



Overview: The Mega Cities, Mega Waste *Last Mile* Challenge

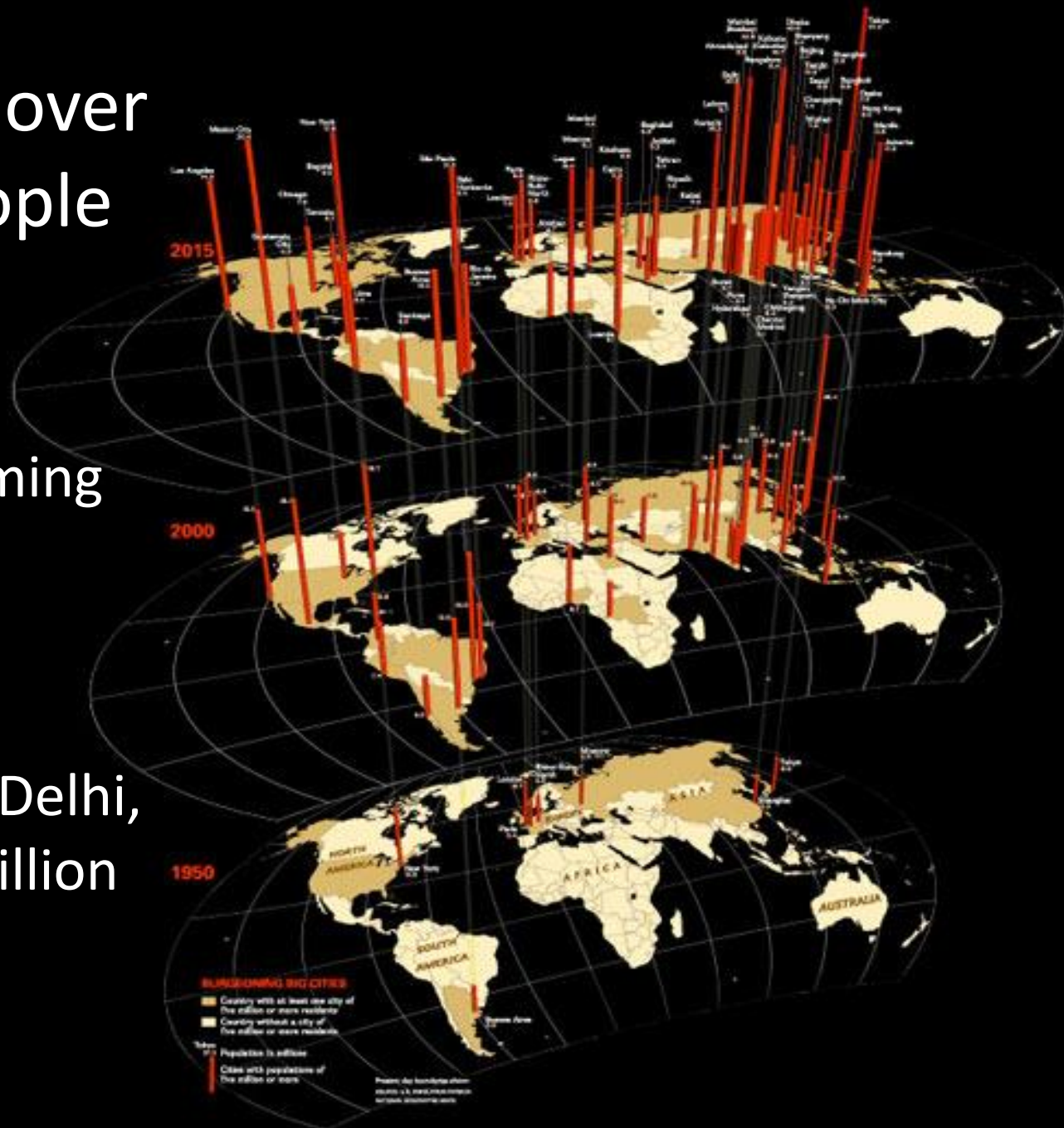
Crawford Fund Conference
30 August 2016

Professor Alice Woodhead
Australian Centre for Sustainable
Business & Development

Mega cities – over 10 million people

Asia rapidly becoming more urban

Tokyo 33 million
Manila, Mumbai, Delhi,
Jakarta over 14 million
and growing





Asian food trends



Busy people
Urban lifestyle
Middle class
Western diets



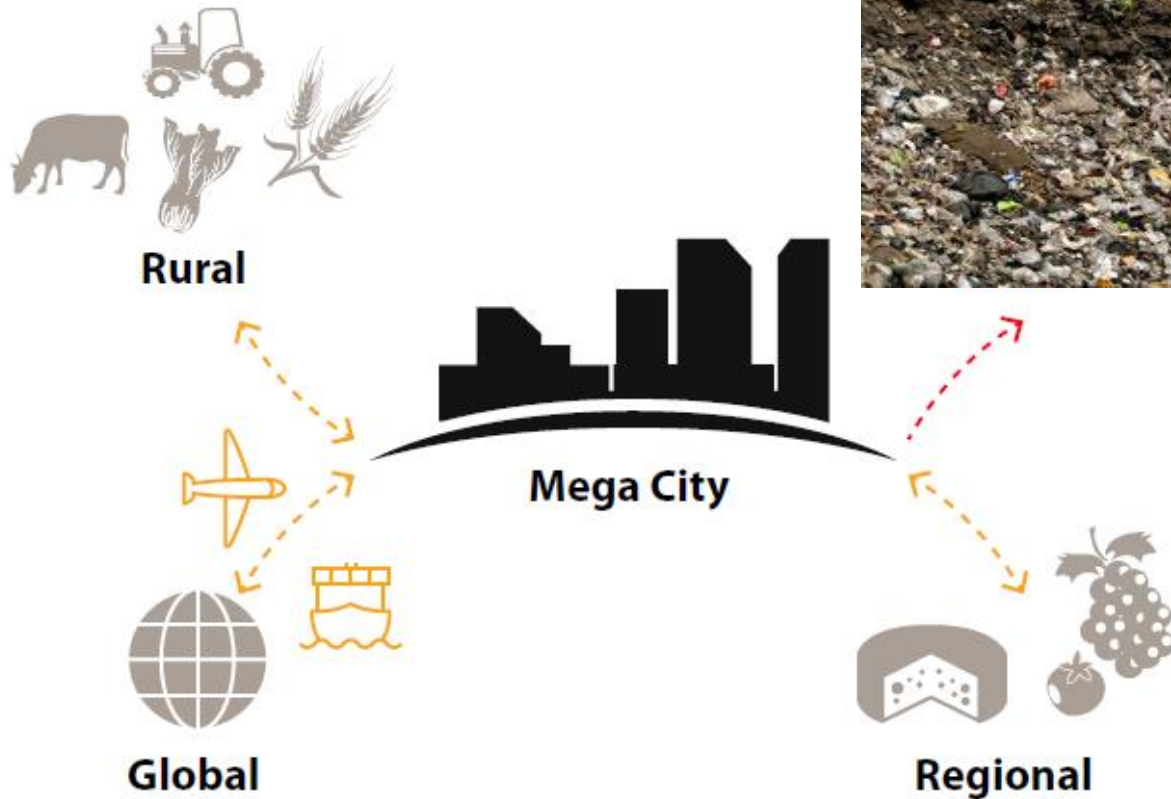
Protein
Chilled
Packaged food



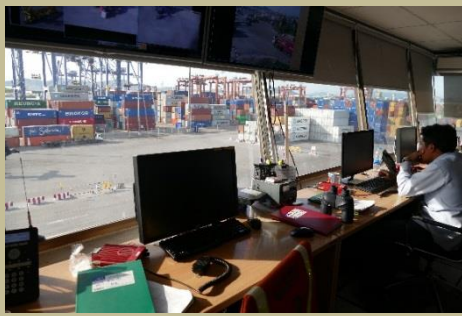
Super
markets
E-Commerce



Result: Mega waste



Global



Value
chains

1. Fresh food



Supermarket



Wet market

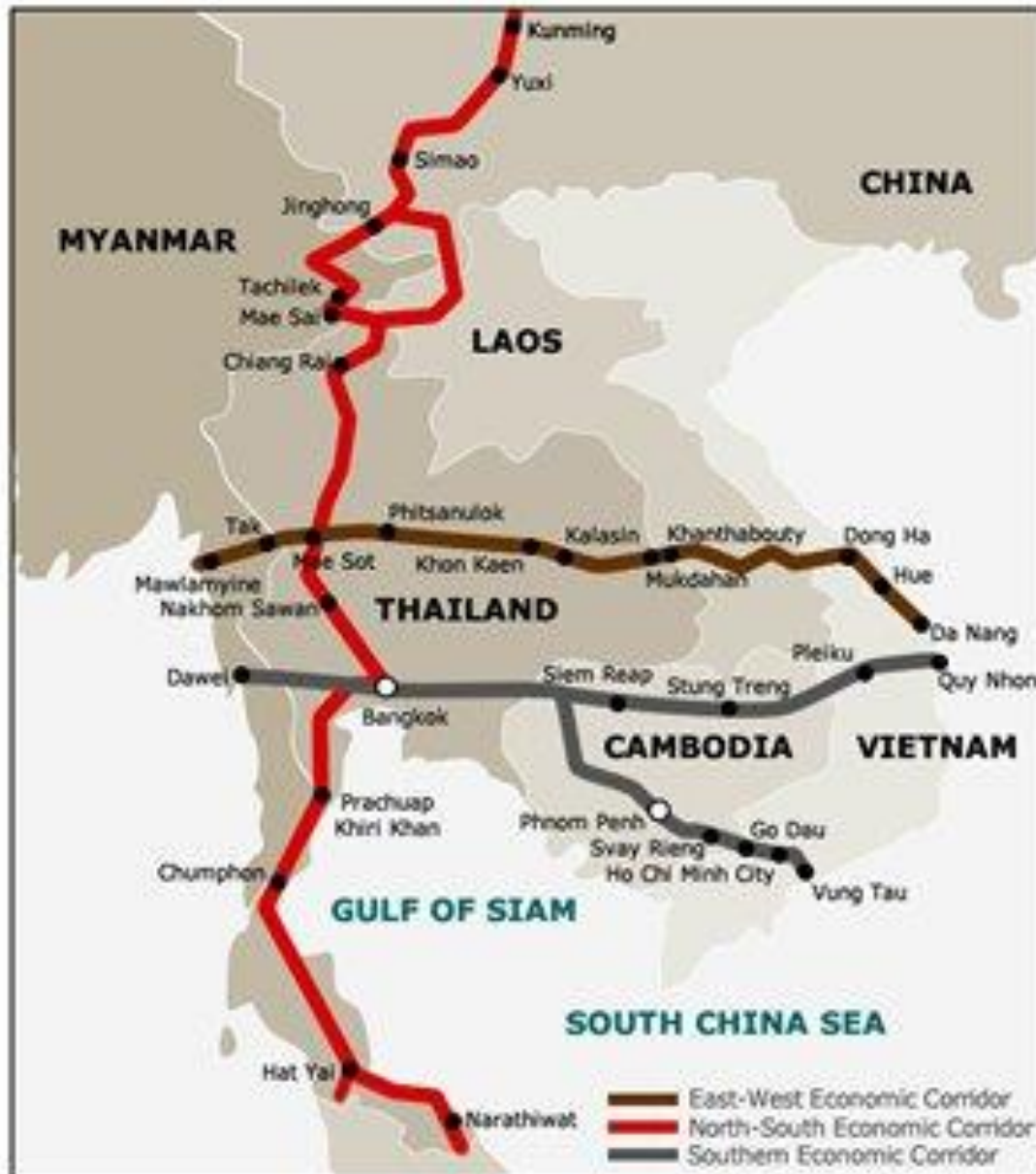
Rural



Regional value chains

Disruptions across regional value chains

- Variable infrastructure, roads, rail
- Numerous logistics providers
- Variable quality control at farm, market and retail
- Consequence; waste



2. Chilled packaged food

- Shelf ready meat and dairy
- Temperature sensitive products
- Requires a high level of quality control
- Drivers, retail managers and consumers uninformed about chilled and frozen handling requirements
- Consequence: short shelf life, contamination, food poisoning and waste





What does the last
mile look like?

Understanding food distribution is imperative for trade and regional wellbeing



The challenge



1. Rapid, chaotic and uneven pace of urban development is causing systemic failures across ag. value chains and food systems
2. Australia thinks differently; our problems are at different points in the value chain – the household

Policy considerations



Growing mega cities without infrastructure development will exacerbate waste problems

Challenges more fundamental and complex in some countries, but common themes;

- cold chain logistics and infrastructure
- education about food quality management and chilled food
- waste regulations and rates
- public private partnerships
- R&D and innovation