Presentation on Postharvest Training Activities

BY

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The Postharvest Education Foundation
E-learning Program Closing Workshop
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Kigali, Rwanda
Vegetable production: BD ranking 3rd in the World

Bangladesh

India

China
Vegetable production in 2015-16 in BD

Source: BBS, 2018
Area Under Vegetable (Winter & Summer) in Bangladesh, 2015-2016

- **Brinjal**: 12.56%
- **Pumpkin**: 7.13%
- **Radish**: 6.57%
- **Arum**: 5.66%
- **Tomato**: 6.81%
- **Beans**: 5.04%
- **Cauliflower**: 4.82%
- **Others**: 51.41%
Fruit production in 2015-16 in BD

Source: BBS, 2018
Garden Area under Fruits in Bangladesh, 2015-2016

- Banana: 31.61%
- Mango: 25.22%
- Jackfruits: 7.37%
- Pineapple: 9.05%
- Melon: 7.36%
- Guava: 2.37%
- Other Fruits: 17.02%
Challenging area in BD: Postharvest loss

- Postharvest loss of fruits and vegetables in BD
  - 23.6-43.5% of total production
  - Loss 3442 crore taka/year
Scenario of postharvest loss in BD
Scenario of traditional packing and transportation service in BD
Scenario of traditional packing and transportation service in BD
Story of my team’s tiny contribution to reduce postharvest loss

- Joined as Deputy Sector Leader, USAID Horticulture Project, World Vegetable Center in 2014
- Responsible was to make successful value chain between the super markets and the project beneficiaries
- Starting my new journey as student under Postharvest Education Foundation in 2015
- Interestingly I became responsible for implementing the USAID Postharvest Project under the collaboration between World Veg. and BARI
- Review the critical causes of postharvest losses of vegetables
Figure out the main causes of postharvest losses in vegetables

1. Production of vegetables without considering supply and demand
2. No storage facilities
3. Absence of proper packing knowledge and facilities
4. Improper transport facilities
5. Lack of knowledge and skill on improved postharvest technologies of all actors in the vegetables supply chain
6. Farmer’s groups are not linked with good markets
Our team had taken actions against all the critical causes under USAID Postharvest Project

1. Establish low cost model packhouse including cool storage facilities in collaboration with DAE
2. Trained more than 600 actors of supply chain on postharvest technologies through hands on training program
3. Linked with good markets including export market for 30 farmer’s groups who were involved in the model packhouse
4. Facilitated the export of more than 400 MT cabbage and cauliflowers to Malaysia and Singapore
5. Given special emphasis on using plastic crates
Coolbot cold storage

Drying area

Wash tanks

Packed produce for storage or dispatch

Packing tables

Sorting tables

Weigh scale

Dispatch

Receiving
Acquired packhouse facilities and their uses

1. Six Stainless steel sorting table (4ft x 2.5 ft)

2. Five steel rack (5 ft x 5 ft with four layers) for Coolbot cold storage

3. Two heavy duty stand fan

4. Established a Coolbot cold storage by constructing a insulated cool room (10 x 11 x 10 ft), air tight insulated door, a Coolbot and an air conditioner

5. Fifty stackable plastic crates (30 kg capacity each)

6. Improving the washing tanks and surrounding area by fitting tiles.
Internal view of Coolbot cool room

Steel rack inside the cool room
Operation of a Model Packhouse

1. Receiving of produce
2. Weighing produce
3. Data recording of the producer and produce
4. Sorting/grading
5. Washing with sanitizer
6. Packaging in PC with MAP
Operation of Model Packhouse..
Human Capacity Building

My Mini Clinic on Postharvest technology Promotion
(Tool kit was a donation from PEF, 2016)
My team trained 603 trainees on postharvest technology

- Men: 408
- Women: 295

Types of trainees:
1. Field/project staff of DAE, DAM, UC Davis, BARI & CARE
2. Growers
3. Processors
4. Packers
5. Traders
6. Exporters
7. Input providers

AVRDC
The World Vegetable Center

USAID
From the American People
Hands on training on improved post harvest technology

Step 1. Motivate the farmers to keep the vegetables under shade after harvest.

Step 2. Showing the harvesting index of different vegetables.
Step 3. Showing the harvesting index at field level.

Step 4. Harvest the mature brinjal by sharp scissors.

Step 5. Showing the field heat of the produce to motivate them for precooling.

Step 6. Showing simple precooling.
Step 7. Sorting and grading were practiced

Step 8: Produce sorted by the participants

Step 9: Showing the sizing/grading ring

Step 10: Showing the source of post harvest loss by traditional packing system

Step 11: MAP Packing of the sorted produce in plastic crate
Make safe food by using Non-Chlorine sanitizer
Use of MAP to make the money
Motivation on using plastic crates
Counting the capacity for carrying plastic crates by one truck
Adaptive research on using plastic crates for increasing shelf life of vegetable
Export of cauliflower from Model Pack house
Export of cabbage from Model Pack house
Trained the project staff of CARE on low cost solar dryer
THANK YOU!

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