Post harvest management practices in tropical FRUITS for market access

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Losses of fruits and vegetables estimated in the range 30 - 80%.
Less than 5% of the funding has gone toward post-harvest areas of concern.
• Horticultural producers in developing countries are mostly small farmers rarely organized into formal cooperative or association.
• Reasons for horticultural produce deterioration and developed technologies.
Deterioration

Developed Technology
High water content

- Humidification
- Curing
- Packaging
Susceptibility to pathogens

- Protective spraying
- Field cleaning
- Systemic fungicide
Easily bruised mechanical damage

- Good harvest practices
- Transport
- Packaging
- Good packing house operations
• To employ new technologies, the scale of operation of business and cost is essential.
• Proposed points of intervention that are less costly, effective and within reach of small scale farmers.
Deterioration

Proposed Technology
Respiration

- Evaporative cooling

Zero Energy Cool Chambers (ZECC) Prof. Roy model.

- Solar – driven cold store (FRC) Ammonia water absorption system.
High water content

• Shading
• Early or late day harvesting
• Curing.
Susceptible to pathogens

- Hot air, water treatment
Sanitation.
Mechanical damage

• Stackable plastic – containers
• Improved harvesting
• Training of harvesters
• Field packing