

# **Innovative Approaches to Advancing Cooperative Engagement in Supply Chains and Logistics**

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# Innovation

பிறப்பென்னும் பேதைமை நீங்கச் சிறப்பென்னும்  
செம்பொருள் காண்பது அறிவு.

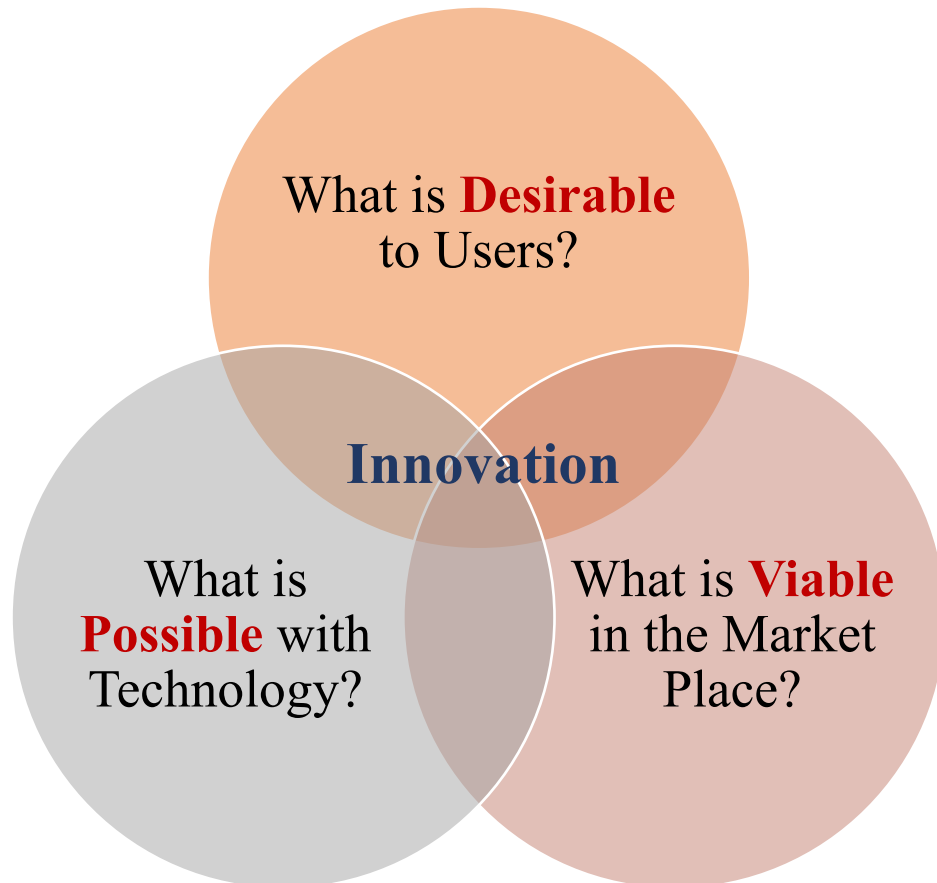
When folly, cause of births, departs; and soul can view

The truth of things, man's dignity- 'tis wisdom true.

- **Meaning:** Knowledge consists in the removal of ignorance; which is (the cause of) births, and the perception of the True Being who is (the bestower of) heaven.
- “Winners don't do different things. They do things differently”

- Shiv Khera

# Innovation



➤ Supply chain logistics refers to the management of the **production, transportation and distribution** of goods throughout a business' overall supply chain.

➤ It encompasses both **inbound logistics** (how materials and supplies are brought into a business) and **outbound logistics** (how the business' resulting products get to retailers and consumers).

# Introduction

- The major difference between cooperatives and other business models in terms of supply chain intervention is that cooperatives integrate their values and principles into those supply chains, and not just to reap the economic benefits.
- Cooperatives have a dual role as enterprises and member-based organizations. Integrating in larger markets and developing the cooperatives supply chain therefore needs special attention to all these different roles.

# **Innovative Approaches of Cooperatives**

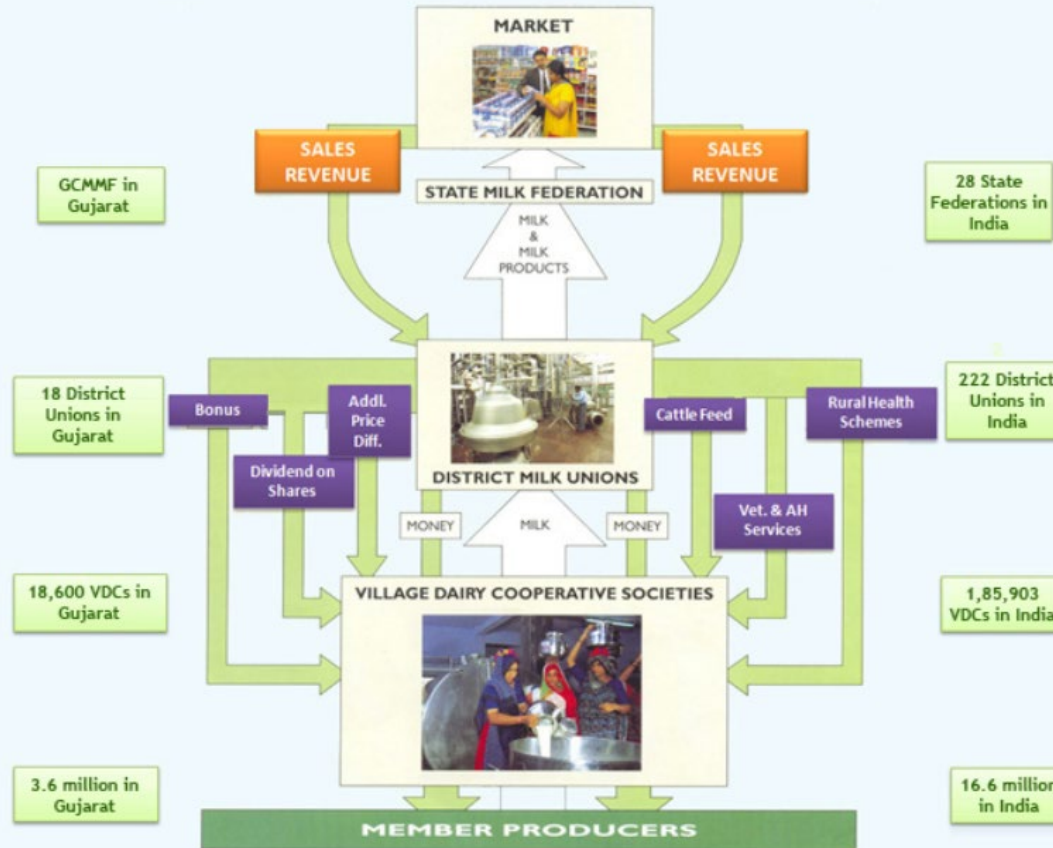
# AMUL

- Amul was founded in 1946 in Anand, Gujarat with a mission to stop the exploitation of the farmers by middlemen.
- Amul is managed by the Gujarat Cooperative Milk Marketing Federation Ltd. (GCMMF), which is jointly owned by more than 3.64 million producers members milk producers of Gujarat.
- Amul has spurred the white revolution of India, which has made India largest producer of milk and milk products in the world and the white revolution has finally created a Billion- Dollar brand.
- Amul has been ranked as the **world's strongest dairy brand** by the **Brand Finance Food and Drink Report 2023**. Amul India's largest fast moving consumer goods (FMCGs) brand.
- The Amul corporative was created by Dr. Verghese Kurien, who is also known as the Father of white revolution in India.
- Its daily milk procurement is approx 25.9 million liters per day from 18600 village milk cooperative societies, 18 member union covering 33 districts, with annual turnover Rs. 72,000 crores (2022-23) .
- This “Amul Model” eliminates middlemen and directly engages farmer with the processor (dairy)
- These cooperatives form part of a national milk grid which links the milk producers throughout India with consumers in more than 700 towns and cities.

# Anand/Amul Model/dairy cooperative model



# Anand Model

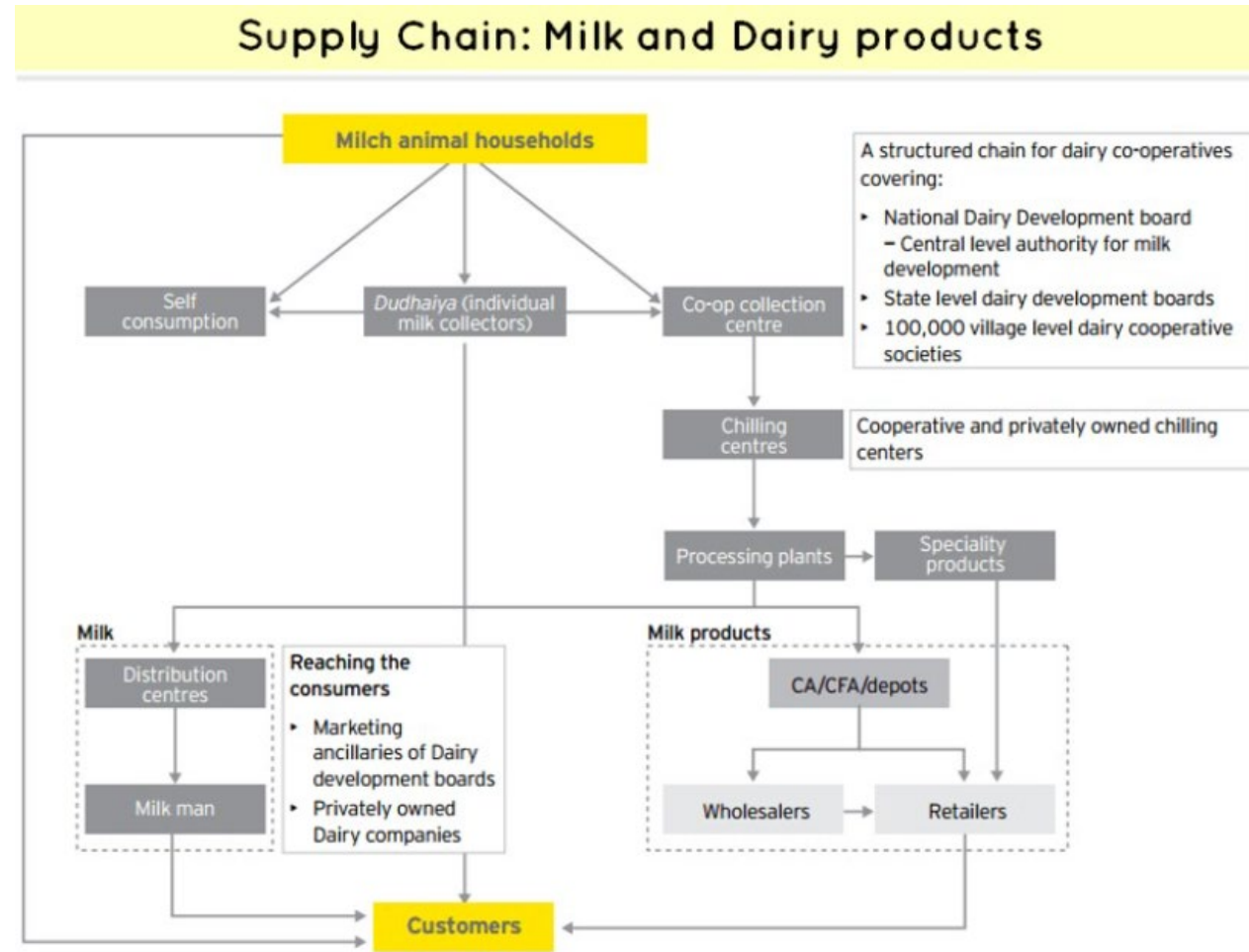


The Amul Model has helped India to emerge as the largest milk producer in the world. More than 16 million milk producers pour their milk in 185903 dairy cooperative societies across the country.

Their milk is processed in 222 District Co-operative Milk Unions and marketed by 28 State Marketing Federations, ensuring a better life for millions.



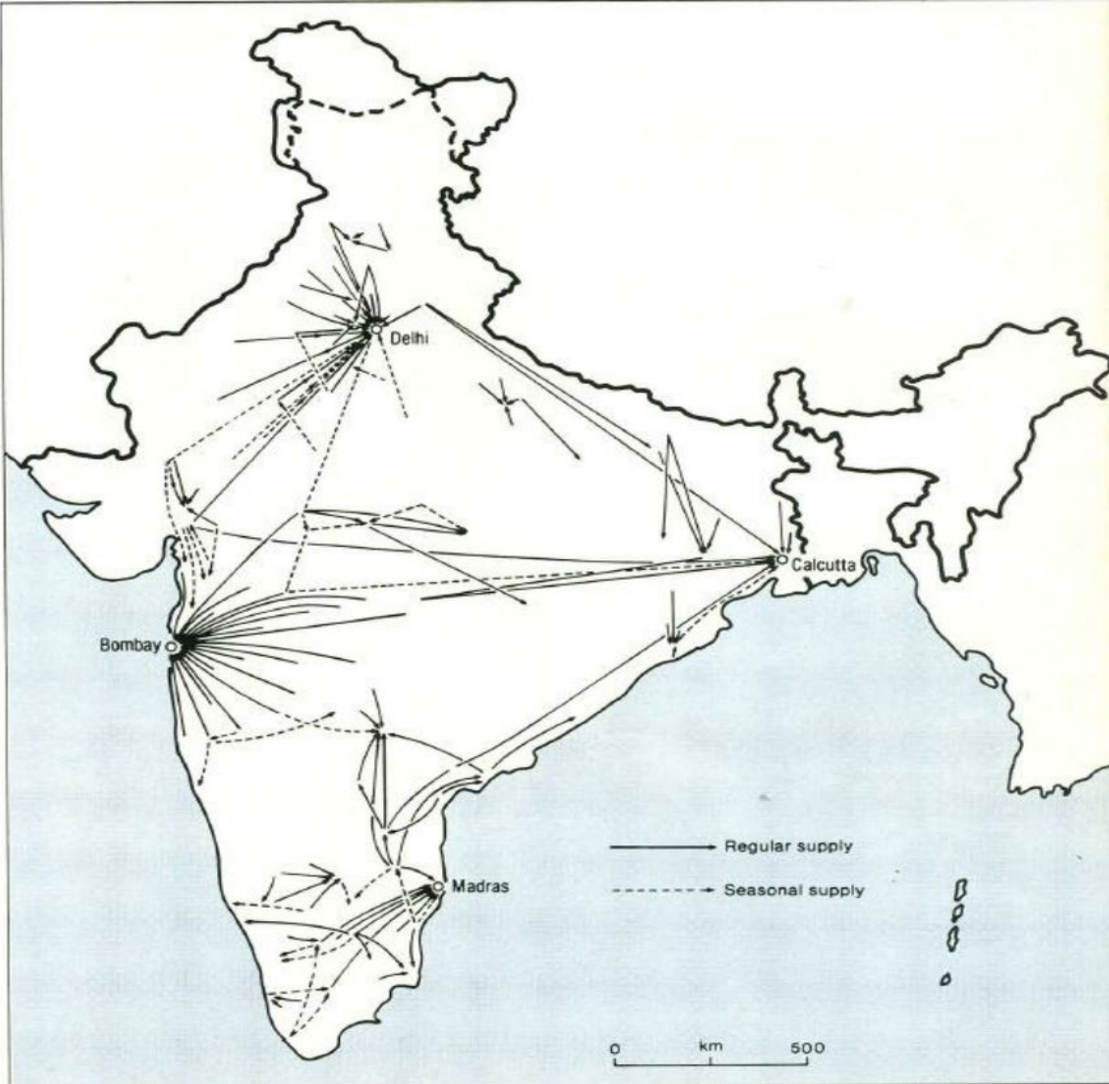
# Supply Chains and Logistics: AMUL



# Amul Supply Chain

VILLAGE	<ul style="list-style-type: none"><li>•In the given village, a dairy Cooperative Society (DCS) is formed.</li><li>•Every dairy cooperative society has ~110 farmers.</li><li>•Combined, all DCS together handle more than 18 million kg milk / day.</li><li>•they're equipped with Automatic milk collection unit (AMCUS): computer analyses fat content of milk, automatic printing of receipts etc.</li></ul>
DISTRICT MARKETING COOP.UNION	<ul style="list-style-type: none"><li>•they process milk=&gt; butter, ghee, milk powder, cheese, ice cream etc.</li><li>•E.g. Banaskantha District Cooperative Milk Producers' Union Limited known as Banas Dairy. They manufacture a large number of dairy products under AMUL, SAGAR and BANAS brands. Usually "Banas" products sold locally, and Amul products sent to other states.</li><li>•similarly Gandhinagar District Co-operative Milk Producers' Union Ltd.=Madhur dairy.</li><li>•Surat= Sumul Dairy</li><li>•Surendranagar District Co =Sursagar Dairy.</li><li>•They can sell their products under the brand name "Amul" as long as they meet the requirements of GCMMF. (e.g. must collect 30,000 litres milk daily for a period of three years)</li></ul>
STATE MILK COOP. FEDERATION	<ul style="list-style-type: none"><li>•The main "boss" is Gujarat Cooperative Milk marketing federation (GCMMF).</li><li>•All of above district cooperative unions (Banas, Madhur, Sumul Sursagar) etc. fall under GCMMF umbrella.</li></ul>
RETAIL	<ul style="list-style-type: none"><li>•Amul has more than 5000 outlets of own- at high streets, residential areas, Railway Stations, Bus Stations, Educational Institutions, across India.</li><li>•2012: Amul planned to setup 10000 retail outlets across India.</li><li>•Other than that, even private shops, hotels, restaurants etc. too sell Amul products.</li></ul>

# National Milk Grid(NMG)



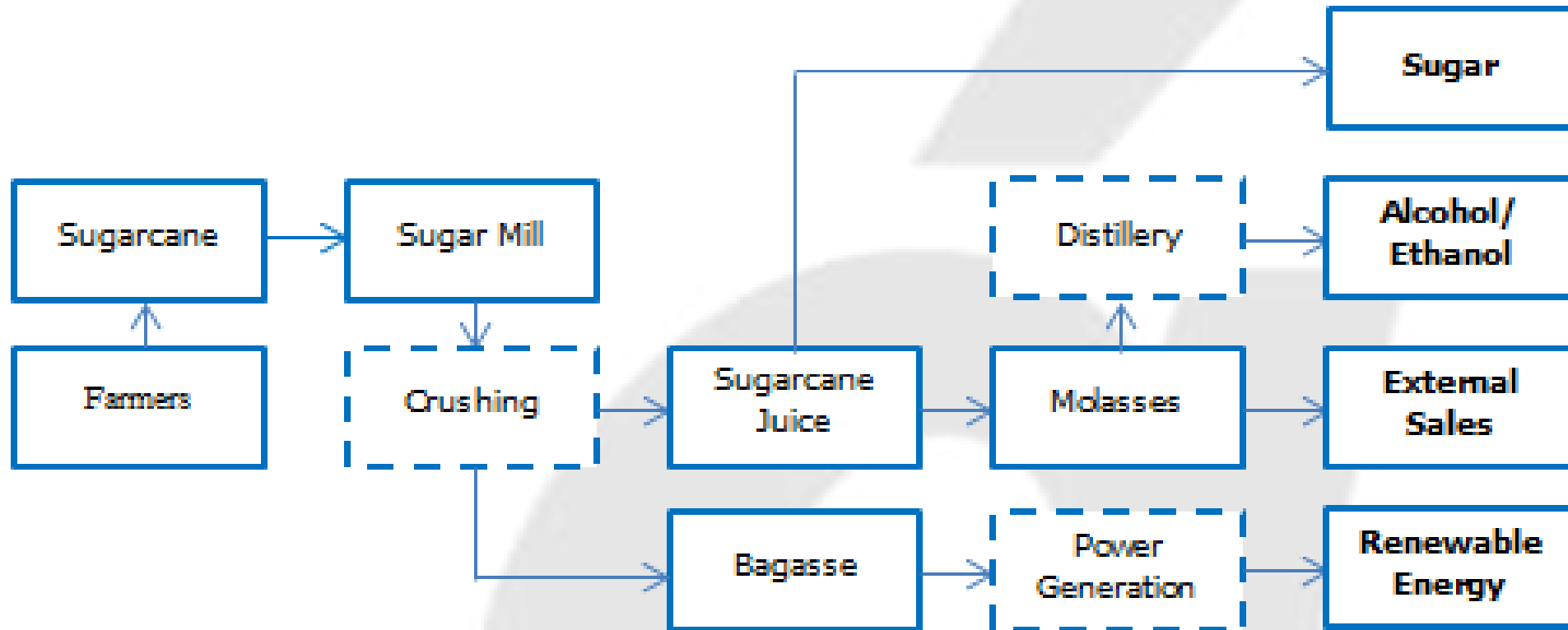
# Benefits of SCM

- Reduced lead time
- Faster inventory turnover
- Reduced warehouse space requirements and safety stock due to accurate forecast
- Minimum stock out situations
- Sustainable advantage and benefits to farmers in the supply side with regular assured market and income.

# Challenges faced by AMUL

- Farmers are not interested in selling to VCoS mainly because of higher prices given by private local dairies even though they are getting all supports from GCMMF.
- No. of diary farmers coming down due to urban migration from villages and more lucrative contract agricultural cash crop farming in Gujarat
- Increasing cost of inputs to farmers for cattle feeds, scarcity of grass due to poor rain
- Competition from international and national brands likes Nestle, Godrej, ITC, Nilguries etc in non-milk products with superior qualities.
- Increasing competition in milk and milk products from local state co- societies like MILMA at lower cost.
- Increasing 3PL (Third-Party Logistics) and local transportation costs.

# Sugar Cooperatives



# Tiruchengode Agricultural Producers Cooperative Marketing Society Ltd.



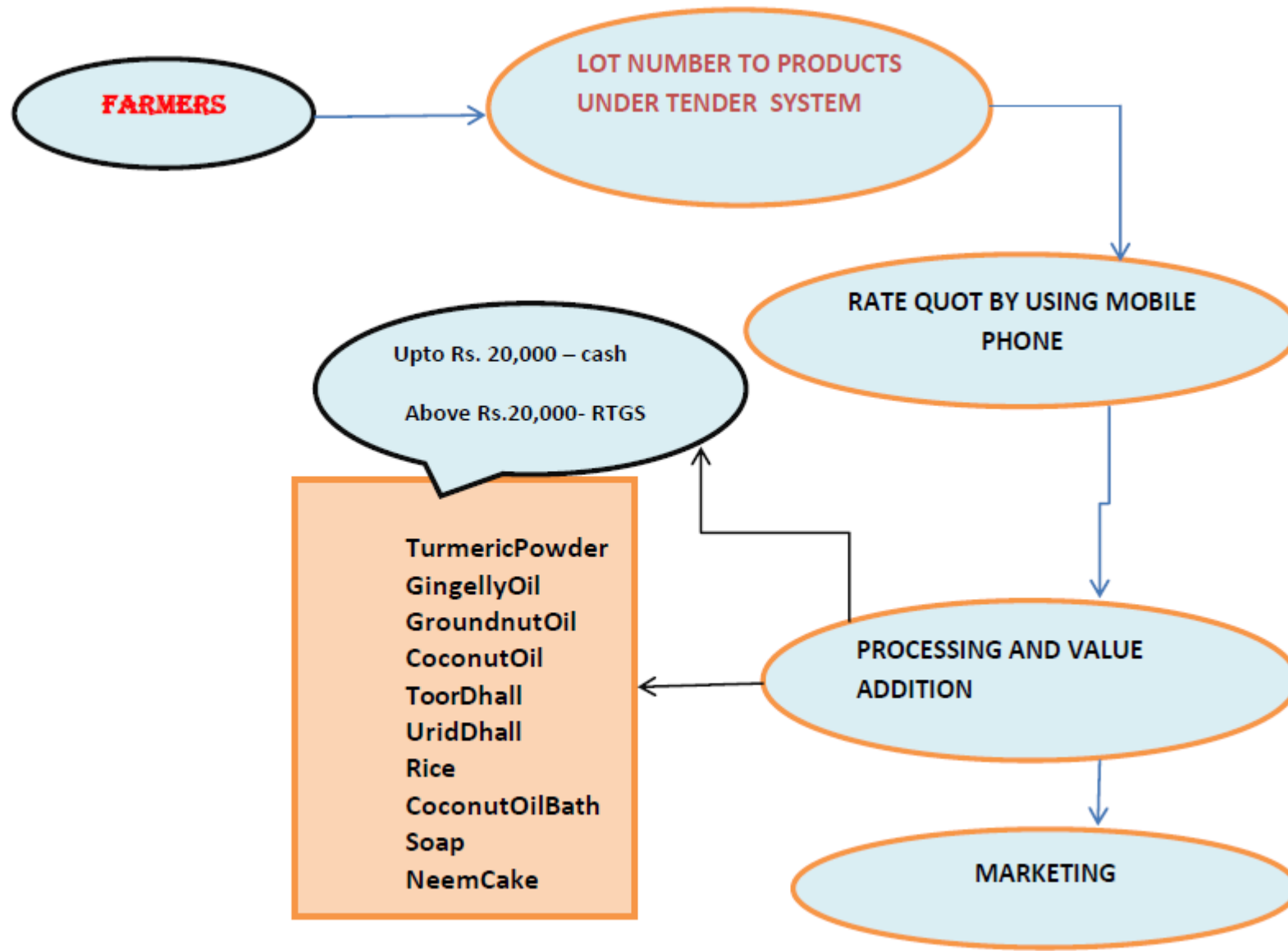
# Objectives of the Society

- To arrange for the marketing of Agricultural produce of the agricultural members at reasonable price.
- To advance loans on the Pledge of Agricultural Produce and Jewels.
- To effect recovery of crop loans issued by the Primary Agricultural Co-op. Credit Societies through the sale of produce of the members.
- To distribute input requisites of the agriculturists.
- To supply other necessities of life to the members and public.



# Advantages of Agri. Marketing

- Maximum and Reasonable price to farmers.
- Minimum and Reasonable service charge to farmers.
- Accurate weight.
- No wastage of produce.
- Immediate payment to farmers.
- Godown and produce pledge loan facilities.
- Processing facility to Agri. Produce of the members.
- Provision of Market Intelligence.
- Provision of Benefits of E-Trading.
- Provision of Rest House to Farmers & Merchants.



# Erode Agricultural Producers Cooperative Marketing Society Ltd.



# Introduction

- Agricultural Producers' Cooperative Marketing Societies (APCMS) play a critical role in assisting farmers with market linkages, input access, and improving livelihoods.
- With the advent of digitalization, these cooperatives are at the forefront of integrating digital technologies for market competitiveness and operational efficiency.
- This research explores the extent and impact of digitalization and value addition practices within APCMS.
- The adoption of digital tools, combined with value addition, is pivotal for enhancing productivity and market access.

# EPCMS

- This society Thiru S.K.Paramasivan Ex. M.P., a veteran Co-operator organized the Erode Agricultural Producers Co-operative Marketing Society Ltd.
- AA268, The Erode Agricultural Producers Co-Operative Marketing Society is registered on 31.01.1960. It is commenced on 29.06.1960.
- It was started with 58 members with a share capital of Rs.14, 885/-. As on 31<sup>st</sup> march 2023, the society function with 35,405 members and share capital of Rs. 43.35 lakhs.
- Its area of operation shall be confined to Erode Taluk, Modakurichi Taluk and Kodumudi Taluk.
- However the Turmeric growers residing in all the other taluks in Tamilnadu may be admitted as 'A' class members and they may be granted loans in the Pledge of Turmeric produce subject to the conditions that they shall not be eligible for the other rights and privileges available to 'A' class members residing in the area of operation of the society.
- AA268, The Erode Agricultural Producers Co-Operative Marketing Society is registered under TNCS Act 1983 as following Limited Liability only.

# Historical Background

- Not only the farm producer is deprived of legitimate return for his produce, but also the consumers suffer on account of high margin-spread between producer and consumer.
- To eliminate monopoly roles and to contain the evil effects of middlemen and cut throat competitions in the agricultural marketing, the Tiruchengode Agricultural Producers Co-op. Marketing Society Ltd., was started.
- Tiruchengode Agricultural Producers Co-op. Marketing Society Ltd., was started on 30 th April 1930 in the name and style of “ The Tiruchengode Co-op. Sale Society Ltd. Tiruchengode” by the sheer efforts of the person Sri S. Palanivelu Pillai of Iluppili village in Tiuchengode Taluk.
- Later on, 6.80 acres of land at the foot hill of Lord "Arthanareeswara" was acquired for the use of the Society under Government land acquisition proceedings in the year 1939 and an office cum godown was constructed by the President Sri. K.A. Nachiappa Gounder of Konganapuram Village in Idappadi Taluk a Veteran Cooperator of Salem District.
- The Konganapuram branch was established by him on 05-12-1936.

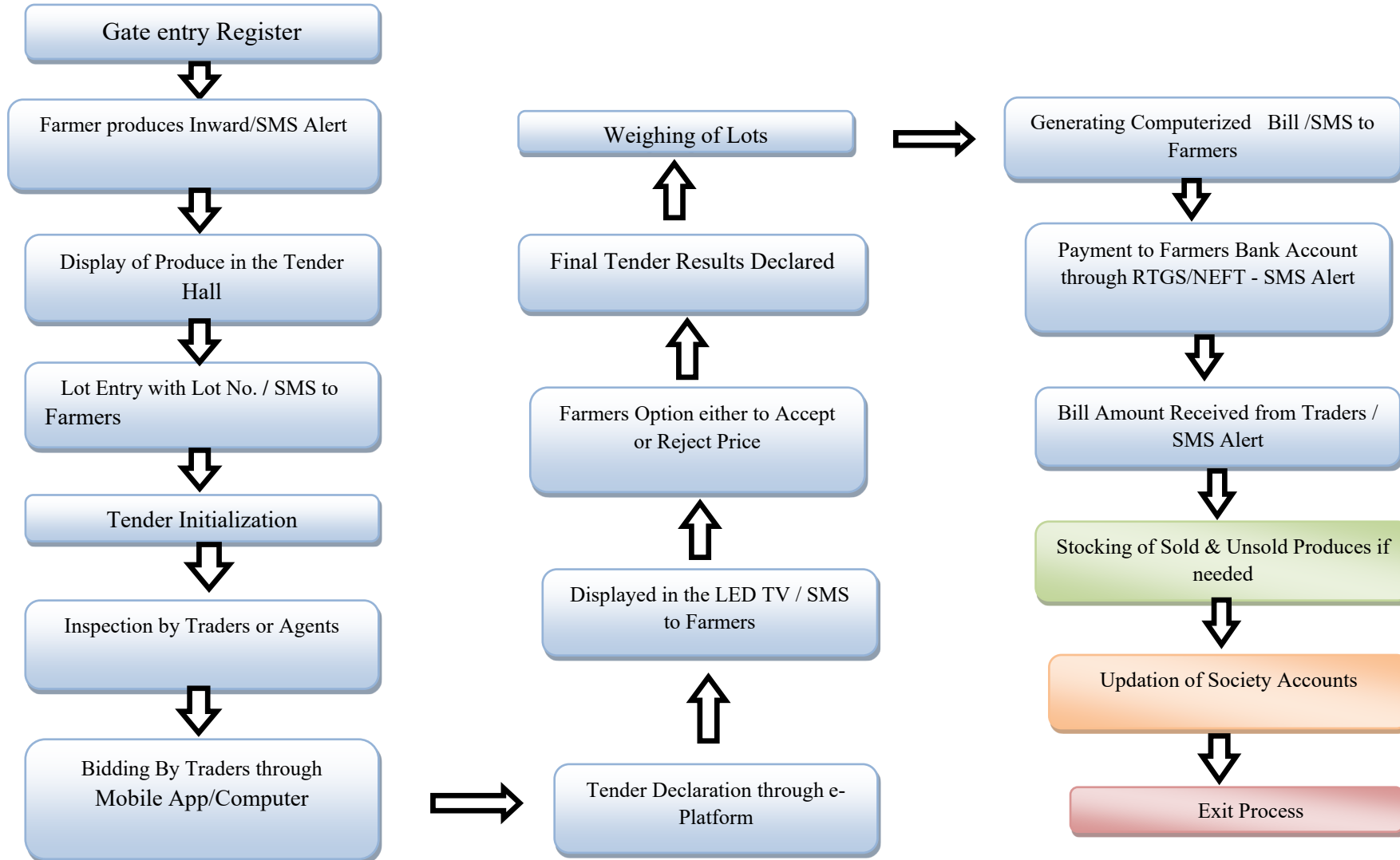
- Thiru K.A. Nachiappa Gounder took tremendous effort to develop this society from 28-03-1935 to 03-09-1951 with utmost care and concern.
- Closely following the managerial capabilities of Thiru. K.A. Nachiappa Gounder, Thiru. K.S. Subramania Gounder took over the Presidentship of the society on 04-09-1951.
- Thiru. K.S. Subramania Gounder was a Veteran cooperator of Salem district and he also headed various cooperative institutions like Salem Coop. Central Bank, Salem District Coop. Supply and Marketing Society, Salem Printing Press etc.
- Under his stewardship, the society had witnessed tremendous growth and development by leaps and bounds and reached its peak position when he left the Presidentship on 26-12-1973.
- The vision set forth by K.S. Subramania Gounder was well taken of by the succeeding President Thiru. N.A. Natesan of Neikkarapatty Village in Tiruchengode Taluk who held Presidentship from 30-12-1973 to 09-06-1976.
- It is he who succeeded in his attempt to get an own site to the extent of 7.15 acres initially for the branch at Konganapuram. A host of other infrastructural facilities like yard, godown etc. were all provided during his period.
- The branch of the society at Mallasamudram was also started during his tenure i.e. on 16-07-1975.
- Thiru. N.A. Natesan had contributed for the balanced growth of the society by his able persevering efforts

# E-Tender

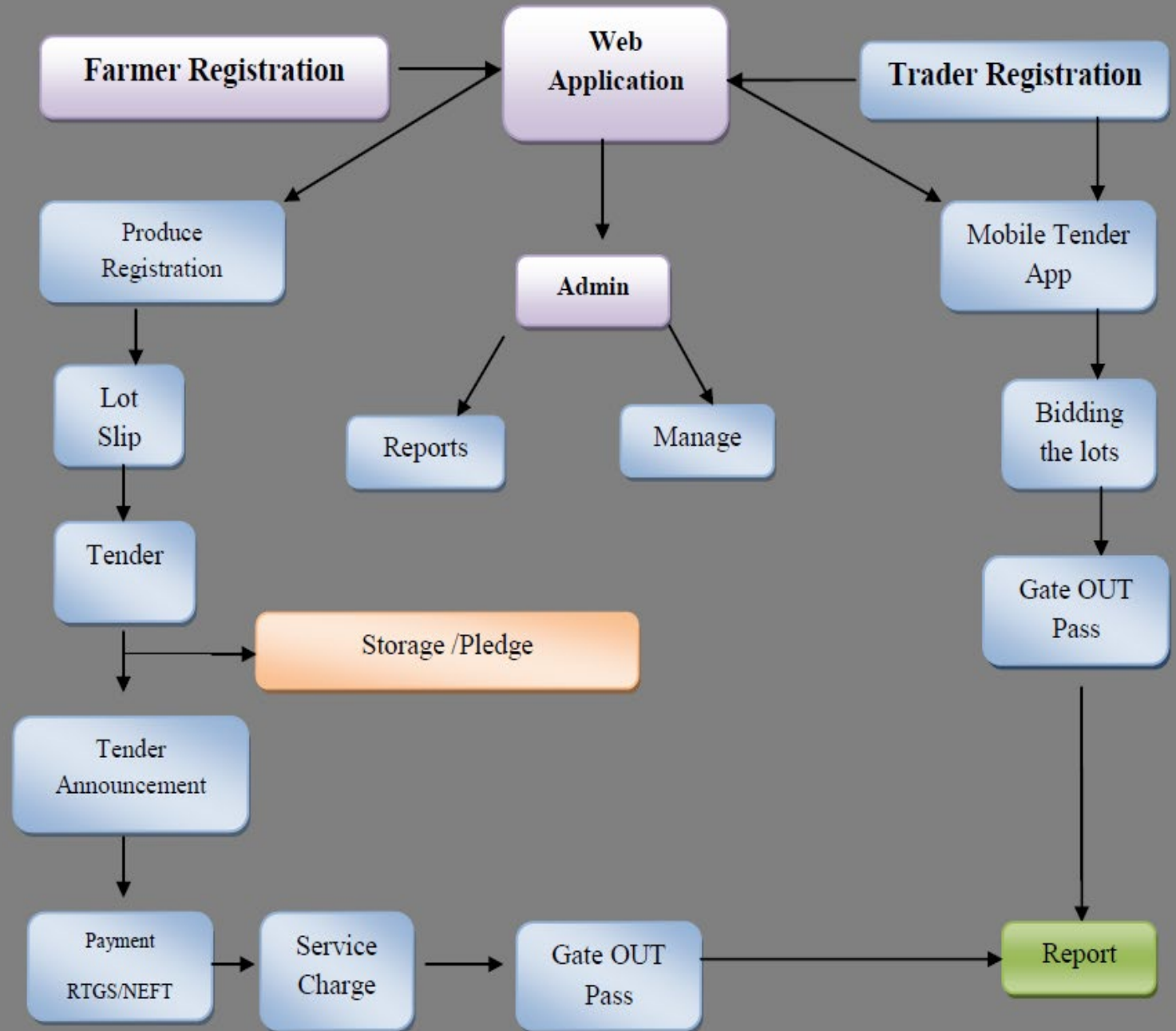
- In number of places the traditional manual tender/ auction system is followed for auctioning the agricultural produces. In the EAPCMS, 'Mobile APP Tender System' is introduced from February 2016 onwards for the benefit of the society and the stakeholders. The flow diagram is presented below.
- Farmer decides to sell their turmeric produce, a sample is taken from their lot and placed in the Auction Hall. The farmer's lot number is displayed for traders to inspect. If the farmer chooses to store and sell the turmeric later, the lots are stored in the godown after weighing.



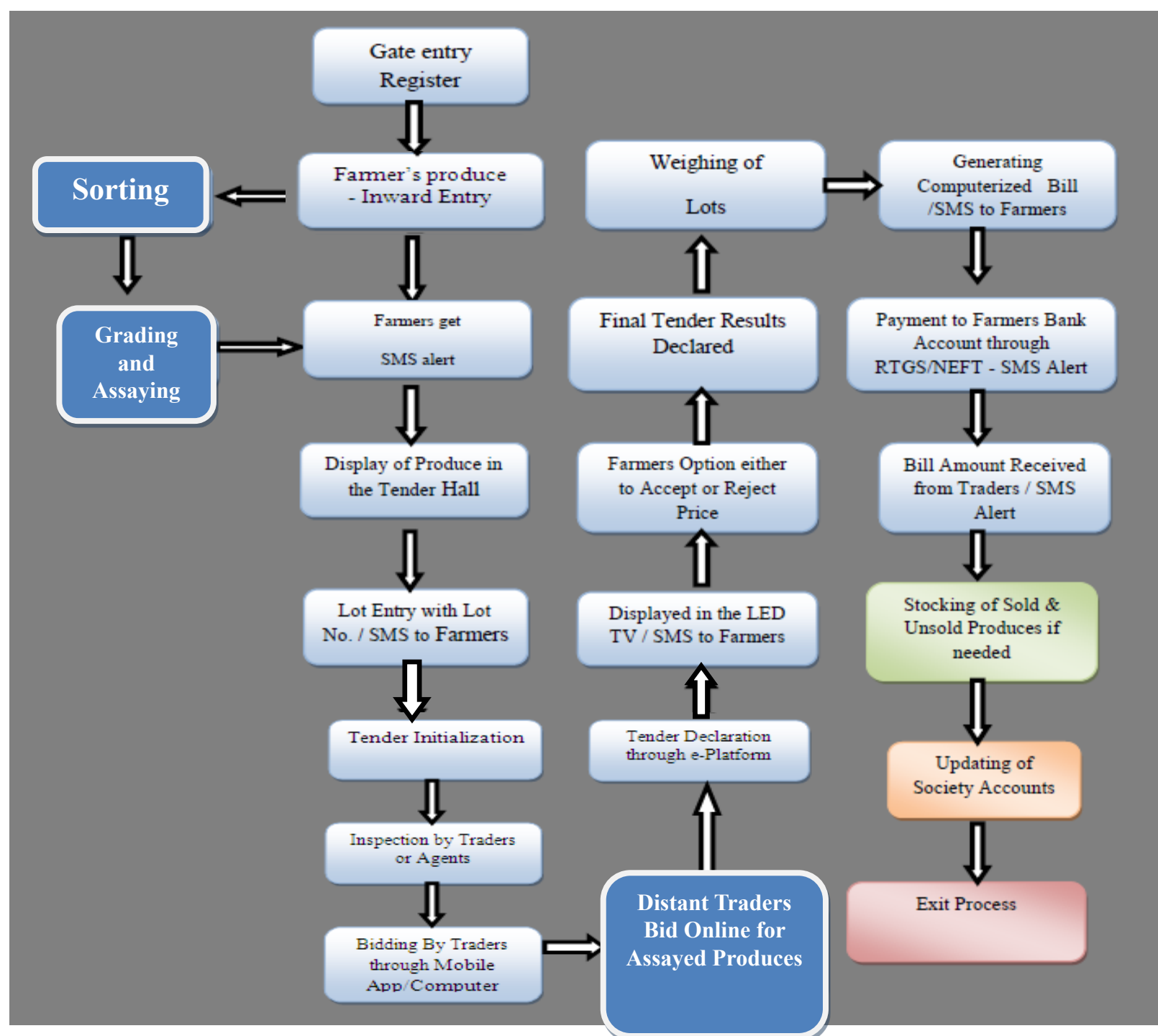
# PROCESS OF E-TENDER



# Web Based Trading



# The Proposed e-Trade Process



# Advantages

- Highly Secured and transparent system
- Farmers will be able to get good price due to competition.
- Software will supports “n” number of concurrent users.
- Process of Interlinking of different Markets and branches can be achieved easily.
- Farmers will get the payment instantly due to online payments.
- Godown-Owners may also get into the regulatory system.
- These activity ultimately led to a Paperless Transactions
- The society can store “n” number of data, transactions in the database of the server, and able to retrieve the old / stored records.



A lush green tea plantation on a hillside, with rows of tea bushes in the foreground and a misty background with trees and a small building.

“THE INDCOSERVE”

Be vocal for local

**Tamil Nadu Small Tea Growers Industrial Cooperative  
Tea Factories Federation Supply chain and Logistics**

# **Brief about INDCOSERVE**

## **Year of Commencement**

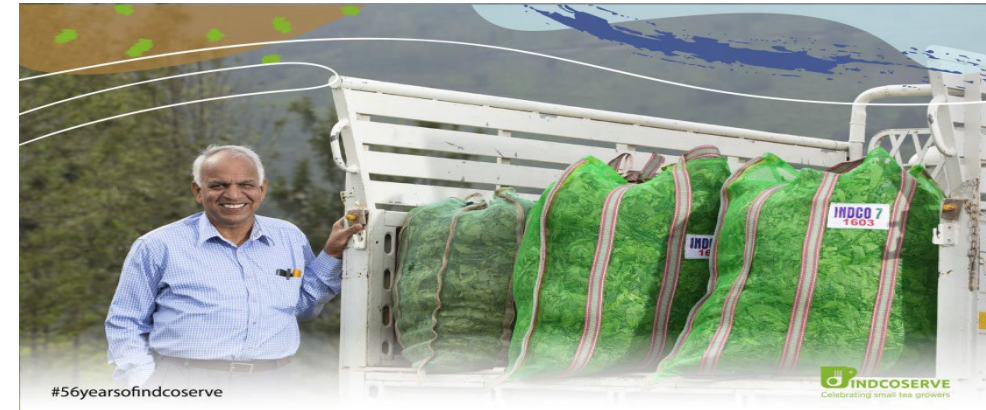
- INDCOSERVE is India's largest Tea Co-operative Federation, commenced in the year 1965 at Coonoor by the Government of Tamil Nadu, INDCOSERVE provides much needed guardianship to small tea growers in Nilgiris District as a catalyst.

## **Details of Members**

- Tea Cooperative Federation working with around 30,000 small tea farmers.
- The value chain of INDCOSERVE spans over 16 Tea Factories and includes sourcing of green tea leaves from its member growers, processing, distribution and trading operations.



# Tea leaf Procurement and Production with Brand Name



## Cont...

Indcoserve produces about 13 million kilograms of black tea annually.

- ✓ Indco's Cardamon Tea
- ✓ Indco's Kahwa
- ✓ Indco's Masala Tea
- ✓ Indco's Mountain Rose Tea
- ✓ Indco's Blue Mont Tea
- ✓ Ooty Tea Gold
- ✓ Indco's Marlimund Premium Tea
- ✓ Indco's Bedford Tea
- ✓ Indco's Honey Hill Tea





# Marketing Activities

Indcoserve is situated in the tea capital of South, Bedford, a town 1.5 km from Coonoor which also houses CTTA, UPASI and many famous tea brokerage firms.

## Primary marketing activities at INDCOSERVE

- In the case of INDCO factories, they have three options to sell the tea; through their own auction centre (TEASERVE),
- through other auction centres (such as Coonoor, Coimbatore, and Cochin in South India) and
- Direct sale.



## Cont...

- INDCOSERVE's secondary marketing activities are primarily through Doty Tea.
- Ooty Tea is currently marketed under three major institutional arrangements that INDCESERVE has. Two of them enable INDCOSERVE to reach the Public Distribution System (PDS), while the third one enables them to supply to the Defence Personnel



Marking **56** years of a  
**BEAU-TEA-FUL** venture, we have  
successfully

Empowered  
**30,000**  
small tea  
growers



Cultivated  
**40,273** acres of  
tea plantations



Established **16**  
modernized  
factories



Launched **9**  
refreshing  
brands of tea



Inaugurated  
**2** tea  
houses



Initiated **5**  
tea vandis

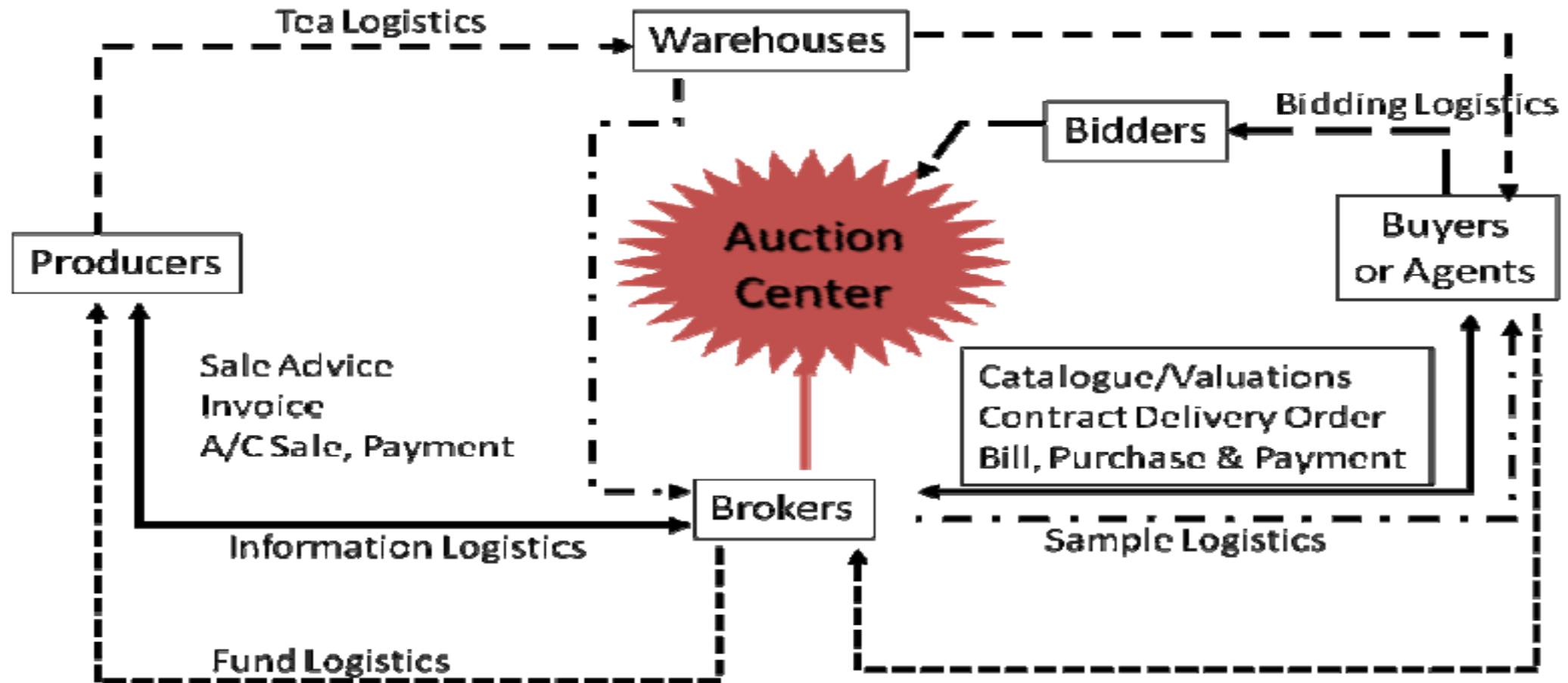


Supported over  
**2000** employees



Manufactured **13** million kgs of Tea annually

# Steps involved in marketing of Tea through Auction Centres



# Kerala

- Green Army
- PACS: Service Cooperative Banks



