

Food Quality - Its impact on Food Waste

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FOOD WASTE- A PROBLEM OF GLOBAL PROPORTIONS

WHAT DO WE CONSIDER WASTED FOOD?:

Edible Material, produced commercially for human consumption, but not consumed by Humans

Edible Material, produced for human consumption, but not consumed by Humans, Animals, Plants or microflora (i.e. not Composted)

Resources wasted on producing food- land, water, energy, fuel etc.

GLOBAL FOOD WASTE (2022)

Over 1 billion tonnes- 19% of post harvest production-

60% Household-40% food service & retail

Equals 1 billion meals a day.

Additionally 13% lost through Supply chain

783 million people go hungry

8-10% of GHG emissions

FOOD WASTE- US

Third biggest source of waste (Behind China & India)

Over 133 billion lbs.

43% Household-40% food service & retail, 2% manufacturers

Does not include food loss (primary producer)

Quality is primary driver of food waste

Wasted food falls into **3 categories** based on shelf-life:

PERISHABLES: Refrigerated, Frozen

LOW WATER ACTIVITY: Grains, Powders, Spices, Oils

SHELF STABLE: Commercially sterile (canned), fermented etc.

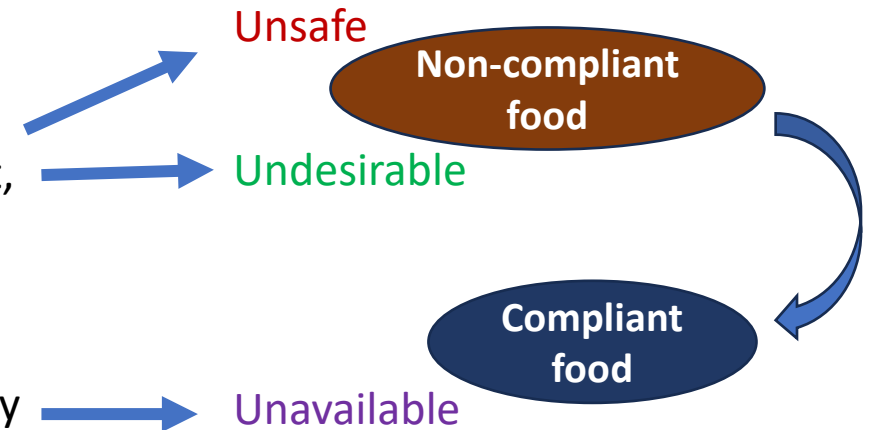
The least wasted foods are ones that hold their quality attributes the longest
Hotter regions associated with more waste

WHY is Food Wasted?:

AVAILABLE to human/animals but they are unwilling to consume it,

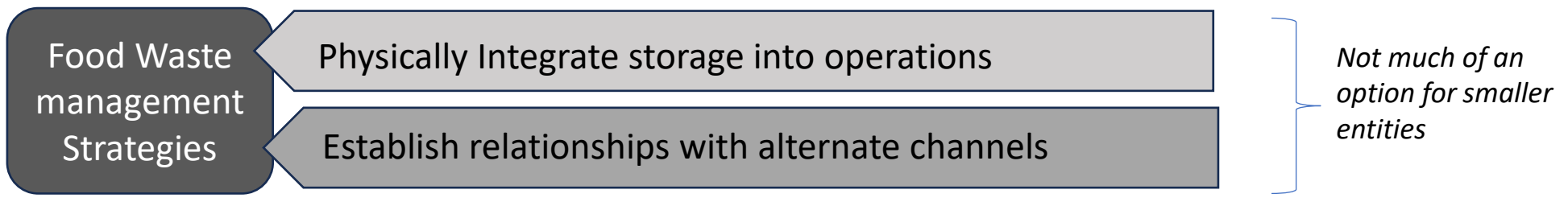
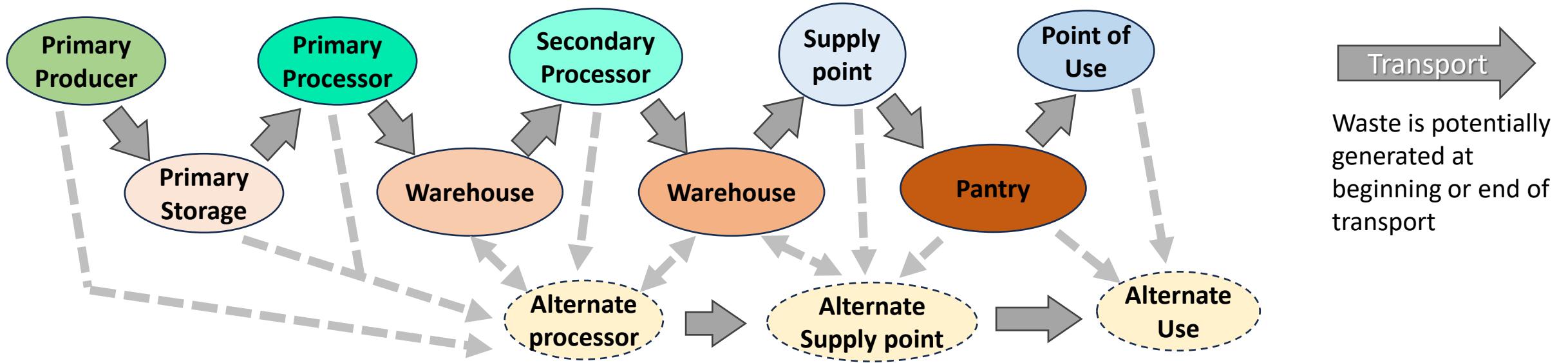
OR

DOES NOT REACH appropriate Humans/animals/composting facility

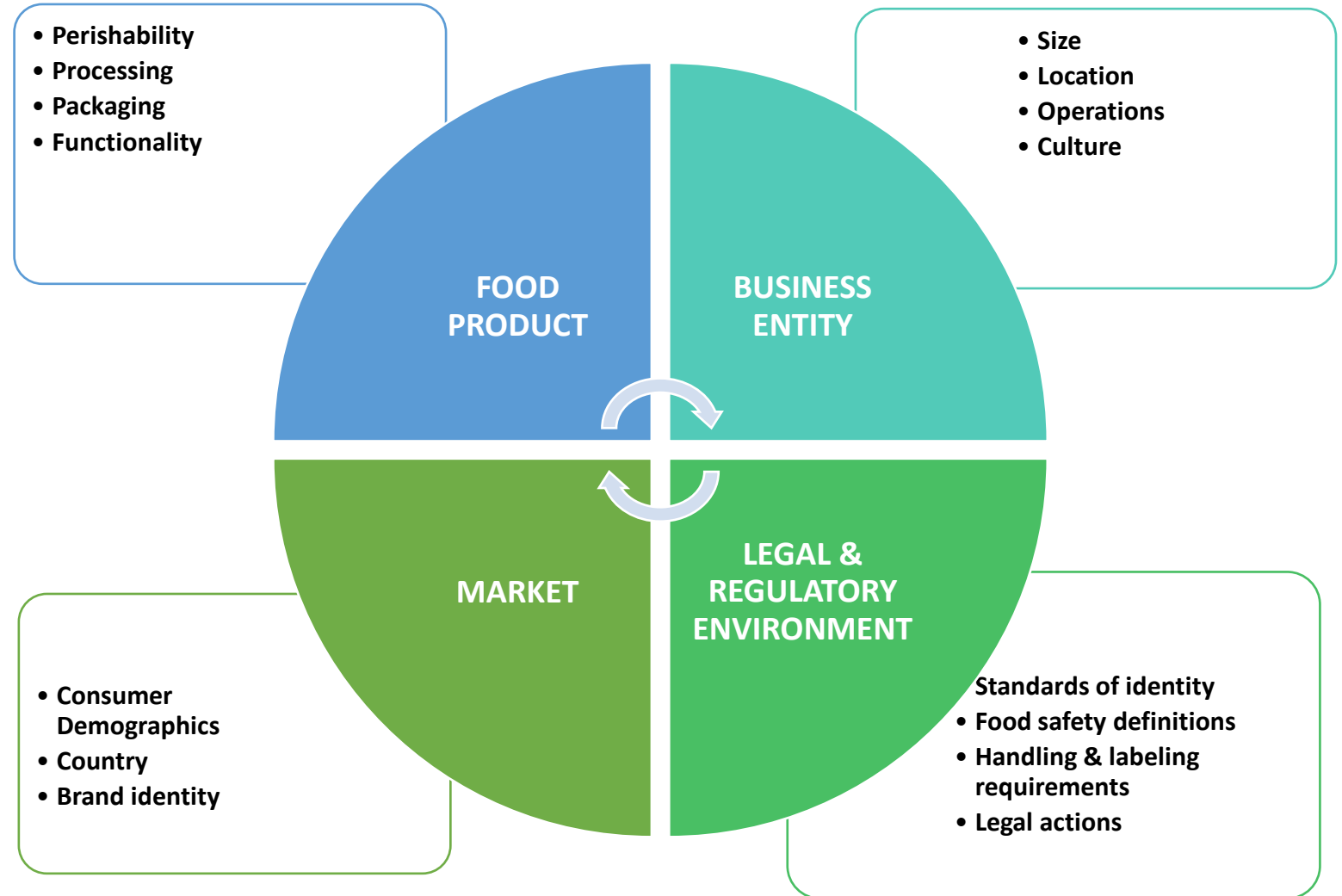


THE FOOD SUPPLY CHAIN / VALUE CHAIN

-is complex and has numerous vulnerabilities



FACTORS INFLUENCING FOOD WASTE GENERATION



EXPLORING SOLUTIONS- Marketplace Initiatives

DESIGN INTO DNA

Alternative use as part of the product & company identity

- Business
- Operations
- Product
- Culture

MARKET SOLUTIONS

Development of solutions holistically addressing the 'whys' of the supply chain.

- Products
- Services
- Information

ADAPT TECHNOLOGY

Leveraging current technology to address challenges .

- Data & Information
- Primary production
- Product formulation
- Food processing
- Food recovery/recycling

EXPLORING SOLUTIONS- Government Initiatives

Targeting 50% reduction by 2030

US Government agencies

Providing information, funding and other resources

- EPA
- USDA
- FDA
- USAID

- Public Private Partnerships- E.g. food waste champions

- Information toolkits for businesses, individuals & communities

- Grants for research, innovation, education and outreach

- Recycling Infrastructure support

- Guidance & regulation- date labeling

- Monitoring & reporting Data

LASTLY...

Embrace Positive Change
in Perceptions & Behaviors
as Individuals & Businesses

Thank

You