Software for Design of Cold Storage for Fruits and Vegetables

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India is the second largest producer of fruits and vegetables in the world, but poor storage and processing techniques result in huge post harvest losses. These post harvest losses can be minimized using cold storage techniques for storage of fruits and vegetables. Design of cold storage is cumbersome and has to be done for each crop separately. Often, experts are required to do these designs and recommendations. To make the design and recommendation easy, an user friendly software was developed to calculate the total cooling load, and cost economics for different fruits and vegetables. The software was developed such that even a novice can easily obtain a basic idea about cold storage design, construction and its cost benefits. Once the commodity to be stored is selected, the software gives the predefined storage guidelines for the respective product. Following the product details, construction information of a cold storage unit is to be given as input information. Using these input details the software provides all design details for a cold storage unit and calculates total cooling load and cost economics of the unit. The software was validated with known data for designing cold storages for selected crops and found to work very well. It is proposed to evaluate this software with real life cold storage problems and designs.