

Economics of Conventional and Mechanical Methods of Compaction and Bagging of Dried Chillies

S Vishnu Vardhan, B John Wesley, D Sandeep Raja and S V S Gopala Swamy
Post Harvest Technology Centre, Agricultural College, Bapatla.

ABSTRACT

Packaging is an important function for every produce and so is in marketing of Chillies. Good packaging of chilli not only facilitates convenience in transportation and storage but also attracts consumer to pay more. Packaging reduces the marketing cost and protects the quality. In Andhra Pradesh, dried chillies are usually compacted by foot for packing in gunny bags. It was found that there is no uniformity in the packing size of chillies in the country. Packing material used and the capacity of packages are different in different states. The capacity of gunny bags is generally 20-25 kg in North Eastern States and in Punjab. In Andhra Pradesh and Tamil Nadu, the pack size is more than 40 kg. Generally, all the farmers use old gunny bags to pack chillies before selling. Only the exporters repack them in new gunny bags sometimes with polythene liners inside. Conventional method of dried chilli compaction and bagging is normally done by farm labourers, with one person continuously trampling the dried chillies. Conventional method involved drudgery and gives burning sensation to the labourers. The productivity of the conventional method by employing three labourers is 8 bags/h. A unit has been designed and developed at Post Harvest Technology Centre, Bapatla for Mechanical Compaction and Bagging of dried chillies. The capacity of the unit has been evaluated as 20 bags/h. The time of operation was found to be 10-11 min and 3-3.5 min using conventional method and machine respectively. The cost of operation of conventional and mechanized compaction and bagging worked out to be Rs. 30 per bag and Rs. 18.28 per bag respectively. The productivity of the machine in compacting and bagging was calculated to be 150 % and a saving of Rs. 11.70 per bag over conventional method. The mechanical compaction and bagging unit is very much useful for bagging of dried chillies.

Key words : *Dry chillies, conventional compaction, mechanical compaction and bagging*