Press Release

Comprehensive Assessment of Cold-chain Capacity in India

New Delhi, September 03, 2015: Dr. Sanjeev Balayan, Minister of State for Agriculture and Farmers Welfare, Government of India released a study titled ‘All India Cold-chain Capacity Assessment (Status & Gaps)’ today. The study was undertaken by the National Centre for Cold-chain Development (NCCD) along with NABARD Consultancy Service (Nabcons).

A unique aspect of this study is that it takes into account the actual per-capita consumption of food items, thereby making the assessment realistic and relevant to existing market demand. The study analyses the requirement of all types of cold-chain infrastructure, directly linked to the flow of perishable food stuffs to urban clusters of India.

This is the first ever study that undertakes a holistic approach to cold-chain as it evaluates all the necessary logistics components, including modern pack-houses, refrigerated transport, cold stores as distribution platforms and ripening chambers, besides traditional cold stores. The report has highlighted that the gap in India’s cold-chain is not as much due to a lack of cold storage capacity, but more to do with various other components, necessary to implement farm-to-fork connectivity.

Releasing this study, Dr. Sanjeev Balayan, Union Minister of State for Agriculture & Farmers Welfare, said, “The cold-chain sector is part of India’s second green revolution and high value products such as fruits, vegetables, meat, fish, poultry and dairy are critically dependent on it. This study by NCCD has underlined the missing links in agri-logistics and will help devise long term plans and policies to improve our cold-chain networks. The report highlights that in future, development focus needs to be more on modern pack-houses and refrigerated transport, which are important to initiate the appropriate logistics chain from villages to city centres.”

As per this report by NCCD, to fulfil current consumption of urban clusters, India needs about 70,000 pack-houses, each equipped with a pre-cooler and dispatch room for onwards transport links. Currently, the country only has about 250 such pack-houses. On the other hand, India seems to have better status in form of large cold storage facilities. The gap in cold store capacity is projected at only about 3.5 million tons in space. As per recorded data of 31-March-2014, the country has created cold stores of 31.8 million metric tons in holding capacity. This breaks away from various earlier reports which suggested that India required to create a total of 61 million tons of cold storages for its perishable produce. To match this storage, country is said to have less than 10,000 refrigerated vehicles, whereas the requirement is estimated at 62,000 vehicles. Lack of pack-houses and transport connectivity results in a breach in the integrity of cold-chain. This also results in most of the cold storage capacity being used to store only crops like potato, dried chillies, pulses, etc. which do not need onwards cold-chain connectivity.
The Prime Minister has frequently expressed the need to improve market linked connectivity for agricultural produce. This study is an important step in this direction and provides inputs for planning future development. Previously, the main focus was on creating of cold stores, and this report now explains how farm-gate infrastructure in form of modern pack-houses and reefer vehicles is key to connecting the farmers with the distribution network. The report lays emphasis that modern pack-houses, which are used to prepare and pre-condition the fresh farm produce for subsequent logistics connectivity in the cold-chain, are a critical missing link. Without these village level facilities, farmers of high value fruits and vegetables are not able to take full advantage of the cold-chain.

At the release of this study, Shri Siraj Hussain, Secretary, Department of Agriculture and Cooperation said, “This is the first such study that directly correlates the food consumption with source points, making the evaluation more relevant and market linked. This study has demonstrated that cold-chain development needs to address “end-to-end” connectivity from farm-gate to consumers. To be future ready, India requires modern and smart logistics to serve as the logistics bridge between source points and markets.”

The existing food distribution suffers food losses due to lack of integrated cold-chains. Establishing modern supply chains for perishable food items, not only minimises the food losses, but also empowers the farmers to reach across to more distant markets. Integrated cold-chain, enables the farmer groups proactively connect to various demand centres and take advantage of the recently launched National Agriculture Market. This empowering aspect of cold-chain, allows for a greater geographical spread of markets by countering produce perishability, and is key to gainful and improved value realisation for farmers.

To support cold-chain as an important agri-logistics intervention, the Mission for Integrated Development of Horticulture (MIDH) under the Ministry of Agriculture and Farmers Welfare, is providing incentives to entrepreneurs for the development of all such relevant cold-chain infrastructure components. Also present at the release of the report were Shri Sanjeev Chopra, Joint Secretary (DAC-MIDH) and Shri Pawanexh Kohli, Chief Advisor & CEO of NCCD.

From April 2014 to July 2015 MIDH has sanctioned 238 cold-chain projects of capacity of 1.04 million metric tons, with subsidy assistance of Rs. 434.6 crores. Of these, 202 projects with capacity of 9,05,571 metric tons were sanctioned in 2014-15. MIDH under Department of Agriculture and Cooperation, gives financial support for cold-chain infrastructure creation by providing 35% subsidy on admissible capital costs. For projects in Hilly regions and scheduled areas, the subsidy is 50% of the admissible project costs. Existing cold-chain projects can also avail financial support for upgradation and for adding new technologies to modernise their operations.

The project components covered under MIDH include integrated pack-houses with pre-coolers and staging cold rooms, refrigerated transport including trucks and containers, modern ripening chambers, cold stores for bulk storage and modern distribution hubs, as
well as merchandising cabinets and street carts. The add-on technologies include alternate energy options such as solar, geothermal or biomass based systems, dock leveller systems, specialised sorting grading lines, etc. The infrastructure types supported by MIDH are direction setting and are aimed at strategically incentivising the missing links needed for greater efficiency and market linked connectivity. Annexure XIV of the study lists the suggested State-wise breakup of the key components that could be developed for farm-to-consumer logistics.

The assessments made in this study have disregarded cold-chain use where the produce is harvested within 300 kilometres of the consumption centres since the selling cycle is manageable well within the normal holding life of the perishable produce. The study has also suggested that the additional time gained by using the cold-chain should be used to reach out to concentration of consumers to better use the remaining shelf life. The example of the quick and efficient supply systems developed for milk distribution is highlighted. The document includes key definitions which is the first comprehensive listing of terminology used so as to add clarity to the concept of cold-chain.

About NCCD

National Centre for Cold Chain Development (NCCD) in India is an autonomous body under the Ministry of Agriculture to drive innovation and to pioneer excellence in the field of cold-chain. NCCD serves as a think tank on agri-logistics matters, to provide guidance on policy interventions. NCCD is representative in nature and works in close collaboration with industry and other stake holders to promote and develop policies for integrated cold chains in India for perishable F&V and other allied agri-commodities.

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