

## Chapter 18

# Key Performance Indicators for the Organized Farm Products Retailing in India

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### ABSTRACT

*The Non-livestock products include Horticulture products (flowers, fruits, nuts, vegetables and medicinal plants) and Agriculture products (Crops like; rice, cotton, wheat). These items share the maximum sale of the farm products. Unfortunately, the farm production in India has witnessed a huge wastage. It has attracted the attention of many practitioners and policy makers. Witnessing the opportunity many organized retail players have entered the arena to sell farm products. However, the supply chain (SC) performance measurement has remained the major challenge as “No measurement no improvement”. Many organizations are searching for an efficient SC performance measurement system. Our study recommends that the SC performance shall be improved by developing a SC strategy based on a limited set of key performance indicators (KPI). Otherwise, managers shall waste time and resources on the undesirable performance indicators. We have identified and classified the KPI for non-livestock retailing SC management into five groups. These are 1) Customer Attraction Metrics (product quality, product personality, process quality); 2) Inventory Metrics (fill rate, customer response time, return adjustment, spoilage adjustment, and Vendor managed inventory); 3) Attractiveness Metrics (inventory cost, distribution cost, Return on investment, stakeholder value, sales profit and channel flexibility); 4) Transportation Metrics (shipping errors, and volume flexibility); and 5) Customer Metrics (lead time, delivery flexibility, and backorder flexibility). This grouping shall help the practitioners to focus on a limited set of KPI for better management of supply chains.*

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## **INTRODUCTION**

Supply chain performance measurement (SCPM) is one of the key managerial tasks integrated planning, organizing, motivating the workforce and controlling events. In this context performance measurement is related to strategic intent, and the broad set of metrics taken as a reference to monitor and guide an organization. However, “performance” implies predetermined parameters and “measurement” imply an ability to monitor events and activities in a meaningful way. The need of SCPM has long been recognized and many attempts are made to develop a better performance measurement system.

To develop a SCPM, it is necessary to understand supply chain (SC) performance metric and performance indicators. A metric is a measurement, taken over time that communicates vital information about a process or activity. The major requirement for being a metric versus an indicator must derive appropriate action. In other words, if you are off target, the metric shows you that and, enables you to start action to get back on target. It is a meaningful measure on the other hand Indicators can be the counts. They come from processes and their inputs, outputs and outcomes. The Indicators come from outputs or their outcomes. The performance indicators and measures shall be the same and often used interchangeably for performance measurement SCPM.

Performance measurement is a very challenging task which has a great occurrence in the field of management as studies and reports. It is of great interest to managers and researchers. Brown and Laverick (1994) defined performance evaluation as a means to verify the effectiveness of their decisions for successful development of business. The Council of Logistic Management (1995) establishes that measurement is related to the level of performance of a company, and that an effective measurement calibrates the results of a company in terms of functional evaluation, process evaluation and benchmarking. McIntyre et al. (1998) defined the measurement of performance as a tool of management, which enables the further understanding of operations and processes and metrics are valued by the financial institutions and are a way in which to compare organizations.

India holds second position in the production of fruits and vegetables with production of 91.3 MT of fruits and 163.39 MT of vegetables during 2014-15. The production of 137.7MT of marine, meat and poultry products has put India in the second position worldwide. The food grain production in India has touched 251.12 MT in FY 2015. Despite good production the 20-40 percent of agriculture products go wasted (Paul Artiuch & Samuel Kornstein 2012, p2). This wastage has been witnessed in the rich farm belt of North India. According to TOI news, India wastes 21 million tonnes of wheat every year (TOI, 2013). These challenges in the farm production have attracted the attention of many researchers and policy makers to find a solution for the same. Expecting the great opportunity to harvest profits many big organized retailers have entered into the arena of retail business.

India holds the fifth-largest global retail destination with a 10 percent contribution to the GDP and 8 percent of the employment. According to the Boston Consulting Group and Retailers Association report, “Retail 2020: Restrospect, Reinvent, Rewrite” the retail market is forecasted to double from US\$ 600 billion in 2015 US\$ 1 trillion in 2020 with overall market growth of 12 percent per annum with 20 percent growth for the modern retail and 10 percent for the traditional retailers (IBFC, 2015).

Farm retailing has been divided into three categories. The *category one* includes the selling of Livestock products (meat, dairy, poultry, eggs). The category two includes the Non-livestock products (including Horticulture products (flowers, fruits, nuts, vegetables and medicinal plants) and Agriculture products (Crops like; rice, cotton, wheat and spices). The *category three* includes the processed products (fats, jams and oils etc.). Farm retailing is the business activity in the sale of farm products directly to final

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