Resilience and “leagility” across the dairy food chain.

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Agenda

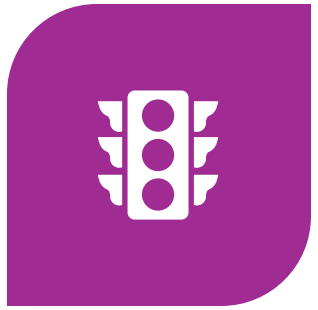
01	Resilience, shocks and being lean
02	Dairy price indices
03	SPOD to a BANI world
04	Leagility and ABCD of resilience building
05	The 7 Rs of Resilience

LARGS supply chains

LEAN

AGILE

RESILIENT



GREEN

Resilience [1-2]

Bounce-back/bounce without breaking	Bounce-forward	Becoming
The ability of a business, supply chain or food system to return to a steady state	The ability to overcome a shock and develop the business to be resilient in the new 'normal'	The ability to continually reshape and refine given the environment in which the business operates now and in the future.
Language of recovery, business as usual,	Language of renewal, transition, change	Language of agility, flexibility, durability, capability.
Buffer capacity	Adaptive capacity	Transformation

Being lean

Businesses and the supply chains they operate in are streamlined, and resource and supply chain efficient (just-in-time) but…

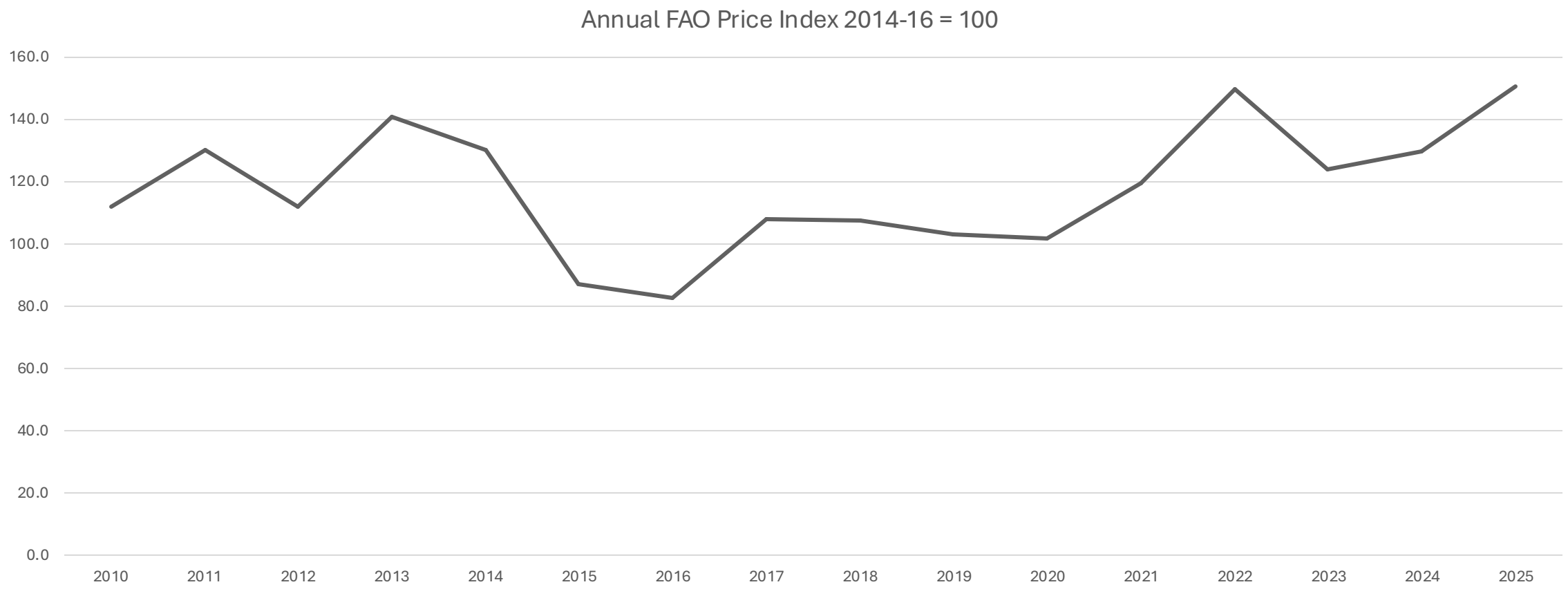
Consolidation and reductionism has created ‘pinch-points’ i.e., bottlenecks or strategic points in the supply chain that are vulnerable to shocks or disruption. [3]

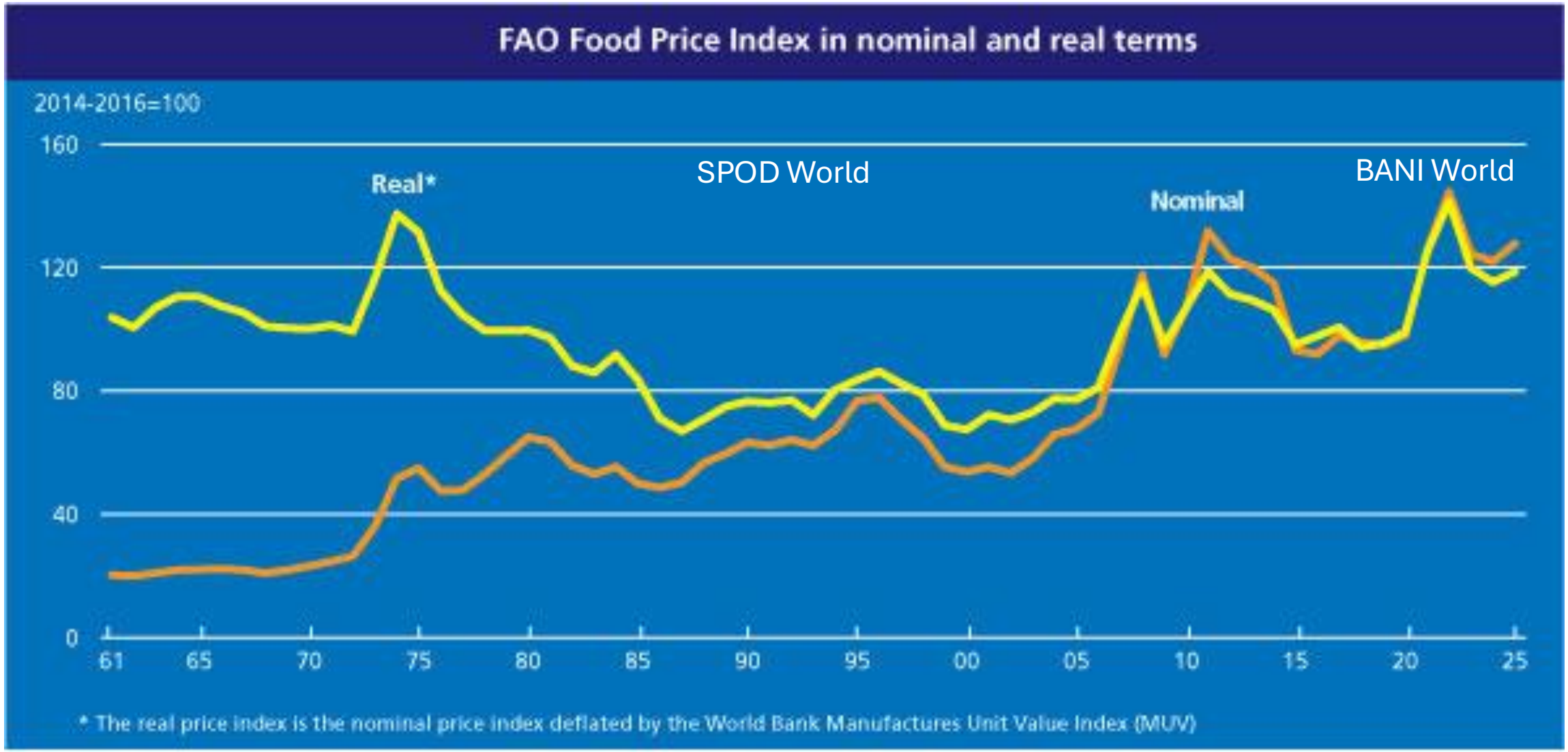
Lean methodology – eliminating waste (Muda)

Seven kinds of waste with a focus on manufacturing overproduction, waiting, transportation, overprocessing or incorrect processing, excess inventory, unnecessary movements and reducing defects [4-5].

Lean thinking promotes value, optimising resource use [6], doing more with less [7] and everything that does not add value is considered as waste [8].

Dairy FAO indices [9]




FAO Food Price Index in nominal and real terms
2014-2016=100
160
120
80
40
0
Real*
Nominal
SPOD World
BANI World
61
65
70
75
80
85
90
95
00
05
10
15
20
25
* The real price index is the nominal price index deflated by the World Bank Manufactures Unit Value Index (MUV)

SPOD to a BANI world....

SPOD world - steady, predictable, ordinary and defined.

BANI world - brittle, anxious, non-linear, incomprehensible.

Non-linear risks are

Complex

Influenced by quantifiable and non-quantifiable factors

Framed by risk-return trade-offs

A viable supply chain is able to [10]

react agilely to positive events and changes

be resilient to absorb negative events and recover after the disruption(s) caused, and

survive long-term, global disruptions by

adjusting capabilities and capacities, allocating resources in response to demands and address a short-term and long-term perspective [11].

Leagility

The evolution from lean thinking to the agile thinking [12]

Resilience reduces brittleness and promotes supply chain viability now, and in the future so the supply chain can “withstand, adapt, and recover from disruptions to meet customer demand(s) and ensure performance” [13].

ABCD of resilience building [14]

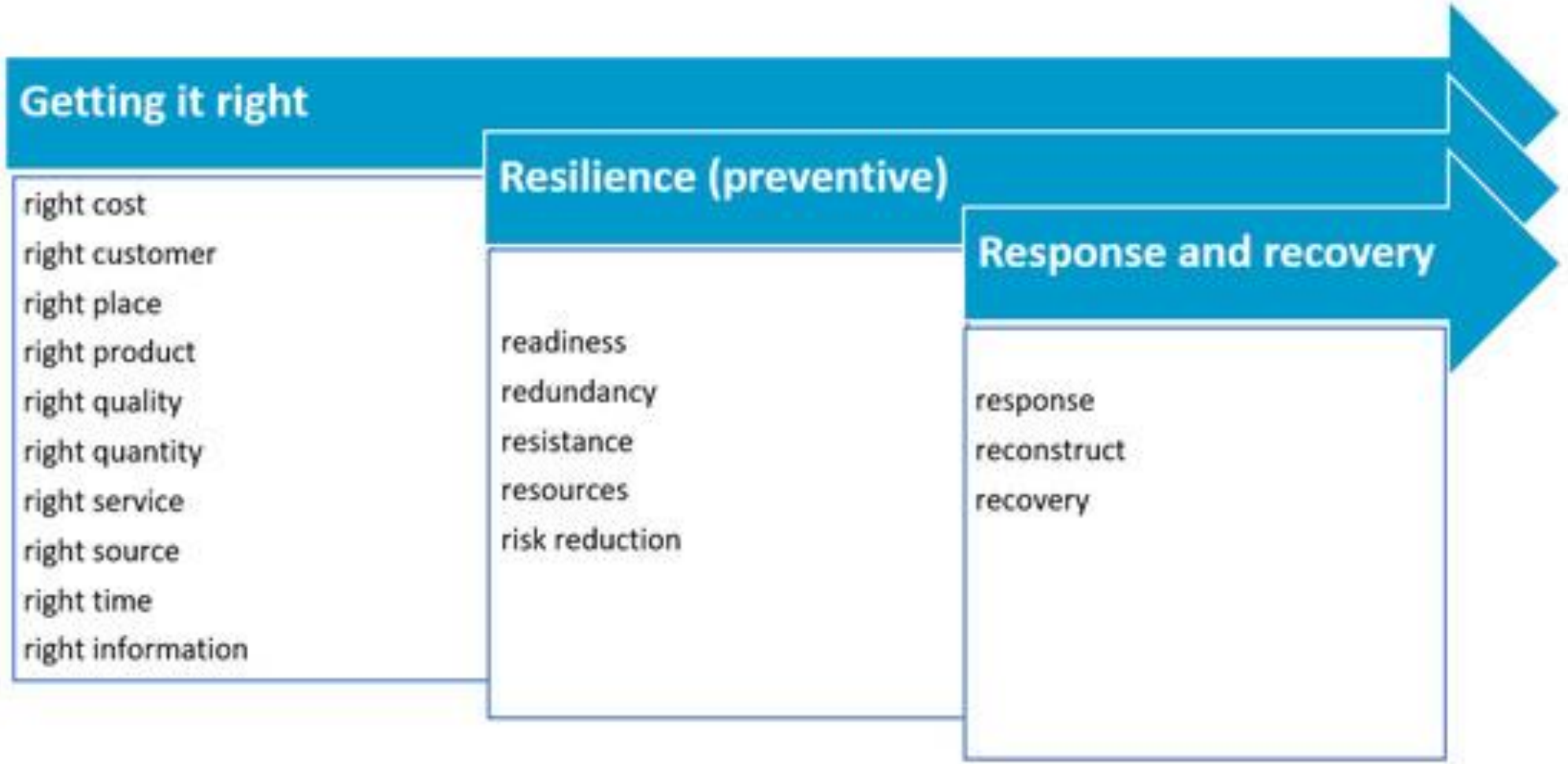
Agency - the capacity and capability to mitigate risk and respond to crises, disruptions and change;

Buffering – sufficient physical, financial and human resources to fall back on in the face of a shock or stress;

Connectivity – collaboration, interconnection and communication across markets and the agri-food value chain; and

Diversity in the entire food system where one resource can be replaced by another resource or one market channel can be replaced by another.

The 7 Rs of resilience [11]



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