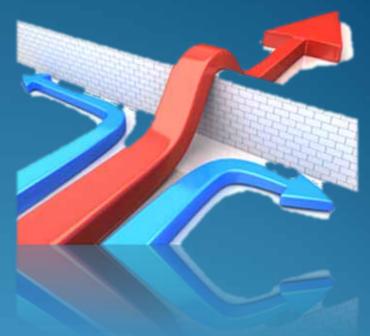
Howard James-Scott, FCILT



Cold Chain appreciation

- Define the wastage first: shrinkage (as in moisture/weight loss), damage (due mis-handling), storage (inadequate, unhygienic, infested), lack of efficient supply lines (appropriate packaging and transport) and pilferage (not too much concern)
- Shrinkage gets sorted by good packaging (go green and make sure it is breathable while impermeable to moisture loss).
- 3. Mishandling & shrinkage also gets attended to by good packaging.

- Storage- designed around lead time t o market. No unnecessary energy expenditure, but that focused on reaching market + 2 days shelf life.
- Understand what is desire Better supply lines use IT for ensuring fast track green corridors. While road infrastructure will mend over coming years, lets mend the document flow and border clearances.d product life cycle – not maximum life cycle.

- Trucking to serve as off-shoots from faster more efficient rail lines. Make rail heads as trucking hubs. Counter handling damage from multiple load/unload by better packaging and unitised load handling.
- Involve retailers in real farm to fork off-take by establishing wholesale markets at farm-gate level. Most large wholesale mandis are around urban centres today.

 Utilise technology to educate farmers on cooperative method of agriculture – like the amul butter story instead of individual and disjointed farming practises. Promote cooperative farming by giving discounts to bulk seed/fertilizer purchases. Offer free weather guidance and soil analysis to cooperatives.

 Map existing food supply lines to offset reverse empty hauls and add viability to transportation. Eg, carry potato to coastal cities, and return fish into hinterland. To be promoted and assisted by govt agencies.

 Establish technologically advance processing centres at farm gate level – aimed at promoting old rural arts of pickling and jam making. Will reduce wastage and serve as value add.

• lot of wastage due to inclement monsoons and dry spells – counter with simple technology of rain water harvesting – a la Gibralter. Harvest rain from hillsides into storage aquifiers. A-la Israelis, drill deep narrow pits every 30-50 metres so water soaks into earth instead of evaporating quickly from surface (like walking with spikes in your garden).

 Another simple technology is mobile phones for transparent communication of market rates to farmers – so they do not arrive at the mandi to find their produce adding to a flooded market. Instead, they would have done better to harvest a couple of days later and fetch right price.

In summer months, harsh dry winds cause major loss

 same dry air can be used to cool by deploying same low-tech concept in desert coolers. Just drape one wall of temporary store or windward side of truck with husk mats and regularly soak with water to keep inside cool.

 Silly but simple obvious ideas – but they do mention cost-effective in subject matter.

Howard James-Scott Would like to say 'Thank you' please feel free to call 0091 8008559777