

# Chapter 6

## Multilayered Distribution System in India: Practice and Issues

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### **EXECUTIVE SUMMARY**

*With the invention of Internet, supply chains have become more comprehensive, global, and faster than ever before. Traditionally, companies used to cut costs through manpower reduction, waste reduction, process automation, and inventory control. However, today those companies that reduce costs in their supply chain are the ones who can remain competitive in the market and provide their customers with a superior quality product. Cost reduction in supply chain is not a new concept. Dell worked with just-in-time systems to make its supply chain both time and cost efficient. Companies have sought to make their supply chains both lean and agile and thus become cost efficient as well as responsive to customer demands. Although there are so many examples of modern global supply chains, most of the supply chains*

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## **Multilayered Distribution System in India**

*in Indian sub-continent still suffer from a number of inefficiencies. The multi-layered market structure, as well as the lack of resilience among supply chain partners, aggravates the issue. Lack of experience and confidence in modern supply chains precludes the supply chain partners to introduce any innovation in the supply chains.*

*This chapter presents several case studies of the multilayered system in India and shows how the prevalent distribution system preclude any means of cost reduction and making these supply chains efficient. Supply chains of perishable goods, electronic products, FMCG products and Pharmaceutical products are discussed in this chapter. Each of these supply chains present unique challenges and issues that need attention. The three main objectives in these studies are to understand the distribution systems as well as cost economics of the supply chains, identify potential conflicts and issues in their distribution system, and to study the effect of macro-environment on the distribution system. Apart from these objectives, these cases are also meant to prepare those venturing into such supply chains to come up with efficient solutions for improving these supply chains.*

### **CASE I: DISTRIBUTION SYSTEM OF PERISHABLE GOODS: VEGETABLES**

Perishable goods present the biggest challenge for supply chains partners because if such goods are not properly handled they perish before reaching the end customer. Therefore, the supply chain partners have to keep some margin for the amount that perishes on the way. The supply chain of vegetable is very simple but the supplier base and the customer base is very complex. In a broad sense the partners in the supply chain of vegetables are the local producers, big farm owners and cold storages which supply vegetables to a central marketplace in a city. In every city there are a few wholesale marketplaces (commonly termed as mandi) which act as a hub for supplying vegetables to small markets and stores in the city. Here, the vegetables are auctioned throughout the day till the supply of vegetables for that day is finished. The vegetables are then supplied to malls, vegetable shops, and small marketplaces in the city. Sometimes small vendors purchase vegetables and deliver them from door-to-door. Figure 1 shows a simple supply chain of a vegetable market, although in reality the supply chain would be much more complex.

Here we discuss the vegetables supply chain in a farm rice state of India – Chhattisgarh. The case study has been conducted for Peesegaon farm which is a sprawling farm of around 20 acres and supplies various kinds of vegetables and fruits to the vegetable marketplaces. Fresh vegetables from local farms are harvested a day before or early in the morning. And those vegetables that are transported from far

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