International Journal of Innovations & Research Analysis (IJIRA) ISSN : 2583-0295, Volume 01, No. 02, July - September, 2021, pp 01-06

ONLINE RETAILING OF FRUITS AND VEGETABLES IN INDIA

Amit Lathiya* Munira Habibullah*

ABSTRACT

Fruits and vegetables are an unavoidable component of our everyday diet. They keep us healthy while also adding diversity, flavour, and texture to our everyday meals. In the age of e-commerce, not only business-to-business, but also business-to-consumer selling of fruits and vegetables is becoming more digital. This article attempts to present the scenario of online retailing of fruits and vegetables and relevant factors and challenges to it in India.

Keywords: Online Retailing, e-Tailing, Fruits and Vegetables, e-Commerce, Business-to-Business.

Introduction

The varied climate of India assures the availability of a wide range of fresh fruits and vegetables. After China, India is second in the world in terms of fruit and vegetable output. According to the National Horticulture Board's National Horticulture Database (Second Advance Estimates) for 2019-20, India produced 99.07 million metric tonnes of fruits and 191.77 million metric tons of vegetables. Fruits were grown on 6.66 million hectares, while vegetables were grown on 10.35 million hectares. Fruits and vegetables are in high demand ever since because they keep us healthy and offer variety, taste, and texture to our daily meals. To gain the health and nutrition advantages, the World Health Organization (WHO) recommends taking at least 400 g per day (FAO, 2020). We can't imagine surviving without fruits and vegetables.

According to Ministry of Economic Development, Job Creation and Trade, Government of Ontario (2021), E-commerce is the process of purchasing or selling goods or services through the Internet. Because of the convenience and quickness with which people may purchase online, it is becoming increasingly popular. (ontario.ca, 2015). As various factors are leading towards the increase of e-commerce or online retailing of the range of the products via internet, food and specifically fresh fruits and vegetables are also not an exception to that. The trend towards purchasing fruits and vegetables online is increasing now a day. This article attempts to present the scenario of online retailing of fruits and vegetables in India and its related concepts.

Retailing

The term "retail" is derived from the French word "retaillier," which meaning "to cut a piece of" or "to split bulk." Retailing is defined as a collection of behaviours or actions used to provide a product or service to consumers for personal or family use. It is in charge of matching specific client requirements to all producer supply. Retail is the sale of goods to end users, not for resale, but for the buyer's own use and consumption. Retail is the sale of items from a single point of purchase straight to a customer who wants to use that item. A single point of purchase might be a physical store, an online shopping website, or a combination of the two.

^{*} Assistant Professor, Planning Cell, Office of Directorate of Research, Navsari Agricultural University, Navsari, Gujarat, India.

Professor, Department of Business and Industrial Management, Veer Narmad South Gujarat University, Surat, Gujarat, India.

International Journal of Innovations & Research Analysis (IJIRA) - July - September, 2021

E-commerce

Electronic commerce, often known as e-commerce, is the trading or facilitation of dealing in goods or services over computer networks such as the Internet. The purchase and selling of products and services through the internet, as well as the movement of cash and data to complete the transaction, are all examples of e-commerce.

E- Retailing

E-retailing is the retail sale of products and services using electronic media, especially the internet. E-retailing is also known as electronic retailing or e-tailing. Consumers refer to it as online shopping or online purchasing. E-retailing, often known as e-tailing, is a type of e-commerce. It is especially focused with the B2C or Business to Customer model of e-commerce, which comprises sales of products or services from a business organization to a consumer. E-retailing is a subcategory of e-commerce. (Pirakatheeswari, 2010)

E- Retailing in India

E-commerce was initially introduced in India in the early twentieth century, but it has gained popularity in the recent decade. Technological advancements in many parts of life in India are driving forces for the growth of e-commerce in this country, as they have elsewhere in the world. E-retailing has a significant possibility in India due to the exponential rise in the number of internet users. The major advantage is that both buyers and sellers save a substantial amount of time and money.

Thanks to 'Digital India' programme', in comparison to 560 million internet connections in 2018, the number of internet connections in India grew to 760 million in August 2020. From the total internet connections, around 61 percentages were made in metropolitan areas. On the other hand, by the end of 2021, internet penetration in rural India is anticipated to increase by 45 percent. The country has the second-highest number of active internet users in the world and is also one of the world's top data consumers. With an average monthly data use of 10.40 GB, it has the greatest data usage per smart phone. (IBEF, 2021) Increasing accessibility and usage of the internet and number of smartphone users is the most important contributor to the growth of India's online grocery business. Furthermore, the growing number of working women, technically competent millennials, and ultra-secure payment infrastructure are significant drivers of the Indian online grocery business. (techsciresearch.com, 2019)

In India, the online retail industry accounts for 25 percentages of the entire organized retail market and is anticipated to grow to 37 percentages by 2030 as per an estimate presented in Indian Brand Equity Foundation. It also states that by the end of the financial year 2020-21, the e-commerce sector is anticipated to have grown to about Rs. 1.8 trillion (US\$ 25.75 billion). It is predicted that by the year 2025, Indian e-retail industry will exceed 300 to 350 million buyers reaching the Gross Merchandise Value (GMV) to 100-120 billion US dollars. Lower data rates and efforts to improve customer experience have resulted in a fast growth in consumer penetration in Indian e-commerce, as online platforms innovate to enroll the next billion of shoppers. (IBEF, 2021)

Online Grocery Retailing in India

The worth of Indian grocery industry was around 2.9 billion US dollars in the year 2020. It is estimated to increase at a 37.1 percent compound annual growth rate (CAGR) up to the year 2028.(Grand View Report, 2020). Packaged Food & Beverages, Fruits & Vegetables, Personal Care, Household Products, and Others are the market segments. The packaged food and beverage category has the highest market share, while the personal care and household products categories are anticipated to expand the quickest in the future years. (techsciresearch.com, 2019)

As per the joint report of RedSeer and Bigbasket (Brand Intelligence), after the Covid-19 pandemic the customer demand for comfort foods like cookies, noodles, hygiene products like sanitizers has increased, but demand for daily necessities remained high in online mode. As compared to the precovid era where snacks and branded foods rose by 5% quarterly, it increased by 75% in the quarter ending June, 2020. (Economic Times, 2020)

Online Selling of Fruits and Vegetables in India

Fruits and vegetables is an important category of online grocery stores. Online selling of fruits and vegetables are increasing. The Covid epidemic has hastened the transformative transition in ebusiness. The two end-users in the supply chain, the consumer and the farmer, are likely to benefit the most. (Ojha, 2021)

2

Amit Lathiya & Munira Habibullah: Online Retailing of Fruits and Vegetables in India

Even though the Indian economy is in a slowdown, there is a stable demand for fresh produce due to a focus on home cooking and health concerns. Furthermore, as the covid pendemic has given a hit to hotels, restaurants, and catering (popularly known as horeca), it has also increased the scope for e-commerce and food deliveries. It is likely to remain growing. (Nieuwsbericht, 2020)

The online retail industry for fruits and vegetables is the fastest-growing sector in the Indian economy. Retail, according to numerous observers, is one of the pillars of the Indian economy. Fresh fruits and vegetables, rice, spices & sauces, packaged goods, beverages, utilities, meats, and other items are available online. Consumers increasingly want their retailers to supply them with the most cost-effective, efficient, and timely items available. They are leading the changes in present business model. Purchasing behaviour of consumers for daily essentials is changing. (otpexpress.in)

There are various players who sell fruits and vegetables online along with other grocery items in Indian market, here are few leading players out of them.

Big Basket

Big Basket is presently the leading online store for purchasing fresh vegetables and fruits. The largest grocery shop sells fruits, vegetables, meats, eggs, dairy goods, drinks, personal care items, and much more. It claims to give minimum discount of 5% on all the products. The offers come in form of buy one get one free and cash backs etc. The shop has expanded throughout India, encompassing major cities and small communities. It is also one of the best-rated online grocery retailers in India. (Kanodia, 2019)

Grofers

Grofers is also a popular online grocery shopping platform in India, claiming to be fast in order delivery and offering the greatest food deals. Apart from fresh fruits and vegetables, it offers variety of daily essentials like milk, bread, cooking oil, ghee, rice, spices, frozen food, chocolates, chips, biscuits and so on. The delivery service is operational in major cities of India like Delhi, Gurugram, Faridabad, Kolkata, Mumbai, Bengaluru, Hydrabad, Chennai, Pune, Jaipur, Lucknow, Kanpur, Agra, Navi Mumbai, Nashik and many more. In Gujarat it presently delivers at Ahmedabad and Vadodra. (grofers.com)

JioMart

JioMart is Reliance Retail Limited's online shopping platform. It was launched in more than 200 cities and towns throughout India in 2020. JioMart's grocery selection includes fresh fruits and vegetables, groceries, snacks, drinks, home & household necessities, beauty & hygiene, and baby care. It claims to ensure high-quality goods while also attempting to guarantee that food reaches consumers' tables with the least amount of delay. The company is strongly emphasizing on on-time delivery by ensuring that the Logistics partners get the order to the consumers on promised time. (relianceretail.com)

Spencer's

It is also a popular Indian grocery and food retailer having stores all over India. It is having multi channel presence. It sells through stores as well as online. Spencer's brand grew significantly between 2006 and 2009, reaching 300+ locations at one point. Spencer's India's Largest Store opened in Kolkata, India's eastern metropolis, in 2008. Its online store includes categories such fresh fruits and vegetables, bread, dairy, fast moving consumer items, and more and in total claims to offer over ten thousand products.

Nature's Basket

Nature's Basket is a firm based in Mumbai, India. It is a chain of grocery delivery which deals in specialty food items. It offers wide range of organic food, exotic cuisines and foreign ingredients too. It has locations in various cities of India like Mumbai, Bangaluru, Pune and Kolkata. (Nature's Basket) Spencer's Retail Ltd acquired it from the Godrej Group in May 2019.

Factors Influencing the Growth of Online Sale of Fruits and Vegetables

There are several variables affecting the rise of online fruit and vegetable sales. These factors have an impact not just on fruits and vegetables, but also on all other types of items sold online.

Fair Price and Discounts for the Costumers

E-commerce lowers transaction costs by eliminating the intermediaries between farmer and consumer, and the advantages are passed on to the producer and buyer. Because of increased competition in E-Commerce, people are moving to sites where fair prices and deep discounts are offered. Sellers should bear in mind how to increase customer interest in online agri-product purchasing in order to completely operationalize e-trading. (Banerjee, *et. al.*, 2018).

Fresh Products & Better Quality

Because fruits and vegetables are perishable in nature, people always want to purchase a fresh product. Fresher and higher quality standards of items encourage consumers to make internet shopping their first option. According to Rahman (2013), a buyer will first choose for online shopping and, depending on the quality of the items, will repurchase from the same portal/website. One of the most important elements affecting the rise of online selling is product quality.

Time-Efficiency

The online website's flexibility in terms of time plays a critical part in persuading a group of consumers to choose for online purchasing. With increasingly busy lives and desires for a successful profession, customers choose choices that give time flexibility and timeliness. (Srinivasan and Ratchford, 1991). Traditional stores/shops have restricted operating hours, which is inconvenient for consumers who lead busy lives. Online retailers give both convenience and flexibility because the shopping hours are not limited and customers may shop at their leisure at any time and from any location. (Chocarro, *et. al.,* 2013).

Packaging

Packaging is regarded as one of the most important operations in food production systems, particularly when dealing with perishable items such as fruits and vegetables. According to Verghese et al. (2015), 40% of food intended for human consumption is wasted each year. This waste is equal to 10% of the entire food consumed by one person over the course of a week. In this sense, the value of packaging is more essential since packaging contains and protects the food that will be consumed by humans. Furthermore, the quality and safety of supplied food are heavily reliant on the packing stage; hence, packaging quality indirectly influences consumer satisfaction levels. (Ghaani, *et. al.*, 2016).

Free Shipping and Free Delivery

Because of increased competition and the availability of a large number of unorganised sectors in stores, online businesses have mostly adopted the policy of free shipping and free delivery. Websites that impose a minimum delivery fee regardless of the price of the goods purchased are typically less favoured over websites that offer free deliveries. In India, websites usually provide free delivery on orders over a particular value in order to attract an increasing number of customers.

Fresh fruit and vegetables, for example, may only be kept for a certain amount of time before deteriorating in quality. As a result, agro e-commerce platforms must be able to manage supply and demand. They need a sufficient quantity of products to attract customers, as well as a sufficient number of consumers to acquire the items for sale before they perished. To achieve this equilibrium, agrie-commerce firms require dependable suppliers as well as a suitable marketing plan to generate demand (Joiner, 2019).

Impact of covid19

Consumers are avoiding going to shops and stores during the epidemic. This has fundamentally altered the way individuals go about their everyday lives. The growing number of online shopping choices, along with the pandemic causing individuals to stay at home, has resulted in a greater usage of online portals and websites to order fruits, vegetables, and other perishable and non-perishable products. Since the epidemic, the use of internet websites has nearly doubled. (Kashyap, 2020).

Nowadays, virtually everything is available online. Prior to the COVID-19 pandemic, customers preferred to purchase perishable items such as fruits and vegetables from local markets, agricultural markets, APMCs, and so on. However, people are now avoiding going outdoors for shopping because everything they require is accessible online.

Challenges in Online Selling of Fruits and Vegetables

The online seller has a variety of problems when it comes to managing fruits and vegetables, such as inefficient supply chain management, storage and packaging, geographical limits, increased competition, waste, and so on.

India must absolutely focus on improving supply chain management, which will reduce inventory costs, which may then be passed on to consumers in the form of lower prices. Technological application improves the efficiency and sustainability of food supply chains while also assisting in the preservation of perishable food qualities. (Haji, *et. al.*, 2020)

4

Amit Lathiya & Munira Habibullah: Online Retailing of Fruits and Vegetables in India

Because perishable food items are temperature sensitive, they are vulnerable to deterioration during processing, packing, shipping, and handling. (Markina, *et. al.*, 2018). Temperature can also have an impact on the processing, storage, transportation, and shelf life of fresh goods, according to Smith and Sparks (2004). As a result, different foods should be stored at different temperatures to assure their safety and healthfulness, and different temperature ranges should be applied to maintain regulated environmental conditions and preserve food quality, safety, waste reduction, and profitability. (Balaji and Arshinder, 2016).

There is also concern about wastage as a result of unsold items. If the selling price is higher than the reference price, the consumer postpones their purchasing decision. Perishable items cannot be kept in marketable form for an extended period of time and must be dumped after a specific period of time. The seller is suffering from the loss of unsold inventory as a result of the large supply. Current E-Commerce websites do not guarantee their returns on investment when supply exceeds demand. (Banerjee, *et. al.*, 2018).

Groceries and non-perishable goods have no regional restrictions. As a result, there are certain geographical limitations in the online sale of perishable items such as fruits and vegetables. Perishable items cannot be sent as far away from the packing centres as feasible. It is more profitable to sell perishable goods in specific geographical locations when the goods are delivered to the consumer on time. The convenience of door-to-door delivery encourages people to choose online purchasing over physical shopping. (Kashyap, 2020).

The main impediments to the growth of local internet trade, according to e-consumers, are higher prices, poorer availability, and short shelf life. There is also concern that the items sent would be rotten, and there is concern about untrustworthy merchants (Barska and Solis, 2020).

Conclusion

Fruits and vegetables are an important part of our daily nutrition. Because of the increased usage of the internet and changing customer lifestyles, online shopping of fruits and vegetables is on the rise. There are several companies in the Indian market that offer fruits and vegetables, as well as groceries and everyday necessities, online. Price and discounts, time savings, convenience, produce quality, free shipping and delivery are the factors that have fueled the sector's growth; on the other hand, inefficient supply chain management, storage and packaging, geographical limitations, increased competition, and waste are the challenges that online sellers of fruits and vegetables must address.

References

- 1. Anonymous (2019-20). National Horticulture Database (Second Advance Estimates), National Horticulture Board, India.
- 2. Anonymous (2020-21). Annual report, Department of Agriculture, Cooperation & Farmers' Welfare, Ministry of Agriculture & Farmers' Welfare, Government of India.
- 3. Balaji, M. and Arshinder, K. (2016) Modeling the causes of food wastage in Indian perishable food supply chain. *Resour. Conserv. Recycl.*, 114, 153–167.
- 4. Banerjee, T., Mishra, M., Debnath, N. C. and Choudhury, P. (2019). Implementing E-Commerce model for Agricultural Produce: A Research Roadmap, *Periodicals of Engineering and Natural Sciences*. 7(1):302-310.
- 5. Barska, A. and Wojciechowska-Solis, J. (2020). E-Consumers and Local Food Products: A Perspective for Developing Online Shopping for Local Goods in Poland, *Sustainability*. 12 (4958) : 1-17.
- 6. Chocarro, R., Cortiñas, M. and Villanueva, M. (2013). Situational variables in online versus offline channel choice. Electronic Commerce Research and Applications, 12(5): 347-361.
- 7. Economic Times. (2020, September 26). *Online grocery to become \$18 billion industry in India by 2024: Report*. Retrieved June 2, 2021, from retail.economictimes.indiatimes.com: https://retail.economictimes.indiatimes.com/news/food-entertainment/grocery/online-grocery-to-become-18-billion-industry-in-india-by-2024-report/78328002
- 8. FAO (2020). Fruit and vegetables your dietary essentials. The International Year of Fruits and Vegetables, 2021, Food and Agriculture Organization, Rome, Italy. https://doi.org/10.4060/cb2395en
- 9. Ghaani, M., Cozzolino, C.A., Castelli, G. and Farris, S. (2016). An overview of the intelligent packaging technologies in the food sector. *Trends Food Sci. Technol.*, 51, 1–11.

International Journal of Innovations & Research Analysis (IJIRA) - July - September, 2021

- 10. Grand View Report. (2020, December). *Report Overview*. Retrieved June 2, 2021, from grandviewresearch.com: https://www.grandviewresearch.com/industry-analysis/india-online-grocery-market#
- 11. grofers.com. (n.d.). Home page. Retrieved July 2, 2021, from grofers.com: https://grofers.com/
- 12. IBEF. (2021). *E-commerce*. Indian Brand Equity Foundation.
- 13. Haji, M., Kerbache, L., Muhammad, M. and Al-Ansari, T. (2020). Roles of Technology in Improving Perishable Food Supply Chains, *Logistics*. 4 (33): 1-24.
- 14. Joiner, J. (2019). E-commerce in agriculture: new business models for smallholders' inclusion into the formal economy, GSM Association.
- 15. Kanodia, Y. (2019, December 31). 8 Best websites to buy fresh vegetables and fruits online in *India*. Retrieved June 2, 2021, from shoppersgossip.com: https://www.shoppersgossip.com/buy-fresh-vegetables-and-fruits-online/
- 16. Kashyap, N. (2020). Online Grocery Shopping in India: Anticipating Trends Post-Pandemic, *European Journal of Molecular & Clinical Medicine*, 7(10): 3664-3672.
- 17. Markina, I.; Safonov, Y.; Zhylinska, O.; Diachkov, D.; Varaksina, E. (2018). Defining the dimensions of national security, financial security and food supply chain in Ukraine. *Int. J. Supply Chain Manag.*, 7, 608–620.
- 18. Nature's Basket. (n.d.). *Nature's Basket*. Retrieved July 2, 2021, from naturesbasket.co.in: https://www.naturesbasket.co.in/HTML/AboutUs.aspx
- 19. Nieuwsbericht. (2020, April 30). Developments in India's fresh fruits and vegetables market. Retrieved June 2, 2021, from agroberichtenbuitenland.nl: https://www.agroberichtenbuitenland.nl/actueel/nieuws/2020/04/30/developments-inindia%E2%80%99s-fresh-fruits-and-vegetables-market
- 20. Ojha, R. (2021, June 29). Online sales of fruits and vegetables gaining traction. Retrieved July 2, 2021, from thehindubusinessline.com: https://www.thehindubusinessline.com/opinion/online-sales-of-fruits-and-vegetables-gaining-traction/article35024758.ece
- 21. ontario.ca. (2015, December 30). *E-commerce: purchasing and selling online*. Retrieved June 3, 2021, from ontario.ca: https://www.ontario.ca/page/e-commerce-purchasing-and-selling-online
- 22. otpexpress.in. (n.d.). How fruits and vegetables online market changing customers buying behaviour? Retrieved October 9, 2021, from otpexpress.in: https://www.otpxpress.in/post/fruits-and-vegetables-online-market-changing-customers-buying-behaviour
- 23. Pirakatheeswari, P. (2010, July). Introduction to Electronic Retailing. Retrieved April 6th, 2021,fromhttps://www.fibre2fashion.com: https://www.fibre2fashion.com/industry-article/5037/introduction-to-electronic-retailing
- 24. Rahman, M. (2013). Green Products: A Study on Young & Native Swedish Consumers' Purchase Intentions of Green Products. Master's Thesis. Umeå School of Business & Economics.
- 25. relianceretail.com. (n.d.). *RELIANCE SMART JIOMART*. Retrieved June 2, 2021, from relianceretail.com: https://relianceretail.com/reliance-jiomart.html
- 26. Rina, H. (n.d.). *Retailing*. Retrieved June 9, 2021, from economicsdiscussion.net: https://www.economicsdiscussion.net/marketing-2/retailing/retailing/32357
- 27. Srinivasan, N., Ratchford, B.T., (1991). An empirical test of an external search for automobiles. *Journal of Consumer Research*, 18, 233-242.
- Smith, D. and Sparks, L. (2004). Temperature controlled supply chains. In Food Supply Chain Management; Bourlakis, M.A., Weightman, P.W.H., Eds.; Blackwell Publishing: Oxford, UK, pp. 179–198.
- 29. techsciresearch.com. (2019, December). Consumer goods and retail. Retrieved June 2, 2021, from Techsciresearch.com: https://www.techsciresearch.com/report/india-online-grocerymarket/4389.html
- 30. Verghese, K.; Lewis, H.; Lockrey, S. and Williams, H. (2015). Packaging's role in minimizing food loss and waste across the supply chain. Packag. *Technol. Sci.*, 28, 603–620.

 $\Box O \Box$

6