

# Postharvest management to ensure food security and the critical role of capacity building

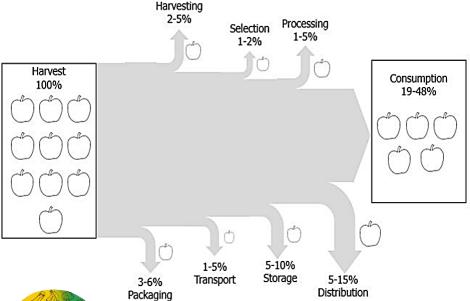
Vijay Yadav Tokala, PhD

President The Postharvest Education Foundation, La Pine, Oregon 97739, USA

www.postharvest.org



Empowering people to reduce food losses...



#### **Postharvest Food Losses**

- Significant and evident in all parts of the world and at all stages of supply chain.
- May constitute **up to 50** % of total produce **or more** in fresh perishables.
- Food losses = loss of all resources used to produce and handle them.





#### **Postharvest Food Losses**

- Reduction of losses is a sustainable means to increase **food availability** and ensure **global food security.**
- Lack of infrastructure and access to an affordable uninterrupted cold chain during different steps of value chain are main reasons for the losses in the perishable foods.
- Proper temperature management is **most effective option** to reduce losses.
- Several research programs presented different sources of losses and developed
  - number of innovations to reduce losses.



# **Reducing Food Losses**

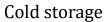
Ways to reduce food losses at different stages in value chain:

- Harvesting and Precooling
- Packhouse operations
- Processing
- Storage
- Transport and Market
- Household



Portable forced air cooling tunnel







Solar drying vegetables



Reefer vans



Refrigerated retail display



Refrigerator



# **Postharvest Capacity Building**

- Capacity building programs **create cadre** of well-trained postharvest professionals.
- To reduce losses **effective extension and training** about factors affecting food loss and wastage and suitable remedies is essential.
- The proper transfer of **knowledge** in postharvest handling of crops is still **critically lacking**, especially in low- and middle-income nations.







### **Capacity Building - Outreach methods**

- Educational institutions curriculum development
- Location-specific/ Crop-specific projects
- Information and communication technology (ICT)
- E-learning programs and online events
- Conferences and other public interaction events
- Public private partnerships







# **Postharvest Capacity Building**

- Outreach activities range from word-of-mouth communication, written
  materials, field visits, and e-learning programs to using information and
  communication technology (ICT).
- Identifying a suitable capacity building method and designing an effective program requires **complete understanding of different aspects of target issue**.







# **Discussion Question 1**

- A technology successful in solving a problem in one location, may not be successful in other location.
- What makes certain technology successful in a specific location?
- How can we identify/decide if certain technology is suitable for the specific location?
- What are the factors to be considered? Any specific approach?







# Discussion Question 2

- There are different outreach methods for capacity building.
- How can we choose the suitable outreach method(s)?
- What are the factors to be considered while deciding a outreach method?
- Which outreach method is most effective in your location and why?





