

Marketing Horticultural Produce: Strategies Adopted During the Covid-19 Lockdown Period



Indian farmers producing horticultural crops faced difficulty in marketing their produce during Phase 1 of the COVID-19 lockdown period. In this blog, R Venkattakumar, TM Gajanana and VKJ Rao discuss some of the innovative models operated by four different agencies to help farmers overcome this crisis, and suggest some

strategies that can be adopted during similar situations.

CONTEXT

During Phase 1 of the COVID-19 pandemic period (April, May and June 2020), farmers, particularly in Karnataka State, faced difficulty in marketing their produce due to restrictions in logistics. The buyers and aggregators could not move freely to collect the produce produced by the farmers. In such a scenario, horticulturists had a tough time in reaching the consumers with their perishable commodities, especially fruits and vegetables. However, certain players such as development departments, voluntary associations, farmer producer organizations (FPOs), and private players, operated in their own way to help the farmers in marketing.



A total of 75 farmers were contacted through telephonic or personal interviews, apart from the office bearers of the models, to collect data about the operations of innovative models. Most of the models mostly operated in and around Bengaluru city of Karnataka State. Under FPO models, the Palamner FPO

model was also considered because even though it is located in Andhra Pradesh, it operates in Bengaluru city due to its proximity to this place. These models were dealing with farmers, who were cultivating mostly fruits and vegetables, which are highly perishable in nature. The major fruits dealt through these models were mango, grapes, papaya, banana, guava, custard apple, lemon, rambutan and kamalam (dragon fruit), etc., while the major vegetables were tomato, chilli, beans, cucumber, brinjal, raw banana, greens, bottle gourd, yardlong bean, cabbage, pumpkin, etc. Farmers faced several challenges, such as getting transport passes, lack of information about actual demand, labour shortage, no demand for exports, no inter-state transaction, price fall due to decrease in demand and drop in demand due to closure of restaurants, etc., during Phase 1 of the lockdown period.

INITIATIVES TAKEN BY DEVELOPMENT DEPARTMENTS AND THEIR COPING STRATEGIES

The Horticulture Producers Marketing and Processing Co-operative Society Ltd. (HOPCOMS) and Karnataka State Mango Development and Marketing Corporation Ltd. adopted e-pass strategies to procure and supply the produce from farmers to consumers during Phase 1 of the lockdown period (Box 1). It was not easy for these organizations to facilitate the farmers to market their produce given the COVID rules and restrictions.



Managing the restrictions

HOPCOMS issued e-passes to the farmers for free movement of their vehicles with the produce. Both the registered and non-registered farmers were asked to supply the produce to the nearby HOPCOMS collection centres. The farmers who supplied from far-off places such as northern parts of Karnataka were

asked to supply directly to Bengaluru centres. In the case of Mango Development Corporation, the green passes issued by the Department of Agriculture were utilized by the mango growers, while supplying the fruits to Post Offices. Apart from green passes, the Mango Development Corporation also issued passes for the free movement of farmers' vehicles.

Box 1: Initiatives by Development Departments

A. HOPCOMS Model, Karnataka

The Horticulture Producers Marketing and Processing Co-operative Society Ltd. (HOPCOMS) is the marketing wing of the Department of Horticulture (DoH), Government of Karnataka (GoK), involved in procurement and marketing of horticultural produce produced by the member-farmers of this society. It procures produce from the farmers and sells it through its sales outlets established in different parts of the states. During phase 1 of the COVID-19 pandemic in the country, HOPCOMS came up with an innovative marketing model not only for the member-farmers but also for other farmers. The farmers who got the special passes supplied fruits and vegetables to HOPCOMS. HOPCOMS in turn supplied these products to more than 90 government/private institutions, such as hospitals and hostels. HOPCOMS got a profit of Rs. 1.5 crores by supplying horticultural produce to these institutions. Apart from supplying to these institutions, HOPCOMS had a tie-up with more than 2500 associations of apartments in Bengaluru. The sales figures ranged from Rs. 45000- to Rs. 60000 per day during April 2020. HOPCOMS also sold the horticultural produce through its sales outlets and the sales through these outlets doubled during the lockdown period.

B. Karnataka State Mango Development and Marketing Corporation Ltd.

Karnataka State Mango Development and Marketing Corporation Ltd., is a unit of the Government of Karnataka (GoK), which acts as a development agency for the promotion of mango development and marketing activities through various schemes of the state. During phase 1 of the pandemic lockdown in the country, the Board came out with a model in order to support the mango growers of the state. The mangoes supplied by the farmers in pre-packed boxes were distributed by the Board through Post Offices (PO) via a marketing tie-up. The farmers were paid after the delivery and the GPO was also paid transportation and postal charges. More than 1000 tonnes of mango were sold through this model. The quantity that remained after delivery to the consumers were supplied to the apartments in Bengaluru at a sale price fixed on mutual consensus.

Sustenance of contacts

Ensuring quality of the produce

The farmers were asked to send photos of produce sample to HOPCOMS. HOPCOMS assessed the quality of the produce and then approved it for transportation. As for the Mango Development Corporation, only registered growers were allowed to deal with the Corporation, who were already following the Global Guidelines for Good Agricultural Practices (GAP).

Informing farmers and consumers on the new arrangements

HOPCOMS informed both the registered and non-registered farmers through targeted WhatsApp groups, so that the information about procurement reached the farmers in time. HOPCOMS had regular

videoconference meetings with the consumers to collate their demands for fresh fruits and vegetables, especially from apartment associations. In the case of Mango Development Corporation, the Corporation maintained a portal (B2C), to which the registered farmers and consumers had access and got updates on demand and supply. In fact, the portal acted as a platform to connect sellers and buyers.

Monitory benefits realized by the farmers

The beneficiaries of the HOPCOMS model, during the lockdown period, realized considerable incremental monetary benefits as compared to the previous period, as a result of arrangements made by HOPCOMS that bypassed middlemen. These benefits were to the tune of Rs. 11/kg for coconut, Rs.3/kg for tomato, Rs. 6 for beans, Rs. 9 for capsicum, Rs. 2 for cabbage, Rs. 8 for ridge gourd, and Rs. 4 for onion and brinjal. This value was arrived at after accounting for transportation charges. Similarly, such profits were Rs. 14 for Alphonso mangoes, Rs. 13 for Mallika mangoes, and Rs. 3 for Totapuri as realized by the beneficiaries of Mango Development Corporation.

HOPCOMS maintained contact with the non-registered farmers for further supply even after the lockdown period. HOPCOMS' contact with the private organizations such as hospitals and hostels as well as Apartment Associations in Bengaluru continued for supply of fresh fruits and vegetables. In the case of Mango Development Corporation, the Corporation tried to have agreements with organizations like Flipkart, so that farmers from places far away from Bengaluru such as Mangaluru, Dharwad, Davanagere and Belagavi, can supply produce during shortage situation at the Corporation level.

INITIATIVES BY FARMER PRODUCER ORGANIZATIONS (FPOs) AND THEIR COPING STRATEGIES

Puthari Horticulture Farmers Producers Company Limited (PHFPCL) and Palamner Horticulture Farmers Producers Company Limited, Palamner, Andhra Pradesh (Box 2) are the two FPOs, whose initiatives were studied in order to understand their coping strategies during the lockdown period.



Managing the restrictions

The governments of Karnataka and Andhra Pradesh issued passes/green passes to needy farmers towards transportation of harvested fresh fruits and vegetables, through state development departments such as Department of Agriculture and Department of Horticulture. However, both the Puthari and Palamner FPOs managed their own transportation arrangements, so that they could aggregate the produce from farmers right from the farm gates. In the case of Palamner FPO, some of the farmers who got the green passes, directly supplied the produce to the FPO.

Arrangements to procure and sell fresh fruits and vegetables

After assessing the huge demand for fresh fruits and vegetables from the consumers of Kodagu district, the Puthari FPO based on their earlier work and resulting contact with farmers of five taluks – Somavarpet and Madikeri taluks of Kodagu district, Hunsur, Virajpet and Periyapatna taluks of Mysore district – procured fresh fruits and vegetables through their own transportation arrangements and distributed it to the consumers. Palamner FPO, after identifying the demand for vegetables decided to supply to three companies located in Palamner (Amara Raja Group of Institutions - some of the construction works for these companies such as battery manufacturers, fruit processing industries and guest houses had more than 1000 workers) that had about 7000 workers. The orders from companies were collected by the FPO, and in turn given to vegetable growers. The growers supplied vegetables to the FPO. The FPO procured, graded, packed, and supplied to the identified companies.

Box 2: Initiatives by FPOs

Puthari FPO, Kodagu, Karnataka

PHFPCL was established in 2017. It is functioning in Kodagu district of Karnataka to extend diversified services to farmer-members from the district. This FPO is being promoted by Krishi Vigyan Kendra (KVK), Gonikoppal, Kodagu, Karnataka, which is functioning under the administrative control of ICAR-Indian Institute of Horticultural Research (IIHR), Bengaluru. It serves its member-farmers (1200 farmers and Rs. 7000/- is the value of each share) through inputs (fertilizers, chemicals, farm implements and tools, etc.), retailing, output procurement (black pepper and coffee), and sale of farm produce (milk, eggs, fresh fruits and vegetables, etc.). During the lockdown period, the supply chain was disrupted and the consumers of Kodagu district suffered from lack of supply of fruits and vegetables. Understanding this situation, the FPO initiated tie-up with horticulturists of five taluks in Karnataka, procured the produce and supplied to the consumers at the premises of KVK, Gonikoppal, Kodagu district. Based on this experience, KVK gave a regular space for the FPO to operate a 'Rural Mart', so that fresh fruits and vegetables could be supplied regularly.

Palamner FPO, Andhra Pradesh

Palamner FPO is serving its producer members from Palamner taluk of Andhra Pradesh through different kinds of extension services such as supply of inputs (seeds, planting material, fertilizers, plant protection chemicals, farm tools and implements), and procurement and marketing of produce. The farmer-members (300-400) of this FPO had a tough time with marketing their produce, especially vegetables, during Phase 1 of the lockdown period of COVID-19. The FPO helped these farmers through direct marketing. Better rates than the market rate were given to the farmers and with a Rs. 1/kg margin for the FPO, vegetables were distributed to the companies. Farmers benefitted from the 'no commission' cost. Based on the demand, farmers started diversifying into cultivation of vegetables such as green chilli, ladies finger, ridge gourd, bottle gourd, and bitter gourd instead of merely growing tomato, cauliflower and cabbage. Every day, around three tonnes of vegetables were supplied to the companies. The remaining vegetables were distributed to apartments in Bengaluru and also sold through roadside stalls arranged by the FPO.

Farmer benefits

Rural Mart is a concept that has been promoted by NABARD to FPOs to sell the produce from their member farmers. Puthari FPO, based on its experience of distribution of fresh fruits and vegetables, initiated this project of Rural Mart with financial support from NABARD. Now, apart from fresh fruits and vegetables, chicken, fish, pork, mutton and groceries are also being sold. The KVK facilitated the FPO to get the Rural Mart project cleared and provided the space for the FPO to establish the Rural Mart on its premises. With regard to Palamner FPO, the vegetable growers benefitted through the interest-free COVID loans arranged by FPO from financial organizations. The FPO is planning to establish a primary processing centre and buy air-conditioned vegetable vending vans under Operation Green project of the Government of India (GoI).

Monitory benefits realized by the farmers

The beneficiaries of Puthari FPO realized additional monetary benefits during the lockdown period over the previous period as a result of arrangements made by Puthari FPO. These profits after accounting for the transportation charges was to the tune of Rs. 26/kg for mango. Likewise, it was Rs. 20 for grapes, 4 for papaya, 6 for banana, 8 for pineapple, 4 for cabbage, 2 for chilli, 6 for pumpkin, 5 for watermelon, 7 for tomato, 3 for sweet potato, 6 for elephant foot yam and Rs. 2 for yardlong bean. Similar benefits realized by the beneficiaries of Palamner FPO were Rs. 6/kg for mango, 8 for ridge gourd, 5 for tomato, 6 for cabbage, 9 for gongura (green vegetable), 9 for raw banana, 7 for chilli and 2 for brinjal.

INITIATIVES BY VOLUNTARY ASSOCIATIONS AND THEIR COPING STRATEGIES

The UAS alumni association and Apartment Association of Bengaluru (HSR Layout), Karnataka State, adopted certain strategies to help farmers during the pandemic situation. Both associations operated in unique ways to establish links between producers and consumers.



Recognizing the problem

Through the electronic media (TV news), the office bearers of this association came to know that the grapes harvested by the grape growers in and around Bengaluru were being wasted due to lack of access

to marketing facilities during Phase 1 of the lockdown period. In order to support the grape growers during this crisis situation, the office bearers of this association took the initiative to link the farmers and consumers. They put out a press release in newspapers and electronic media about direct marketing of grapes to the consumers in public layouts and apartments.

Facilitating linkages

The association advised the grape growers to arrange common transport facility for supply of the harvested grapes through a group of grape growers and made them sell it in different apartments and layouts directly. The passes issued by the Government of Karnataka through the Department of Horticulture were utilized by the grape growers to arrange the transport facilities. The association also informed the residents of layouts and apartments through print, electronic media and WhatsApp groups. By this arrangement, both farmers and consumers benefitted. Around 400 tonnes of grapes were sold through this arrangement during April and May 2020. Here, the role of the association was mainly in linking the grape growers and the consumers through their facilitation (communication through electronic, print and social media). However, this kind of facilitation itself helped the grape growers to a considerable extent in selling their produce.

Role of Apartment Association (HSR Layout), Bengaluru

In order to overcome the problem of consumers getting fresh fruits, an arrangement was made by the volunteers (one was a scientist from ICAR-Indian Institute of Horticultural Research [IIHR], Bengaluru, and another a retired bank official), who reside in and around the 30 apartments located in HSR Layout of Bengaluru, within a radius of 7 kilometers, to collect the orders from the public and the quantity that can be supplied by the farmers directly to the apartments. The scientist from IIHR, through contacts from his own native village and surrounding villages, mobilized the farmers in supplying fresh fruits. The retired bank official took the lead in collating the orders from the residents of apartments through WhatsApp communication and also through word of mouth. The communication between the volunteers and the farmers with regard to quantity to be supplied was made through e-facilities. Initially, the group of farmers themselves supplied the fruits at a common place, which was convenient for the residents of the apartment to come and buy. Representatives from the farmers visited the apartments and involved themselves in sales. However, after some time, unemployed youth were engaged as delivery boys by the apartment association to supply the fruits from the villages on commission basis. The passes issued to the farmers for transportation was utilized by the delivery boys, while supplying the fruits to the apartments from the villages. Online payment was made to the farmers after collecting the money from all the consumers who had placed orders.

Monitory benefits realized by the farmers

As beneficiaries of the model operated by UAS Alumni Association, the grape growers realized additional monetary benefit of Rs. 18/kg more than the previous period, after accounting for the transportation charges. Similarly, such benefits realized by the beneficiaries of apartment association was observed to the tune of Rs. 63/kg for kamalam (dragon) fruit. It was Rs. 9 for papaya and banana.

INITIATIVES BY PRIVATE PLAYERS AND THEIR COPING STRATEGIES

Model operated by TENESIRI Vegetables, Karnataka

TENESIRI Vegetables is a private initiative to link the sellers, buyers and consumers of vegetables through its specially developed mobile app. It helps in collecting the orders from both buyers and consumers and notifying the sellers. This initiative serves both the commercial vegetable growers and organic vegetable growers. The commercial vegetable growers are linked by B2C model of the app, whereas the organic

vegetable growers are linked through the B2B model of the app. The organic growers are mainly from Belagavi region and the commercial vegetable growers are from Chikkaballapur and Hoskote region of Karnataka. During Phase 1 of the lockdown period, this organization helped many vegetable growers, who had registered through the app to sell their produce, without any problem. The additional monetary benefits realized by the beneficiaries of this model ranged from Rs. 9/kg for beans and capsicum to Rs. 1 for chilli, after accounting for transportation charges. It was Rs. 5 for cucumber, 6 for tomato, 4 for ivy gourd, and 4 for radish.

Model operated by Village Story, Karnataka

Village Story is yet another private initiative to bring together farmers, buyers and consumers. This initiative has its own Facebook, WhatsApp and Instagram applications, which have more than 25,000 clients. Clients include all the stakeholders of agriculture. Clients interact among themselves based on their business interests and needs, and thereby benefit each other mutually, through their transactions. The additional monetary benefits realized by the beneficiaries of this model was Rs. 4/kg for tomato, 3 for guava, 19 for grapes and custard apple, after deducting transportation charges.

Model operated by Farmers of Kamalam (dragon) Fruit, Bengaluru, Karnataka

Kamalam (dragon) fruit is gradually becoming a preferred fruit crop for cultivation by farmers in Karnataka due to its demand from health-conscious consumers. One such farmer is Mr Prasad, from Sira city, Tumkur district, Karnataka, who has started dragon fruit cultivation based on the demand from Mumbai markets. Usually, he sends the harvested fruits from his farm and that of the 5-6 neighbouring farmers to Mumbai market for an average price of Rs. 75/kg. Due to the lockdown they were not able to send the fruits to Mumbai market. In such a scenario, purchase of fruits from an IT employee through direct contact put forth the idea of supplying fruits to apartments. Hence, they identified a group of apartments as the target and supplied fruits (weighing 300 gm and above) to them for Rs. 130/kg, after grading and packing it under their own brand. After grading, the fruits weighing below 300 gm were supplied to a group of bakeries for Rs. 200/kg. Accrual of profit through such direct marketing made them go for contract farming with about 100 farmers, in order to sustain this model of direct marketing. Also, there is a move – through this initiative – to establish a processing unit exclusively for Kamalam (dragon) fruit for the preparation of fruit bars, jam, and powder, etc.



The initiatives of the development departments such as HOPCOMS and Mango Development Corporation provide confidence not only to the beneficiaries of these departments but also to the common farmers who are able to avail the services of these department during such uncertain times. These initiatives also provide support to a larger number of farmers and thereby ensure that farmers can undoubtedly avail adequate and necessary support in marketing of their produce without much difficulty. This will encourage farmers to participate in government-sponsored schemes with greater involvement. The initiatives of development departments are suitable for covering the stakeholders of a wide range of commodities on a large scale. On the other hand, the initiatives made by the FPOs provide their beneficiaries with assured marketing support and thereby enhance their faith in these FPOs. This will help improve their patronage in the business activities of the FPOs, and thus strengthen the overall business health of the FPOs, which is the main motto of the FPOs. The voluntary associations helped small groups of farmers, but benefitted a lot from the consumer point of view, hence it can be replicated for need-based situations. These applications can be replicated in densely populated cities, where the consumers look forward to buy fresh and high quality fruits and vegetables during lockdown like situations. Similarly, though the private initiatives address the marketing needs of a small target group (both farmers and consumers), it sets out a lot of lessons for the government mechanism in terms of innovations on linking sellers to buyers, sellers to consumers, and buyers to consumers.



COMMON STRATEGIES ADOPTED BY INITIATIVES

- Effective utilization of social media (WhatsApp, Facebook, Instagram, etc.) to communicate among both farmers (sellers) and consumers, i.e., both B2B and B2C business models.
- Identification of appropriate sellers (farmer groups or FPOs) for procurement of produce, such as fruits and vegetables.
- Targeting hostels/business organizations/restaurants and apartments to facilitate demand and supply in bulk.
- Entering into contracts/agreements with sellers (farmers/FPOs) for setting of prices of the produce.
- Effective application of common online platforms to connect the stakeholders of both B2B and B2C transactions.

- Grading and packing the produce under their own brand name for distribution, in order to create trustworthiness among the consumers. This creates awareness among the sellers/farmers to agree upon grade-based pricing for higher realization of returns.
- Better assured price for the sellers (farmers/ FPOs) than market price. Similarly, assured supply of quality produce for consumers directly from producers.
- Selling price set after discussion with the sellers (farmers/FPOs) and the consumers, which benefits farmers by saving on the commission charges paid to middlemen and unauthorized deductions.
- Apart from the use of social media, print and electronic media were also effectively utilized to popularize the business activities of these models.

CONCLUSION

An understanding of the models operated by four groups of players for marketing of fruits and vegetables by farmers during Phase 1 of the COVID-19 lockdown period, helps in generalizing certain conclusions for further analysis. The models operated by the development departments, such as HOPCOMS and Mango Development Corporation, can be applied to address the needs of farmers as beneficiaries of government-run schemes. The situation-specific links and tie-ups developed through these initiatives with other public and private organizations can be further strengthened for the benefit of the farmers. The models operated by the FPOs suggest that such initiatives will strengthen the patronage by producer members. Such initiatives taken in the course of addressing the needs of the farmers during such unfavorable situations also lead to effective utilization of various schemes run by the government for the benefit of FPOs. The voluntary association models help greatly to address the needs of consumers in thickly populated cities, like Bengaluru, and also benefit a few groups of farmers. The models operated by the private players offer a number of strategies for effectively linking sellers, buyers, and consumers.

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