

**Title of the paper:**

“Co-operative movement: the only way to turnaround Indian fruit processing industry”

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# **“Co-operative movement: the only way to turnaround Indian fruit processing industry”**

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## **Abstract**

Average land holding of Indian growers/farmers/cultivators is significantly small. Similarly, large percentage of processors are either tiny or small. Smallness of the Indian growers and processors is the source of all problems that prohibit this industry from flourishing to its desired levels. Being small means sacrificing the benefits of larger economies (Economies of scale, economies of scope and economies of experience). Thus they can't exercise their power in the market place and end up in becoming price takers. Middle men have capitalized on this weakness of growers and processors and have been exploiting them.

The only solution to this problem is to speed up cooperative movement amongst growers and processors. Growers and processors should come forward, join their hands and form cooperatives and run them successfully.

Karnataka being second largest producer of fruits in India contributing to nearly 12% of the total production, effort has been made in this research paper to gather and analyze information pertaining to cooperative effort made so far by the growers and processors of mango within Karnataka state so that results can be generalized for the entire nation.

Growers and processors should follow the footsteps of small milk producers, who came forward, formed cooperatives and run them successfully during 1980s. The cooperative movement (popularly known as white revolution) initiated by Dr. Kurien has revolutionized the dairy industry of India and made India the largest producer and processor of milk in the world. Such similar cooperative effort is the need of the hour to turnaround this industry.

## **Key words:**

Co-operative movement, Fruit Processing Industry, Turnaround

## **Introduction**

Average land holding of the Indian fruit cultivators is significantly small when compared with other developing countries. Middle men (traders between growers and processors) have capitalized on this weakness of growers and exploiting them. This is the reason middle men have become strong and the growers have become weak in India.

Similarly large chunk of Indian fruit processors have their operations in home scale, cottage scale and small scale category with the installed capacity ranging from 50 tons to 250 tons a year and only a small number of large scale Indian and multinational companies have larger installed capacities in the range of 12000 to 72000 tons a year. Yet it is still dominated by large number of small scale processors.

Smallness of the Indian growers and processors is the source of all problems that prohibit this industry from flourishing to its desired levels. Being small means sacrificing the benefits of larger economies (Economies of scale, economies of scope and economies of experience). Thus they can't exercise their power in the market place and end up in becoming price takers.

Similar kind of situation was plaguing Indian Dairy industry till 1970s. The stakeholders then realized that the only way to overcome this problem of smallness, which in fact was prohibiting the growth of this industry to desired levels, is to come together and form cooperative associations. Small milk producers came forward, joined their hands, formed cooperatives (region wise), and ran them successfully. The cooperative movement (popularly known as white revolution) initiated by Dr. Kurien has revolutionized the dairy industry of India and made India the largest producer and processor of milk in the world by 2000.

Like Indian small milk producers revolutionized Dairy industry of India during 1980s, the fruit growers and processors should also come forward, join their hands, form cooperatives and run them successfully. Speeding up cooperative movement amongst growers and processors is the only solution. Cooperative effort is the need of the hour to turnaround this industry. Some work has been done in this direction but is not enough. Lot more needs to be done to exploit the tremendous potential, which the India has in this sector.

## Literature Review

The review of literature in the field of fruit processing industry of India has revealed several contemporary issues of importance and are discussed in brief here-in-under. Literature discussed in this chapter, which throws light on the contributions made by the prominent researchers in this study area, will set the guidelines for this particular research project and indicate the tremendous scope for the further research in this particular area.

MOFPI (Ministry of Food Processing Industries) Report, (1999), reported that India is the largest producer of fruits (41.5 mmt) and second largest producer of vegetables (67.28 mmt) in the world. The country tops in production of banana, mango, potato, tomato, onion, green peas and coconut. **Only 2% of the fruits/vegetables produced are being processed at present.** The installed capacity of fruits and vegetables processing industries has increased to 21 lakh tons in 1999 with 4589 fruit/ vegetables processing units. Exports during 1998-99 were worth Rs. 678 crores.

TIFAC Report (2003), the task force on Agro food processing of TIFAC on the sub group on fruits and vegetables, has given the technology status and future vision for India. The report states that the total production of fruits in the world is around 370 mmt. India ranks first in the world with an annual output of 32mmt. TIFAC study has focused on 12 selected vegetables which accounts for about 65% of the total production in India. It is estimated that around **20-25%** of the total vegetables is lost due to poor post harvesting practices. Further while discussing about the future trends, the report highlighted that fruits and vegetables would continue to be harvested manually in the future. While small land holdings and non availability of good quality planting material have been the major issues of concern, it is expected that quality of planting material would improve in the long run due to right selection, hybridization, proper breeding and adoption of tissue culture.

US Commercial Services Report (2000), reported that the Indian food processing industry is a high priority sector and is poised for excellent growth in the next century. The government of India has adopted a major policy decision for commercializing agriculture and packaging sectors.

Agricultural production and food processing together accounts 30% of India's GDP and employs more than 70% of its work force.

MOFPI (Ministry of Food Processing Industries) in its annual report (2000-01), reported that the country's share in the world trade of processed fruits and vegetables is still less than one%. As such, abundant investment opportunities are there in the expanding domestic market and export arena. An increasing acceptance of new products together with innovative market development efforts is seen.

Surinder Sud (1998), in his article on India's revolutionary progress in food production opined that the interest shown by the domestic corporate sector and transnational corporations in setting up food processing units indicate that India would soon emerge as an important player in the international processed foods market. The Government already has approved about 343 proposals for 100% Export Oriented Food Processing Units and joint ventures since the beginning of the economic reforms, i.e. in the early 1990's. These would involve an investment to the tune of Rs.43040 Million including foreign direct Investment worth Rs.7880 Million.

MOFPI report (2001), It's report on summary on fruits and vegetable processing documented in the report of Ministry of Food Processing Industries (MOFPI) highlights the following facts;

1. India is the second largest producer of vegetables and third largest producer of fruits.
2. Thirty percent of the fruits and vegetables get wasted due to lack of proper processing and packaging facilities.
3. Only two to three percent of the total produce is being processed in India.
4. Total cultivation area under fruit and vegetables is around 12.0 million hectares and accounts for 7% of the total cultivation area.
5. Main fruits produced in India are Mango, Banana, citrus, Guava and apple. These fruits account for 75 to 80 percent of total fruit production.

Manish Jain (2002), in his article explained that India accounts for 10% of the total world production of fruits and ranks second after China. It leads the world in the production of mango, banana, sapota and acid lime and has recorded highest productivity in grapes. Area under fruit has increased from 2.87 million hectares during 1991-92 to 3.729 million hectares during 1998-99 recording an increase of 29.93%. Similarly production increased from 28.63 mmt (million metric tonnes) to 44.02 mmt recording an increase of 53.83%. During the same period, productivity of fruits increased by 18.4%. Further he listed five largest fruit producing states of the country viz. Maharashtra (17.08%), Karnataka (12.37%), Andhra Pradesh (10.42%), Bihar (8.82%) and Uttar Pradesh (8.20%).

Researcher also noted the trend that out of the horticultural crops produced in the country, approximately 60% is consumed by the local population or marketed in the nearby market yards and only about 40% of the produce is channeled through the regulated markets for the consumption of urban population in the cities. Export markets account for less than 5% of the total production except in some commodities like cashew, spices, onion, etc. He noted further that the bare minimum infrastructural facilities are lacking even in the regulated markets. The horticulture produce suffer significant post harvest losses due to lack of adequate post harvest and marketing infrastructure viz. Processing units, packaging and grading facilities, cold storage facility, refrigerated transport vehicles/ containers, storage and phytosanitary facilities, etc.

Researcher strongly recommends for an integrated development of horticulture industry in order to meet not only the requirements/ demand of the domestic market but also to exploit the export potential to maximum extent. Emphasis on quality production needs to be strengthened together with sound post harvest management of the highly perishable horticultural commodities.

MOFPI Report, (1998), in their documentation on fruit processing submitted to Ministry of Food Processing Industry, highlighted that fruit and vegetable processing industry in India is highly decentralized. A large number of units are in home scale sector, cottage scale sector and small scale sector having installed capacity of 50 tons to 250 tons a year, where as a smaller

number of large scale Indian and multinational companies have larger installed capacities in the range of 05 to 30 tons per hour. Due to effective liberalization policies and withdrawal of excise duty on fruit and vegetable products there has been significant rise in the growth rate of production of this industry.

## **Research methodology**

Karnataka being second largest producer of fruits in India contributing to nearly 12% of the total production, Karnataka state has been chosen as a cluster which best represents entire nation. Effort has been made in this research paper to gather and analyze first hand information pertaining to cooperative effort made so far by the growers and processors of mango within Karnataka state using structured interviews guided by a schedule. Information gathered is then systematically analyzed to arrive at the meaningful inferences. Research findings are then generalized and concluded for the entire nation.

## **Research findings and discussion**

In Karnataka there are only three cooperatives, formed by the local fruit growers, which are actively functioning namely;

1. '*Bijapur district grape producers and processors society*' located in Bijapur
2. '*Pomegranates Growers Association*' located at Kaladagi Taluk, Bagalkot district
3. '*Suvarna Karnataka Mavu Belegarara Sangha (Regd.)*' located at Hanagal

And there is only one cooperative association, formed by the fruit processors, which is actively functioning namely;

1. '*All Karnataka Pickle Manufacturing Association*' (APKMA), a pickle manufacturers association, formed in the year 2006.

The functioning of these cooperatives is discussed in great detail to know the gaps prevailing in this industry so that concrete measures can be taken by the stakeholders involved to close these gaps.

1. ***'Bijapur district grape producers and processors society'***

Majority of the grape growers of Bijapur district in Karnataka have joined their hands and formed ***'Bijapur district grape producers and processors society'*** in 1987. Present membership stand at around 1300 plus members. This cooperative association functions under the guidelines of national board ***'Grape Growers Federation of India'***. Key activities cum achievements of this association includes;

- Organize seminars and workshops frequently for all the members to familiarize the growers with latest developments that took place in the industry.
- Publicized ***'Draksha Darpan'***, a monthly magazine covering all relevant information pertaining to grape cultivation and processing.
- Help farmers in acquiring new technology.
- Liaise with NHM (National Horticulture Mission), a nodal agency of India and make various schemes (launched by MHM) and facilities (provided by NHM) available to all its members, like; distribution of crates at subsidized rates to store grapes and process them in to raisins, provide them shade nets, etc., at concessional rates.
- Invited big companies like;
  - i. Seven star: A subsidiary of MAHYCO, Maharashtra
  - ii. Bhandari Group of companies, Maharashtra
  - iii. Mallya group, Bangalore
  - iv. Basaveshwar group, Bijapur
  - v. Other leading exporters and well established wineries like; Chateu Vintage Ltd., etc.

To procure the grapes from Karnataka, especially Bijapur district, directly from the growers which ultimately fetch a higher price to growers and also to set up small and medium scale winery in and around Bijapur district.

- Exported 150 containers of fresh grapes in 2006 to various European countries, Malaysia and Gulf countries.



- Launched '*Mahagrape*' a state level brand to market fresh grapes through the association.
- Establishing cold chain facilities like cold storage units, refrigerated vans, etc. to facilitate growers.
- Encouraged Establishment of pre-cooling units (like chilling centers in dairy industry), to bring the temp of the fruits to 0 degree Celsius and then shift to cold storage units, so that freshness of the fruit can be retained for many days. Pre-cooling units charge reasonable price for this process. The current price is around Rs. 5 to 6 per KG.
- Established weather stations at major growing centers, to predict the climatic changes for next couple of days, so that growers can plan their activities.
- Providing extension support to growers, i.e.,
  - i. Which variety to grow
  - ii. How to grow (farming practices)
  - iii. From where to buy the seeds
  - iv. How to cultivate (pruning, feeding, nurturing, watering, etc.)
  - v. Which growth boosters or growth retarders to use
  - vi. From where to buy those growth boosters and growth retarders
  - vii. How to manage the farm (farm management practices)
  - viii. How to control the weeds, pests, insects, etc.
  - ix. When to harvest and how to harvest (harvesting practices)
  - x. How to store (storage practices)
  - xi. How to process (building necessary processing capabilities)
  - xii. How to pack (packaging methods and practices)
  - xiii. How to market (marketing approaches), etc.

## 2. '*Pomegranates Growers Association*'

Located at Kaladagi Taluk, Bagalkot district, is another recently formed cooperative association to promote the interests of local pomegranate growers. The present membership

stroll stands at around 150 plus members. The association is very active when it comes to educating cultivators on various issues listed above and also in exporting the pomegranates through the association.

3. ***‘Suvarna Karnataka Mavu Belegarara Sangha (Regd.)’***

Located at Hanagal, a taluka headquarters in Haveri district, a well known Alphonso (a variety of mango) growing centre, is the only recently started cooperative association to promote the interests of local mango growers. It was established in February 2007 and has around 50 active members. It has just started its activities primarily focused on to educating growers on the above listed issues.

4. ***‘All Karnataka Pickle Manufacturing Association’ (APKMA)***

A pickle manufacturers association, formed in the year 2006. AKPMA has a total membership of around 60. Membership fee is Rs.1000.00 every year. All the members meet frequently at different places or member’s manufacturing premises and discuss the upcoming issues and problems facing them like;

1. Modifications in the FPO (Fruit Processing Order) regulations as laid by MOFPI (Ministry of Food Processing Industries), India. Entrepreneurs who want to enter in to this industry will get all the support from the association and the association will make them aware of all the norms/regulations of FPO and liaise with FPO till they get the FPO license.
2. Changing tax structures. Recently the association succeeded in convincing the State Government to bring down the VAT (Value Added Tax) from 12.5% to 4% during 2007 and later from 4% to 0% during 2008.
3. Upcoming legislative issues pertaining to this industry. Recently the association succeeded in convincing the State Government and the Karnataka State Pollution Control Board (KSPCB) to treat this industry as a green industry which means Pickle manufacturers of Karnataka need not have to take the clearance from KSPCB.

4. The Association arranges seminars, conferences, lectures, visits, etc. so that all the processors get benefited in terms of added knowledge and skills. It also provides escort services to the processors who are facing problems in dealing with the Government offices.
5. Association is also helping the home scale and cottage scale pickle manufacturers to form a consortium and launch their products under one common brand name. Protecting the interests of these manufacturers using some price fixation norms is another important step taken by the association.

## **Conclusion**

Smallness of individual cultivator and processor is the sole cause for their exploitation and is also a prime cause for non-exploitation of the huge potential of this industry. Hence, a cooperative movement amongst farming as well as processing community will strengthen their position with regard to the following;

1. Creating necessary infrastructure like; well developed nurseries, laboratories, storage facilities including cold storage, pre cooling centers, and freeze drying facilities, cargo airports in the vicinity of cultivation centers, state of the art packaging and processing facilities, sound marketing, sales, and extension networks, GIS facility, etc., will become possible.
2. Reaping the benefits of larger economies of scale and higher value addition will become possible.
3. Adopting an integrated approach right from the farm gate till final consumer encompassing all the activities like; planting the right variety quality seedling, harvesting at right time, proper grading, proper storing, in time processing, innovative packaging, effective and efficient marketing and selling, etc., will become possible.

4. Enjoying higher power to bargain in the market will lead to fetching better prices for their output, which in turn will improve the financial condition of the farmers and the processors.

From the above findings it can be concluded that fruit growers and processors of India are slowly thinking of co-operative effort to overcome their weaknesses arising out of being small. This movement (cooperative movement) if accepted and implemented, aggressively, by both the groups, i.e., growers and processors, nationwide, will definitely strengthen the industry.

Enchanting success of ‘**green revolution**’ and ‘**white revolution**’ in India has already set the trend. A similar approach needs to be followed to turn around this industry and making ‘**horticulture revolution**’ a successful one.

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