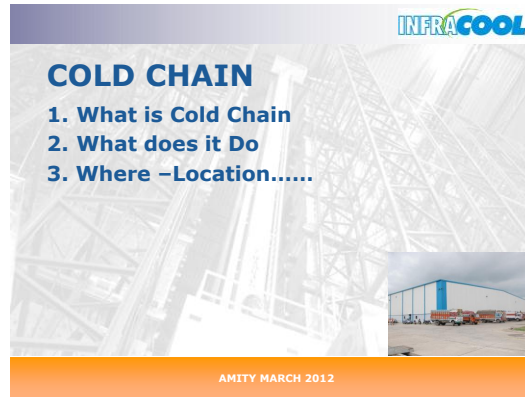





COLD CHAIN MANAGEMENT



INFRA COOL

COLD CHAIN

1. What is Cold Chain
2. What does it Do
3. Where –Location.....



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INFRA COOL

Cold Chain

1. What is Cold Chain
 - **Series of Cold Facilities in a Chain**
2. What does it Do
 - **Maintains Ideal Storage Conditions – Perishable**
3. Where – Location
 - **Starts at Point of Originto Point of Consumption**



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COLD CHAIN



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Cold Chain Benefits

1. Reduces Spoilage
2. Retains Quality at Consumption Point
3. Extends Marketing Season
4. More Distant Markets Covered
5. Cost Efficient Delivery to Consumer



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Cold Chain Infrastructure

- ❑ Pre-cooling Facilities
- ❑ Cold Storage
- ❑ Refrigerated Carriers
- ❑ Packaging
- ❑ Warehousing
- ❑ Retail Point Cold Facilities
- ❑ Information Management System (Traceability & Tracking)



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INFRA COOL

INTERNATIONAL SCENARION

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INFRA COOL

PRECOOLING – FORCED DRAUGHT



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INFRA COOL

PRECOOLING – FORCED DRAUGHT



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PRECOOLING – FORCED DRAUGHT



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PACKAGING ICING



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COLD STORAGE



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CONTROLLED ATMOSPHERE STORAGE



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Ripening Center



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INSIDE A PACK HOUSE



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INSIDE A PACK HOUSE



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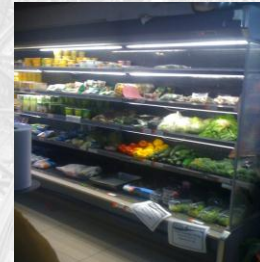
REFRIGERATED TRANSPORT



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SUPER MARKET RETAIL



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INDIAN SCENARION

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Farm Level Transportation



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COLD STORAGE & CA STORAGES



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Controlled Atmosphere Facility



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TRANSPORTATION



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RETAIL



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BIG QUESTION ???

- Does Cold Chain Exist in India ?
- Where are we on the Road ?
- What is required ?

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Does Cold Chain Exist in India ?

- Yes
 - Dairy Industry, Pharma, Fast Food
 - Grape Export
- No
 - Domestic Horticulture Produce
 - Outdated Technology - Potato

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Where are we on the Road ?



- Transition Stage

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What is Required ?

The optimum storage condition for each product, cultivar and production area is potentially different

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What is Required ?

- Cold Chain to Suit Specific Products at Production Area
- Cold Chain for Specific/ Multi-commodity Storage at Consumption Centre
- Research to establish suitability Optimum Storage condition.
- Knowledge of What is to be done ????

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Questions

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