# 3PLs (Third Party Logistics Providers) as a Supply Chain Strategy in Integrating the Distribution Network for Reaching the Unreachable Rural Consumer

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#### Abstract

Rural market is the heart of India. Hard selling to the heart of India is a formidable challenge because reaching 6 lakh villages and feeding a retail network of over 35 lakh village shops is a distribution night mare. Research shows that despite an increase in the number of consumer class households and levels of disposable income, 68% of the rural market still lies untapped primarily due to inaccessibility. The saturation of urban markets and growing potential of rural markets have forced marketers to adopt out-of-the box thinking to come up with innovative solution, to ensure that the products reach remote locations.3PLs (Third Party Logistics Providers) can be considered as an innovative, cost effective, sustainable model for rural distribution. The paper finally highlights the role of 3PLs in supply chain aggregation, supply chain surplus, advantages and risks associated with 3PL in SCM in the rural areas and how to overcome these risks in order to increase the supply chain surplus and value to the rural customers.

**Keywords:**3PLs, supply chain surplus, rural distribution.

#### I. OBJECTIVES

The objectives of the paper titled "3PLs (Third Party Logistics Providers) as a Supply Chain Strategy in Integrating the Distribution Network for Reaching the Unreachable Rural Consumer" are as follows.

- 1. Understand the Rural Indian market and the distribution problems faced.
- 2. Understand the role of Third Party Logistics providers (3PLs) in the Supply Chain Management.
- To know the merits of using the services of 3PLs over in house facilities of logistics and other services.

- 4. To describe the impact of 3PLs on Supply chain surplus and sustainability
- 5. To know the Risks associated with using 3PLs and suggest measures how to overcome the risks.

#### II. METHODOLOGY

Research Design: Conceptual Research

Data collection: Data is collected from both primary and secondary sources.

- a) Primary sources: Interviews with Executives of leading Transportation and logistics companies in Bangalore.
- b) Secondary Sources: Magazines, Journals, News papers, Inbound Logistics newsletters (2000 edition).

#### III. REVIEW OF LITERATURE

- 1. The research topic is related to Third Party Logistics service providers. In order to understand how the 3PLs help in improving the overall supply chain surplus and generate value to the customers and achieve sustainability in business the researcher has collected data from a bibliography "Armstrong & Associates, Inc. Who's who in logistics? Armstrong's Guide to 3PLs and Global Logistics Services, 2001.
- 2. The researcher has referred "Will Sourcing Come Closer to Home" by Murphy, Sean. Supply Chain Management Review (September 2008): page number 33-37.
- 3. Billington, Corey, and Francois Jager. "Procurement: The missing Link in innovation" Supply Chain Management Review (January-February 2008): page number 22-28. The article was refereed to know the importance of the purchasing and supplying which plays a pivotal role in the entire Supply chain functions.

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#### IV. INTRODUCTION

#### A. Understand the Indian Rural Market:

With a population already in excess of one billion people, India hascaught the eye of multinational corporations across the globe as a place of opportunity for exploring new markets. While India has portions of their populationthat would be considered wealthy or middle class by Western standards, amuch greater percentage of India's population is low income. As a result, theyspend money, live, and use products differently than the countries where mostmultinational corporations originate. Rural areas,in particular, exemplify these differences. Understanding the characteristicsthatmake the people and the market in rural India unique can help corporations one one of this market with success.

Rural India accounts for almost 70 per cent of the population as the recent Census 2011 indicates that of the 1.21 billion population, 833 million live in rural India. Higher disposable income in the hands of rural households along with massive advertisements by the market players, would take rural FMCG market from current Rs 87,900 crore (US\$ 18 billion) to a market size of over Rs 106, 300 crore (US\$ 21.64 billion) by 2013, according to a study by an industrial body. This entails a compounded annual growth rate (CAGR) of 10 per cent in totality for rural and semi-urban areas.

Source: IBEF (India Brand Equity Foundation February 2012)

Rural population has grown by 12% in last decade. Rural market has distinguished characteristics, accounts for 40% of Indian economy. Rural India has huge, heterogeneous and growing consumer market, which contributes more than 50% to India's total consumer market size. The rural market of India is large and scattered in the sense that it consists of over 63 crore consumers from 5, 70,000 villages spread throughout the country. Nearly 60 % of the rural income is from agriculture. Hence rural prosperity is tied with agricultural prosperity.

More than 50 percent of the sales FMCG and Durable companies come from the rural areas. The McKinsey report (2007) on the rise on consumer market in India predicts that in twenty years the rural Indian market will be larger than the total consumer markets in countries such as South Korea or Canada today, and almost four times the size of today's urban Indian market and estimated the size of the rural market at \$577 Billion.

Census of India defines rural as any habitation with a population density less than 400 per sq. km., where at least 75 percent of the male working population is engaged in agriculture and where there exits no municipality or board, and the same definition being accepted for the paper here. A marketer trying to market his product or service in the rural areas is faced by many challenges; the first is posed by the geographic spread and low population density in the villages in the country.

The table below gives us the population and village size details in the country.

**Table 1: Rural Population Statistics** 

Population	Number of Villages	Percentage of total villages
Less than 200	114267	17.9
200-499	155123	24.3
500-999	159400	25
1000-1999	125758	19.7
2000-4999	69135	10.8
5000-9999	11618	1.8
10000 & above	3064	0.5
Total	636365	100

Source: Census 2011

The consumer in the village area do have a low standard of living because of low literacy, low per capita income, social backwardness, low savings, etc.India has been acknowledged as one of the most promising and fastest growing economy of the world. Besides urban and semi-urban areas, rural India has a huge potential.Rural markets in India constitute a wide

and untapped market for many products and services which are being marketed for the urban masses.

Although the rural market does offer a vast untapped potential, it should also be recognized that it is not that easy to operate in rural market because of several problems. Rural marketing is thus a time consuming affair and requires considerable investments

in terms of evolving appropriate strategies with a view to tackle the problems. Distribution and logistics Infrastructure continues to be a challenge in rural India. Moreover, the lack of an efficient distribution network prevents penetration of products/services into rural India.

The saturation of urban markets and growing potential of rural markets have forced marketers to adopt out-of-the box thinking to come up with innovative solution, to ensure that the products reach remote locations.3PLs (Third Party Logistics Providers) can be considered as an innovative, cost effective, sustainable model for rural distribution.

A Third-Party Logistics Provider (abbreviated 3PL, or sometimes TPL) is a firm that provides service to its customers of outsourced (or "third party") logistics services for part, or all of their supply chain management functions. The firm can avail the services provided by an outsiders or 3PLs. The effective sourcing process can improve the profits for the firm and total supply chain surplus in a variety of ways. The Third Party Logistics providers result in many advantages to the firm. More efficient procurement transactions can significantly reduce the overall cost of purchasing. Better coordination lowers the inventories and improves matching of supply and demand.

There are many companies who are considered as the most popular 3PL in the word like UPS, Schneider, Kuehne and Nagel Lead Logistics, Safe Express, GATI, VRL Logistics, PVG Logistics etc.

Traditionally 3PLs focused on the specific functions such as transportation, warehousing and information technology within the supply chain. Over a period of time 3PLs started to provide innovative services which will be listed in the next pages.

The firms must evaluate the various risks when they avail any service from 3PLs. The Third party Logistics provider's results in various risks or disadvantages to owners like loss of internal capability and growth in third party power. Leakage of sensitive data and information etc.

A firm gains the most by outsourcing to a third party if its needs are small, highly uncertain and shared by other firms sourcing from the same third party.

A Third Party Logistics Provider performs one or more of the logistics activities relating to the flow of product, information, and funds that could be performed by the firm itself.

Third Party Logistics (3PL) provider handles all or most of freight of the organizations including the management of information by the third party, freeing the company from day to day interaction with carriers, and having to oversee hundreds or thousands of shipment. New and cheaper information flow resulting from internet enabled solutions, will lead not only achieving immediate cost reductions in operations but also to enormous productivity gains over the next few years.

The tracking and control of movement of goods drive freight optimization and asset utilization. The options are: increased trailer utilization, combining full truckload shipments, consolidation, and aggregation of smaller buyers. To put simply, 3PL refers to the outsourcing of a logistics function. It could be the use of a transportation carrier, a warehouse, or a third party freight manager to perform all or part of a company's production distribution functions.

#### V. TYPES OF 3PL PROVIDERS

Hertz and Alfredsson (2003) describe four categories of 3PL providers:

- Standard 3PL provider: this is the most basic form of a 3PL provider. They would perform activities such as, pick and pack, warehousing, and distribution (business) the most basic functions of logistics. For a majority of these firms, the 3PL function is not their main activity.
- Service developer: this type of 3PL provider will
  offer their customers advanced value-added
  services such as: tracking and tracing, crossdocking, specific packaging, or providing a unique
  security system. A solid IT foundation and a focus
  on economies of scale and scope will enable this
  type of 3PL provider to perform these types of
  tasks.
- The customer adapter: this type of 3PL provider comes in at the request of the customer and essentially takes over complete control of the company's logistics activities. The 3PL provider improves the logistics dramatically, but do not develop a new service. The customer base for this type of 3PL provider is typically quite small.
- The customer developer: this is the highest level that a 3PL provider can attain with respect to its processes and activities. This occurs when the 3PL provider integrates itself with the customer and takes over their entire logistics function. These providers will have few customers, but will perform extensive and detailed tasks for them.

#### **Terminology:**

- 1PL, which are the shipper or the consignee,
- 2PL, which are actual carriers such as YRC Worldwide, UPS, FedEx, DHL, Ceva Logistics
- 4PL, which are consulting firms such as CPCS, SCMO, BMT, Deloitte, and Accenture.

Table 2:Following are the Important Services Provided 3PLs.

Service Category	Basic Service
Transportation	Inbound, outbound (Ship, Truck, rail and Air)
Warehousing	Storage, facilities Management
Information Technology	Provide and maintain advanced information/ Computer systems
Reverse logistics	Handle reverse flows

Table 3: Value Added Services Provided by 3PLs Include

Service Category	Value Added services
International	Customs brokering, port services, export crating, consolidation.
Special; skills/Handling	Hazardous material, temperature controlled, package/ parcel delivery, food-grade facilities/ equipment, bulk.

#### Other 3PLs services include

- 1. Brokering, freight forwarding
- 2. Purchase-order Management
- 3. Order taking, loss and damage claims
- 4. Freight bill audits, consulting

### VI. THE TOP 10 3PL EXCELLENCE AWARDS(www.inboundlogistics.com/cms/3pl-awards)

- 1.C.H. Robinson Worldwide, Inc.
- 2. Ryder
- 3. Menlo Worldwide Logistics
- 4. Transplace
- 5. UPS Supply Chain Solutions
- 6. J.B. Hunt
- 7. BNSF Logistics
- 8. Land starPenske Logistics
- 9. Unyson
- 10. UTi Echo Global

# VII.ROLE OF SUPPLY 3PLS IN INCREASING THE SUPPLY CHAIN SURPLUS

- 1) Elimination of infrastructure investments
- Access to world-class processes, products, services or technologies
- 3) Improved ability to react quickly to changes in business environments
- 4) Risk sharing
- 5) Better cash-flow
- 6) Reduction of operating costs
- 7) Access to resources not available in one's own organization

3PLs help the manufacturing firms in reducing the distribution cost which helps in increasing the supply chain profitability and increase the supply chain surplus. Following costs can be reduced if the manufacturer avails the services of 3PLs:

- a) Packing costs
- b) Carriage outwards costs
- c) Warehousing costs
- d) Upkeep and running costs of delivery vans
- e) Loading charges
- f) Dispatch expenses
- g) Finished goods damaged in transit
- h) Expenses for repairing of empty containers for re use
- i) Fixed and variable costs associated with purchasing the vehicles for transportation

The manufacturer has to invest huge capital in fixed assets like purchasing trucks and vans, construction of warehouses storage facilities, hire the vehicle operators, maintenance costs associated with the vehicles in order to have own logistics function. Having a own supply chain function and logistics function is not a technically financially and operationally feasible decision. The manufacturer can appoint the 3PLs and outsource the entire activities of logistics in order to reduce the costs of supply chain. 3PLs can be a effective mode of transportation who can manage the logistics activities and help the manufacturer in reducing the cost of operations. Using 3PLs the firms can reach the customers in the rural areas effectively and efficiently than any other mode of transportation.

#### VIII. RISKS OF USING 3PLS:

- 1. The process is broken: the biggest problems arise when a firm outsources supply chain functions simply because it has lost control of the process. Introducing 3PL into a broken supply chain process only makes it worse and harder to control
- 2. Reduced customer and supplier contact: a firm may lose customer and supplier contact by introducing an intermediary like 3PL.
- 3. Loss of internal capability and growth in 3PL power
- 4. Leakage of sensitive data and information.

# IX. STEPS IN SELECTING RIGHT 3PLS AND MEASURES TO OVERCOME THE RISKS ASSOCIATED WITH 3PLS

#### A. Outline Sreas of Opportunity

One reason to outsource is to gain the ability to enter new markets or adapt to competitive forces without building out costly distribution infrastructure. Establish a team to look at the current and future requirements of your business and critically assess your ability to meet those needs internally. This team should be comprised of key members from both your logistics organization and other areas like marketing and customer service.

#### B. Critically Assess Your Strengths and Weaknesses.

Determining what you're good at, and more importantly, those areas where your company needs the most help, will enable you to find a complimentary partner. Keep in mind, though, that potential partners will have their own distinct strengths and weaknesses. "Some 3PLs are better at warehousing than transportation and vice versa. Others are great at managing the import process, but have less to offer in functional areas like inventory and order management. Merging your strengths with those of your partners will help ensure a robust result."

#### C. Decide What is on the Table.

Once you've identified opportunities for partnering with a 3PL, determine which of these you are actually willing to pursue. "Logistics functions like warehousing and transportation influence how your customers view your ability to execute. "The decision to include some or all of these functions in your outsourcing project should be informed by a clear understanding of your company's willingness to turn over mission critical processes to a logistics partner."

# D. Identify a shortlist of Providers that Meet your Requirements.

At this point in the process, you should consider initiating a logistics network optimization study to "identify optimal locations for import or export gateways, assembly, merge-in-transit and other specific

operations. "Your geographic needs may require a nationwide or global network or be more focused on specific regions. Create and distribute a concise request for information (RFI) designed to ask potential partners about their capabilities. From this, develop a list of providers that have experience in your industry and markets, as this process will reduce the number of potential partners quickly." Then, examine the network infrastructure of the remaining companies and compare your requirements with the capabilities of potential providers. It's also important that you assess the technological infrastructure of potential partners, especially as it applies to such applications as warehouse management systems, order management systems or transportation management systems.

#### E. Consider the Human Element Carefully

"Cultivating relationships between key personnel on both sides throughout the outsourcing process is critical," Blanchard notes. "Ensuring not only a fit between corporate cultures, but individuals will contribute greatly to success. This is especially important during implementation and ongoing operations, but if you wait until this stage to identify issues, it will be too late. Remember you will be trusting your chosen partner with your livelihood."

#### X. FINDINGS

- 1. Rural market in India is booming and provides tremendous opportunities for growth.
- 2. Over the last decade , manufacturing firms have increased the fraction of the purchased parts
- 3. Reaching the rural market needs a effective mode of logistics and outsourcing plays a major role in reaching the rural market efficiently
- 4. 3PLs plays a major role in reducing the costs of transportation and increase the supply chain surplus
- 5. Effective outsourcing to 3PLs have a impact on financial performance
- 6. Availing the services from 3PLs is technically, financially and operationally feasible decision than having in house SCM functions.
- 7. Only good sourcing decisions with 3PLs can improve in the supply chain surplus
- 8. 3PLs help the firms in generating more value to the customers by providing more benefits and reducing cost of operations

#### XI. CONCLUSION

The connectivity and communication requirements of leading supply chains have created the emergence of a more advanced role for third-party logistics providers 3PLs. They have evolved from providing logistics capabilities to becoming orchestrators of supply chains that create and sustain a competitive advantage. 3PLs will increase the supply chain surplus by maximizing the benefits to the

customers and reducing the cost of operations. The 3PLs are playing a pivotal role in organizing the supply chain activities which involve in physical movement of goods from source to the destination. Most of the firms are availing the services of 3PLs as the in house operations are costlier. If a firm has to adopt its own logistics facilities in order to support supply chain activities it has to invest huge amount of capital, to avoid this firms can go for availing the services of 3PLs. 3PLs can be used to reach the huge untapped rural market who provides tremendous opportunities for the firms to earn profits by reducing costs and increase the supply chain surplus and supply chain profitability.

#### Scope of research

The research is related to the role played by Third Party Logistics providers in increasing the supply chain surplus. The Research includes how the 3PLs will help the firm to maximize the benefits and reduce the cost of operations and generate more value to the customers. There is a further scope for the research in the areas of 1PLs, 2PLs and 4PLs. This research is based on the conceptual methodology. There is a further scope for the cost benefit analysis of 3PLs using financial tools and techniques.