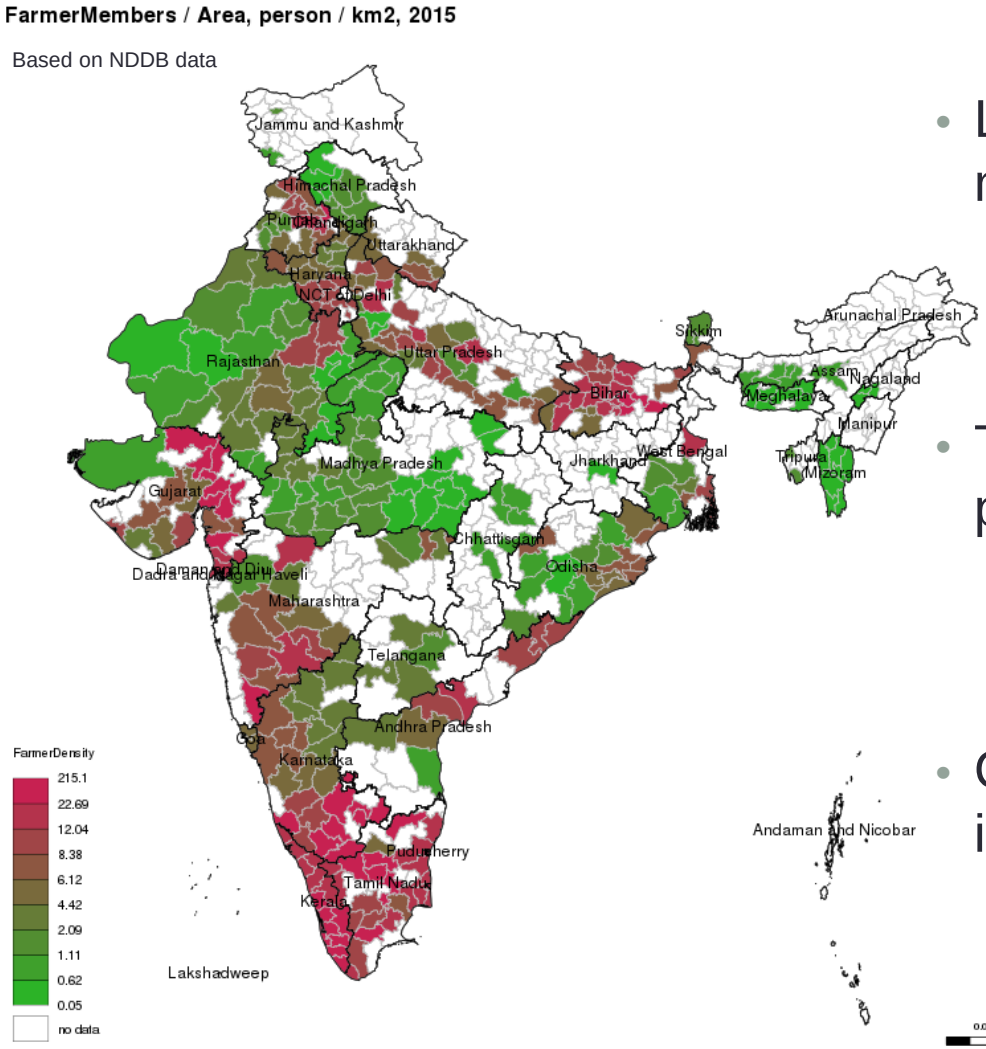
Collection networks & business models

	Rajkot Dairy	Vasudhara	Amul Dairy	Maahi
Number of **members**	69 000	120 681	684 807	98 000
Av. Delivery per member (LPD)	**6,5**	**4**	**3**	**6,5**
Cow milk **Buffalo milk**	22 % **78 %**	**87 %** 13 %	**60 %** 40 %	20 % **80 %**
Share of the production collected	**15%**	**28%**	**50%**	?
Population type	Urban	Rural		
Products	Liquid milk, Butter Milk, Ghee			
	Peda	Peda + Dahi + icecream+ aromatised milk	Full Amul range including cheeses	SMP
Turnover 2014-2015 (billion Rps)	6,9		**41,5**	9,9
Share realised with another organisation	**36%**	**64%**	?	50 %

Specific conditions to access market

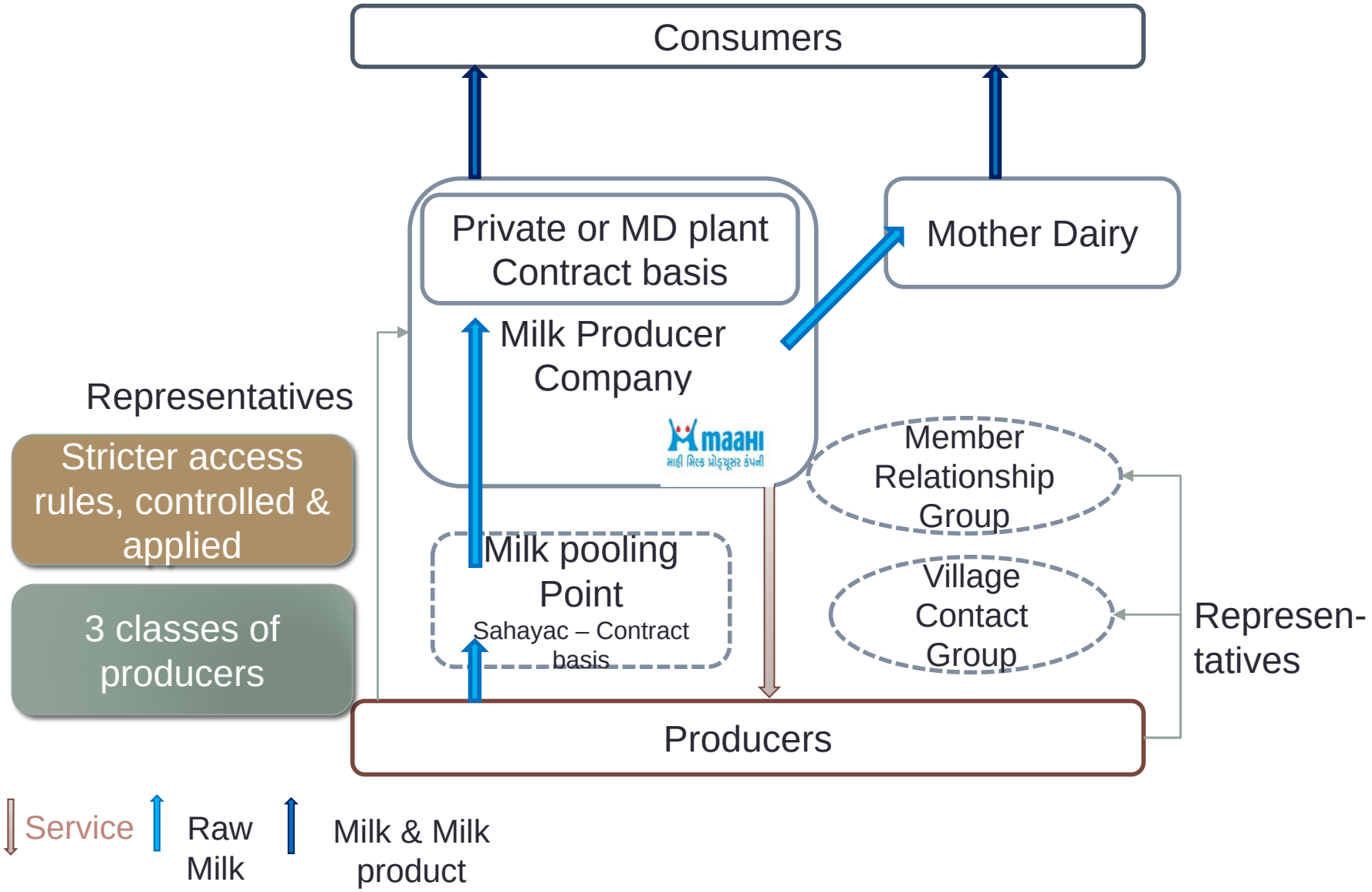
	INDIAN COOPERATIVES	Regional variability	French cooperatives
MEMBERS	Cattle ; > 750L/year Social share: 10 Rps	Criteria: +/- respected Access to non-members	Producers Social share
QUALITY date criteria scale	**Since 1956** TB (+ TP) India + Union	Formula adapted to the average characteristics of the milk collected	Since 1969 TB + TP + bacterial count
PRICE	Federation Framework Union turnover Validation by the producers	Raj Vasu Cattle: 24,3 - 28,3 Rps/l Buffalo: 40,3 – 35 RpsL/l	Board based on interpro. indicators
VOLUME	Full collection	+/- direct sale	Contractual Volume
PROD. COSTS	**Support to production increase & cost** reduction : AI, feed, vet…	Services prices & availability (Feed:+/- 4Rps/kg AI (15 -> 130 Rps) + service availability	Bulk purchase & bargaining

Result 3: Institutional innovation with the creation of MPC & adaptation to the liberalisation



- Limits of the traditional cooperative model (Ebrahim, 2000; Singh, 2013)
  - Efficiency issue : adm., funding
  - Growth of collection by private firms
- The required interface between producers and market (Singh, 2008)
  - Mutualisation, scale economy, development
- Cooperatives features but inscription in the Company act
  - Only producers as members
  - Profit sharing based on patronage
  - Joint-venture and alliance; reserves mandatory

Patronage & business orientation strengthened



Preliminary conclusions & perspectives

- Network of cooperatives & MPC allowing a maximisation of the producers dairy income through
  - Price, bonus, technical support
- Adaptation of the coordination devices framing market access to the diversity of territorial context for a better inclusion
- Inclusiveness in terms of access to market and value added but limited to alliances with large farmers in case of rules framing.
- *Coexisting or renewal of the traditional cooperative model through MPC?*
- *Coexisting with the private formal and informal sector?*

THANKS FOR YOUR ATTENTION !