

Emerging Linkages between Consumers and Agricultural Producers during the Covid-19 Pandemic: A Case Study from Bengaluru, India

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Introduction

The COVID-19 pandemic shocked food systems around the world (Workie et al. 2020). Within days of the World Health Organization declaring the COVID-19 virus outbreak as a pandemic: borders closed, international travel came to a halt and lockdowns were imposed in many countries throughout the world (Shiraeef 2020). On March 24, 2020, despite very low numbers of infections, the Indian government announced one of the strictest lockdowns in the world (Gettleman & Schultz 2020). The sudden lockdown induced many shocks, from the mass migration of day-laborers from cities back to their native villages (Frayer & Pathak 2020) to long queues for panic shopping (Bengaluru Bureau 2020).

For the Indian food system, shocks along the supply chain meant farmers were left without markets to sell their produce, prices rose and consumers had to navigate movement restrictions, new hygiene regulations, and their personal fears of contracting COVID-19 (Bharadwaj 2020a, Reardon et al. 2020). Limited hours of operations of wholesale markets and local travel restrictions, compounded with labor shortages both on-farm and along the value chain, presented farmers with a multitude of challenges in selling their produce (Bharadwaj 2020b, P. Kumar et al. 2021, Raj 2020). Consumers, seeing the plight of farmers on social media and in the news, saw an opportunity to support farmers through direct marketing (B.S.S. Kumar 2020). These new “lockdown farmers markets” and “farm to fork” activities drew media attention, hailing the resilience of farmers and the supportive efforts of consumers (Abraham 2020, Kannadasan et al. 2020).

The first lockdown in India lasted from the end of March to mid-June 2020. Following the end of this first lockdown we conducted a study in the south Indian mega-city of Bengaluru to better understand the responses of agricultural producers and consumers to the changes induced by the COVID-19 pandemic. Home to over 12 million people, Bengaluru is known historically as the garden city, and more recently as the IT capital of India; it is one of the fastest developing metropolises in the Global South (Government of Karnataka 2021b, World Population Review 2020).

The rapid economic growth and lifestyle transformations occurring in Bengaluru have given rise to a burgeoning middle class, whose consumption practices raise concerns for sustainability and the environment; namely land use changes for food production and related food loss (Sahakian et al. 2018). Food consumption practices change as incomes rise (Shetty 2002). Among the middle class, as concern for personal health and wellbeing increases, the consumption of high quality organic products, traditional foods and locally-grown foods gains importance (Erler 2019).



Fig. 1: Screenshot from the COVID-19 Farm to Fork Bangalore Facebook group (Shivarudrappa 2020).

With the onset of the COVID-19 pandemic many food shopping activities changed: markets operated for limited hours, social distancing practices were enforced, and online options for purchase and delivery gained customers (Bharadwaj 2020b, Bhattacharya 2020). Farmers and consumers connected via social media for direct sales. In light of these changes, we sought to understand how widespread these direct marketing activities were during the first lockdown. This study contributes to the larger discussion of developing local sustainable

food systems through rural-urban linkages and direct marketing.

Food Systems

We see the disruptions caused by the COVID-19 pandemic as an opportunity to reevaluate the local food system to make it more sustainable. In this study we apply the City Region Food System (CRFS) framework as a practical and holistic approach to food system design. The CRFS framework is “the complex network of actors, processes and relationships to do with food production, processing, marketing and consumption that exist in a given geographical region that includes a more or less concentrated urban center and its surrounding peri-urban and rural hinterland; a regional landscape across which flows of people, goods and ecosystem services are managed” (Jennings et al. 2015: 29).

In the context of Bengaluru, farmers from the peri-urban and rural areas provide a vast majority of the fresh vegetables sold in the city. Sami and Surie (2017), in their Hungry Cities Report on Bengaluru’s food system, identify three major outlets where farmers sell their produce: Agricultural Products Marketing Committee (APMC), Horticultural Producers Co-operative Marketing and Processing Society (HOPCOMS) and farmer networks. Some middle-class consumers are also seeking out organic products and alternative food networks, though this is currently a niche activity (Erler & Dittrich 2020). In general, an estimated 80% of food consumed in India is non-grain perishables which need to be restocked frequently (Reardon et al. 2020). With the lockdown disrupting marketing channels and consumer attitudes, there may be an opportunity for alternative food networks, especially direct marketing or community support agriculture (CSA) activities, to reach a wider audience of consumers interested in maintaining their health and supporting local farmers.

Methods

We conducted a study in Bengaluru, India, from July to September 2020 to understand the direct marketing activities that unfolded under lockdown and what can foster or hinder such activities. We used online and telephone surveys with consumers and producers in Bengaluru Urban, a geographical area of 2,196km², which includes the city of Bengaluru and the surround peri-urban region (Government of Karnataka 2021a). In our online survey we targeted urban, middle-class consumers because they comprise a sizable consumer demographic whose consumption practices are significant and highly influential in sustainability discussions. We applied the Kuppaswamy scale (Mohd Saleem 2019) to ensure that our sample is from middle-class respondents by calculating self-reported monthly household income and the education and occupation of the head of household. We used IP addresses to ensure that our sample is from Bengaluru-based

respondents. In total 117 complete responses were received from Bengaluru Urban residents. We also conducted telephone surveys with 117 Resident Welfare Associations (RWAs) and six Farmer Producer Organizations (FPOs) to better understand their engagement in and motivations for direct marketing activities during the lockdown.

Results and Discussion

To better understand consumer attitudes towards direct marketing, we asked respondents to consider six factors as either positive or negative aspects of purchasing produce directly from farmers. The six factors are: variety of produce, locally produced, freshness, communication with farmer, price, and logistics. Our results, though not representative, show that consumers are generally interested in purchasing fruits and vegetables directly from farmers. The freshness factor, selected by 86% of respondents, is the most positive aspect of direct purchasing. Locally grown (55%) and price (53%) were also seen as very positive aspects of direct marketing. Logistics (56%) and communication (30%) between consumers and producers were selected as the most negative aspects of direct purchasing.

Respondents were not provided definitions for positive or negative, therefore these responses are based on individual interpretation and association of these words in relation to the six factors. We interpret the negative aspect of communication between consumers and producers is related to the effort required to organize the logistics of purchase volume, payment and delivery.

Table 1 shows that purchases directly from farmers, while small compared to other outlets, is the only category that increased during the lockdown.

Table 1: Fresh vegetable and fruit purchasing behavior before and during lockdown (n=117)

Type of Vendor	Before lockdown	During lockdown
Farmer	8%	9%
Wet (open-air) market	38%	21%
Pushcart vendor	45%	40%
Vegetable/Fruit stand	78%	69%
Supermarket	46%	32%

From the online survey only three of 117 respondents are currently members of a CSA. However, 45 respondents (38%) said that they would like to join a CSA but it is not available in their area. We see this result as a promising indication for interest in alternative food networks and as an opportunity for developing rural-urban linkages.

RWAs which engaged in direct marketing, 42 of the 117 surveyed, did so primarily to help farmers and reduce outside shopping trips for their residents. Even more RWAs, 96 out of 117, engaged in the distribution of food donations to households in need during the lockdown. As their general responsibilities are more focused on community infrastructure issues, their long-term engagement in direct marketing is strongly dependent on need, motivation and convenience.

For producers, access to diverse markets, like direct marketing in addition to wholesale markets, can bolster their resilience—especially in times of shocks (Sukhwani et al. 2020). However, the scale of operations must remain economically viable for producers to continue engagement. As argued by P. Kumar et al. (2021), the vegetable farmers need support, not only from the government but also from civil society and community groups to ensure the continued sale and flow of fresh fruits and vegetables. As seen in our results from the six FPOs surveyed, five engaged in direct marketing during the lockdown. These five FPOs represent 4,700 farmers. The FPOs worked with RWAs (2), had government assistance (2) or used a personal contact (1) to make these arrangements. For three FPOs direct marketing to apartment buildings or neighborhoods is a regular marketing channel.

Both RWAs and FPOs used technology, especially messaging apps and social media, to organize direct marketing. The use of such technology can help to strengthen rural-urban linkages and foster better communication and logistics for direct marketing activities. Digitally linking producers and geographically-clustered consumers can increase the likely success of direct marketing initiatives, in turn bolstering sustainability and resilience in the local food system.

Conclusion

Developing rural-urban linkages through direct marketing activities is one way to make the food system in Bengaluru more sustainable. The expected growth of FPOs and the post-pandemic demands of health conscious consumers (Padhee & Pingali 2020) present new opportunities for direct marketing. With close to 1,000 registered RWAs and 22 registered FPOs in Bengaluru, the possibilities for organizing direct marketing through these existing organizations in Bengaluru has potential and should be explored in future research. What we are suggesting here is not that RWAs take on the role of intermediary between consumers and producer; rather, that FPOs connect with RWAs to find communities of consumers. This is potentially one new way to connect consumers and farmers that continues beyond lockdowns and the COVID-19 pandemic.

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