ABSTRACT

The perishable food supply chain is generally considered to be the most complex in terms of movements of goods, because of their time and temperature-sensitive nature. The study has found out the break and fault in the link between the farmer/producer and the consumer through retailers which causes huge loss of perishable goods. About 30-35% of the fruits and vegetables grown in India (40 million tons amounting to US$ 13 billion) get wasted annually due to gaps in the supply chain.

The aim of the study is to measure the supply chain effectiveness in organized vis-a-vis the unorganized retail sector with special reference to perishable food products in Pune. In pursuit of this information, a detailed study has been carried out in length to compare the present practices in Supply Chain Management adopted by organized retailers vis-a-vis unorganized retailers. The study further aimed at finding out the effectiveness of investment required for the development of advanced logistics infrastructure for organized retailers and its cost competitiveness with respect to unorganized retailers and to assess the level of consumer satisfaction and value creation through Supply Chain Management in organized vis-à-vis unorganized retail for perishable food products in Pune.

A descriptive research methodology has been used where non-probability and stratified sampling design applied at three sampling units viz. organized retail, unorganized retail and consumers with an effective sample size of 298 in Pune area. The hypotheses are formulated and tested with various statistical methods. SCM practices in organized vis-a-vis unorganized retail have been tested with two way anova on basis of factors viz. IT & ITEs uses for integration, stock outs, lead time of procurement, order placement, merchandizing, delivery process and bullwhip effect in perishable supply chain. The chi-square test has been applied to judge the significance of association between the two attributes viz. investment plan/awareness for up-gradation and integration by retailers' vis-à-vis effective SCM practices for perishable food products. The chi-square test has been
applied as a test of goodness of fit in order to enable us to explain that four variable/ attributes of consumer offering viz. product, quality, service & price have significant effect in enhancement of SCM of perishable food products which gives more satisfaction and value creation to consumers.

Though, there are significant developments at the organized retail level, the farm-to-shop-to-consumer and farm-to-manufacturer/processor-to shop-consumer supply chain is fragmented, inefficient and has no supply chain integrator. The Indian retail cannot be competitive until the supply chain is made integrated, efficient and customer-centric which must be able to reduce wastage. However, despite all pros and cons, there is ample opportunity for both the systems at various levels. The challenge for the organized retail is to maintain a high growth status. At the same time it is also a challenge for members of the unorganized retail to maintain their present status.

The Supply Chain Management for perishable products is integrated somewhat but is not up to desired standards and drastic upgradation is required. The need is to pay attention on the development of advance processing of food, development of a cold supply chain system, cash and carry model with advanced technology, investment in infrastructure for development of transport and logistics etc. The retail industry should grow and train labour and management personnel and cultivate a logistics-centric pool and which will be more effective and less expensive than hiring manpower from outside the industry. The Home Delivery model is also a viable strategy to enhance market share by organized retailers.

Investments in cold chain infrastructure are capital intensive and will yield slow returns. From the view point of a complete supply chain, from farm to the market, the infrastructure for all types of perishable horticulture produce is required at various levels with proper initiation of retail industry and government.