Indian Cavendish Bananas in European Market: NEW INITIATIVE OF ICAR IN PPP MODE: Final Report

Indian bananas are traditionally exported to Gulf countries like UAE, Saudi Arabia, Iran, Kuwait, Oman including Malaysia and Nepal. The European Union presents huge market opportunities for Indian banana producers and exporters owing to the shortage of supply from its traditional suppliers like Latin American countries. To boost the Indian banana exports further to the European union, MoA was signed among TNAU, Coimbatore, University of Udinae, Italy, Port of Trieste, Italy in partnership Tamil Nadu Banana Growers Federation (TNBGF), to develop a cable way conveyor (CWC) system and better postharvest handling practices for the export of Grand Naine Banana from India under the project "Tamil Nadu banana goes Europe: Banana 4 Growth, India". ICAR-National Research Centre for Banana, Trichy, was associated as the technical partner to provide end to end solutions from the development of cable way conveyor system to postharvest handling and packaging the banana into the reefer container.

With the successful development of CWC and static simulation studies and shipment protocol and technical assistance from ICAR-NRCB, in a first, a trial shipment of 20 tons capacity, harvested from Theni, Tamil Nadu India was flagged off by the agriculture minister R.Duraikannu and Dr. A.K. Singh, Deputy Director General (Horticulture) from TNAU campus, Coimbatore on 31st October, 2018. Dr. S. Uma, Director, ICAR-NRCB, Mr. Chiru, APC, Govt of Tamil Nadu, Mr. Gangandeep Singh Bedi, Secretary Agriculture, Officials of TNAU, Drs. K.N.Shiva, R.Thangavelu, V.Kumar and P. Suresh Kumar, experts from ICAR- NRCB were also presented in the meeting. The vessel started its voyage from Kochin port on 2nd November 2018 and reached the destination port on 28th November, 2018.

Pallets of 54 boxes arranged in 9 stacking lines with the individual box weighing 18 kg was packed and palletized. In a box, 17-20 clusters of 5-6 fingers were arranged with the total fingers of 108-125. In total, 1080 boxes in 20 pallets were stacked in the reefer container which was conditioned to 13.5±0.5 °C before stuffing the produce in to the reefer. Pulp temperature during depart was 15 °C. Upon arrival at the destination port, the fruits were examined for various physical and chemical parameters. The report from the AGROinspect, Italy revealed that the cargo maintained it temperature throughout its voyage and has the retention temperature of 13-3-14.4°C. The report appreciated the general condition of the fruit. The fingers were medium to full, well filled weighing 130-170 g, slightly curved, fruit firmness of 50-60N and the length varied between 15-22 cm with the appearance of green to light yellow colour. Altogether the fruits with major defects were <6.19% while 84.88 % recorded the sound fingers thus the overall quality of the banana could be graded as **Good -Fair**.

In future, efforts should be given to follow the practices of using bunch sleeves, cushioning pads to carry the bunches, *in situ* removal of latex, better pack house practices, stringent removal of damaged, over and under sized fingers to get the grade of excellent with the quality score of more than 95% sound fruits.



Flagging off ceremony at TNAU- Coimbatore





Fruits displayed at Port of Trieste, Italy