

# Future Direction – Cold Chain in India

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The cold chain is a much bandied about business proposition in India, attracting ever burgeoning attention over the past decade. It has typically been associated with securing national food supply, reducing wastage and with an energy intensive technology. Despite fetching increasing focus driven by the government, its ground manifestation stays limited.

The cold chain industry is understood differently by various pronouncers of the trade. So at first, let us dispel a few notions in line with the intent of this article. Most people, including some of those driving this from within the government, presume the “cold chain” implies solely temperature controlled storage or carriage of goods. This automatically pre-supposes that the application of refrigeration is the singular differentiator.

In reality, the cold chain is a misnomer derived from “**cold SUPPLY CHAIN**”; and like any supply chain, the production process, packaging criteria and delivery & distribution mechanism is particular to the cold chain. Hence the benefits perceived from the cold chain are not just limited to those derived through application of cooling, but additionally those due to inherent procedural changes it enforces across the entire supply chain process.

For example, the cold chain is dependent on air flow patterns; hence the unit load must not restrict but promote air infiltration around the goods. Consequently shoulder vents, side vents (or Jaali type crates) become important in this supply chain. Such application of specially designed unitised packaging aids in minimising the handling damage. The cold chain also makes obligatory a selection criterion, allowing right cost realisation for various product categories.

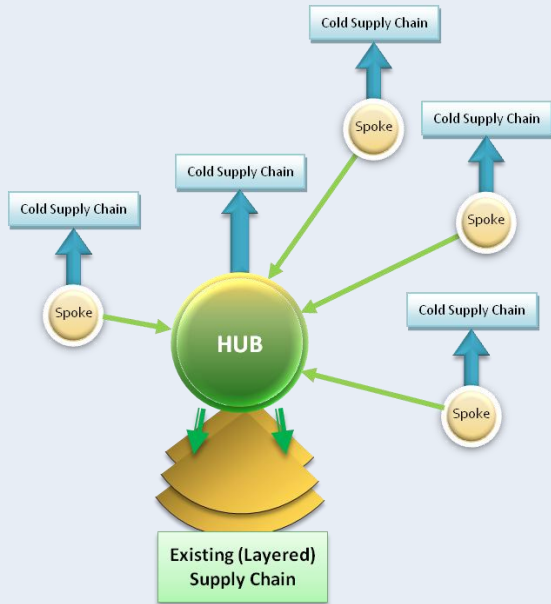
Similarly, the cold chain requires perforce, the application of hygiene and traceability norms, leading to brand value, added in terms of quality and regulatory compliance.

Furthermore, the cold-chain is essentially about speed. A product must reach the consumer well within its marketable life and without transit losses; haste becomes one of the most crucial aspect in perishable distribution. It is the physical limitation to speedy transit that is offset by controlling the supply chain ambient – thereby in enhancing or sustaining shelf life, one basically has extended viable transit time and enhanced market reach. Except for a small percent of product types, the cold chain is about motion, about being ahead in reach!



The ordinary supply chain delivers a predetermined value (goods) to markets... whereas; the cold chain is integral to and effects the value discovery, quality and price realisation of the goods. The fact being, the cold chain incorporates all that the ordinary supply chain aspires towards – integration, speed, value continuation and direct supply lanes.

The future hinges upon the clear understanding of above intrinsic concepts, among others, in reference to driving the cold chain. The realisation of the true value-adds derived from cold chain is yet unstated.



This is largely as the end user, the customer, is also unaware and nascent in understanding of the achievable potential. But each year brings forth a changing perception that raises participative interaction with the cold chain, differing from the earlier short-sighted approach that treated it as yet another logistics delivery method.

Our base transport infrastructure will take a long while to keep pace with developing and demanding India. With distance alone not being the sole bottleneck for perishables – *even entry access into metros takes many hours and crossing barriers adds further time delays* – the cold chain takes on even more import, as it alone would allow suitable extension of transit life (time). The cold chain is applied basis total transit hours and not on distance alone.

Regulatory norms forthcoming both in the live perishable and pharmaceutical space, will further spoon the need for the cold chain. The pharmaceutical industry will have increasing bulk shipments with primary, secondary and tertiary packaging changes, all with temperature controlled transits in mind. FDI into retail (inevitable in coming years), will also fuel need for an optimal cold chain, based on a long term vision for sustainable quality supply chains.

Towards the govt, the following suggestions are placed – hastening the implementation of NCCD, FSSAI; opening FDI into F&V retail as a precursor to the same in multi brand retail; innovative tax incentives (converse to capital subsidies); infrastructure status and VG funding; incentivise environmentally friendly technology in cold chain and similar others. Positive direction and action on any of these will add further impetus to cold chain development.



The author, Pawanexh Kohli, is a supply chain professional with 25 years specialised experience, including 19 years in the elite cold chain arena. He serves as business leader and as advisor to various firms and was also acknowledged as the 'Cold Chain Personality of the Year' by an expert selection panel of KPMG.

I would hazard to forecast that in the coming year, 2011, we will see larger investments and new players entering in the cold chain industry. Operational excellence will truly become the byword and prime differentiator. While static infrastructure development will progress slowly, the need for mobility into markets will add to the investment in surface transportation. The demand supply gap will not balance out yet rising demand for quality will lead towards likely consolidation in this industry in coming years.

India demands *quality* as it marches ahead and the future of cold-chain in India is inevitably bright – albeit with the pangs of a new birthing and the lack of appropriate domain skills that it currently suffers.

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