

# Smarter Farming – Are our Farmers Ready ?



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**The Farmer is an Expert in the Crop that he Grows because :**

he tends to his crop everyday in the field

he sees the plant

he feels the soil

he senses the weather

and he anticipates the next invasion of P&D pathogen

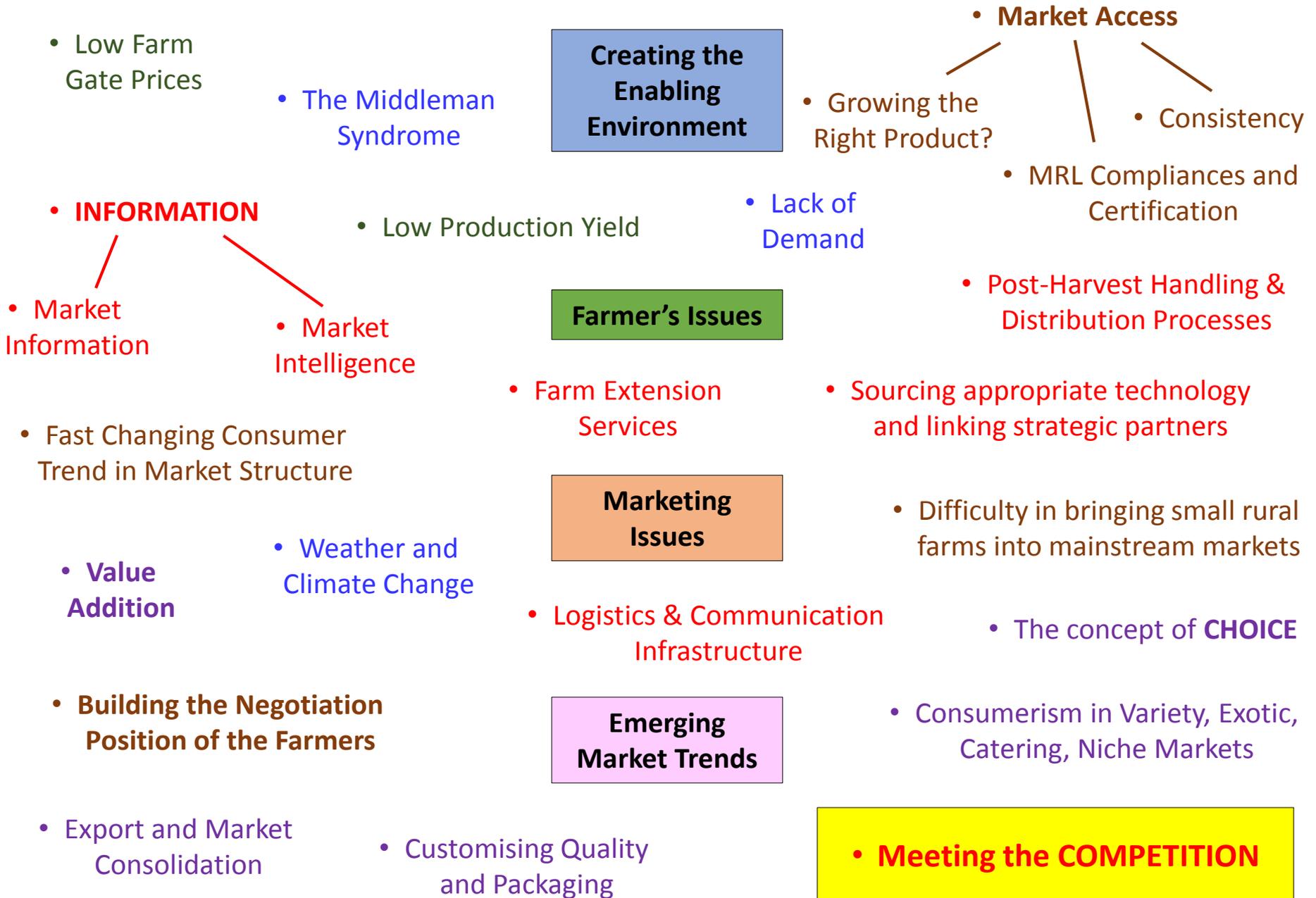
**Yet he has little control over what he does, see, feel or sense**

**He can only anticipate and fear**



K-FARM

# The Value Chain Parameters



# Anticipating the Farming Community of Tomorrow ?

## Farmers

- There will be a new generation of farmers who can read and write and Info Tech savvy
- The Farmer will become a Food Producer (Commercial, Productivity, Control)

## The Information and Technology Effects

- The Speed of Change of Technology is Hyperbolic
- The experience of the Information and Technology Effect is more entrenched
- Farmers who lack behind now will need to **Make a Leap**

## Demand for Food

- The demand for food is greater than the availability of food

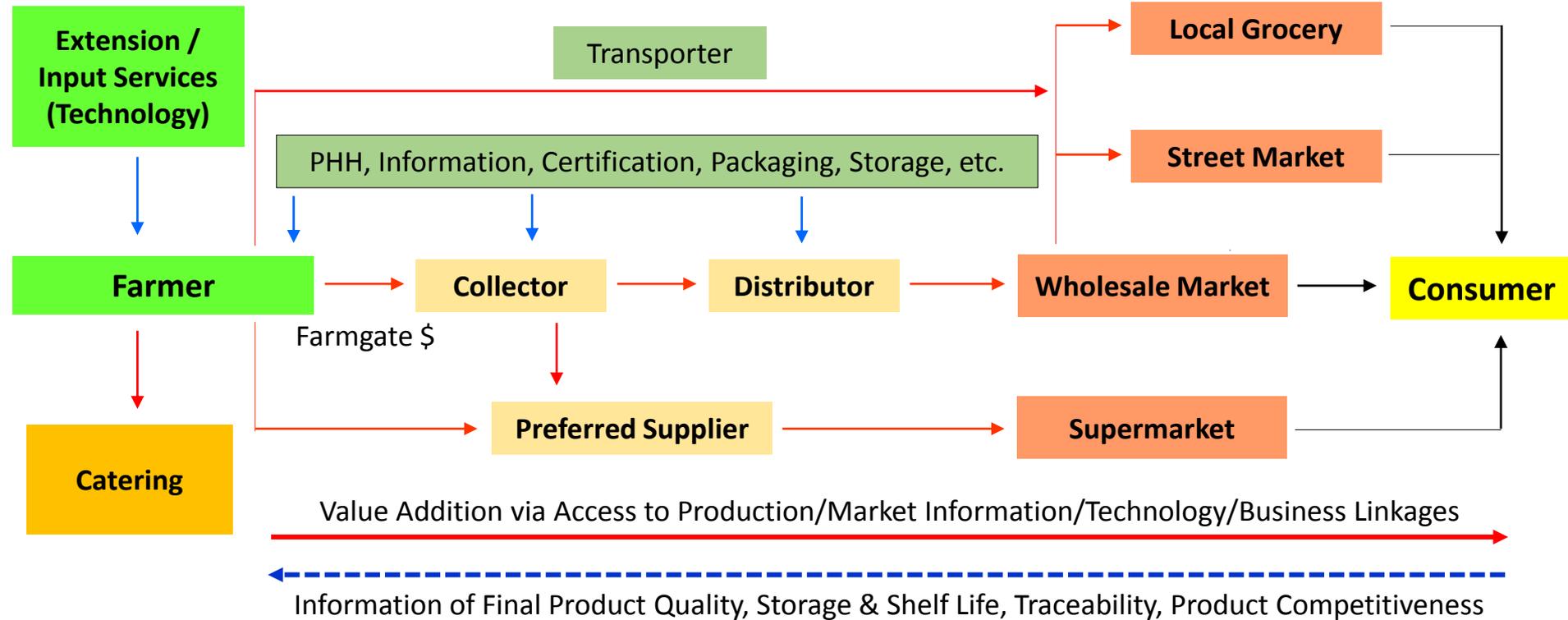
## Market and Marketing

- The marketing distinction on locality will diminish (urban vs rural markets, and domestic vs foreign markets)
- Traders will focus on data management and control

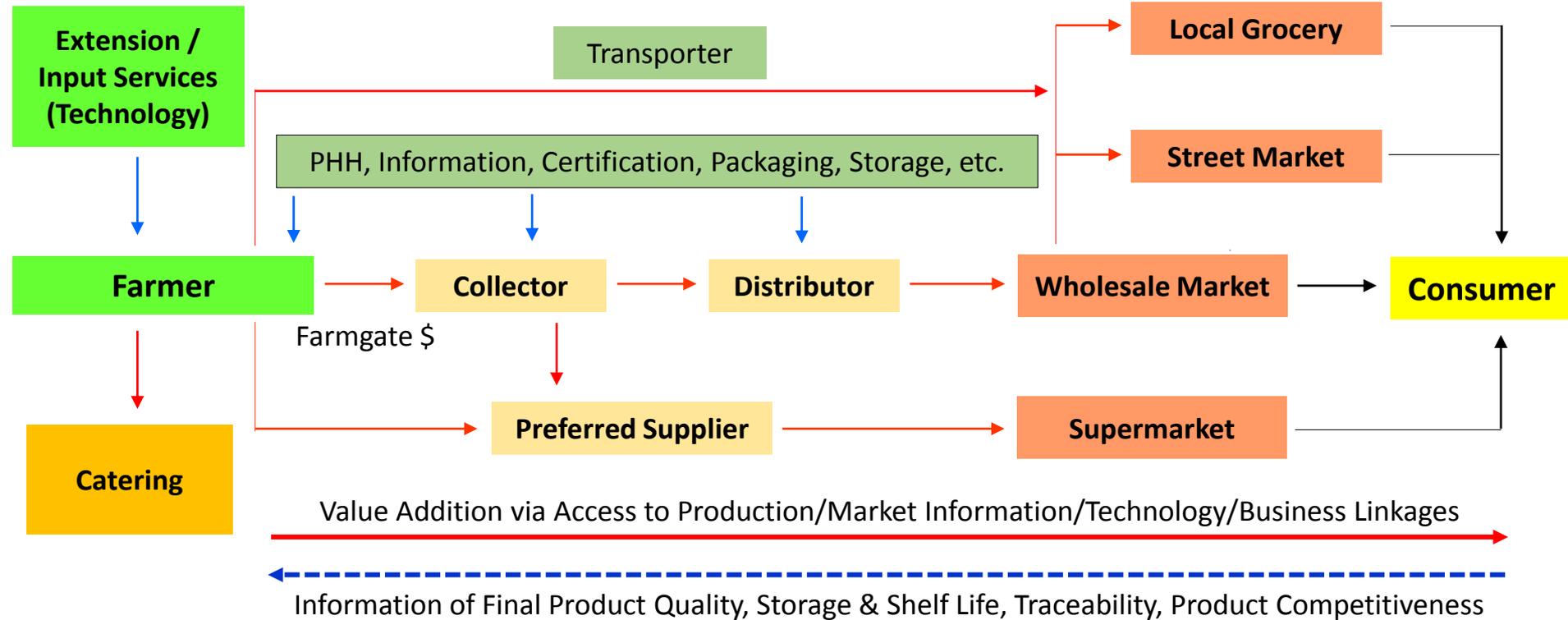
## The Environment

- The Environment will impact in every action and decision that the Producer makes

# Food Value Chain Today

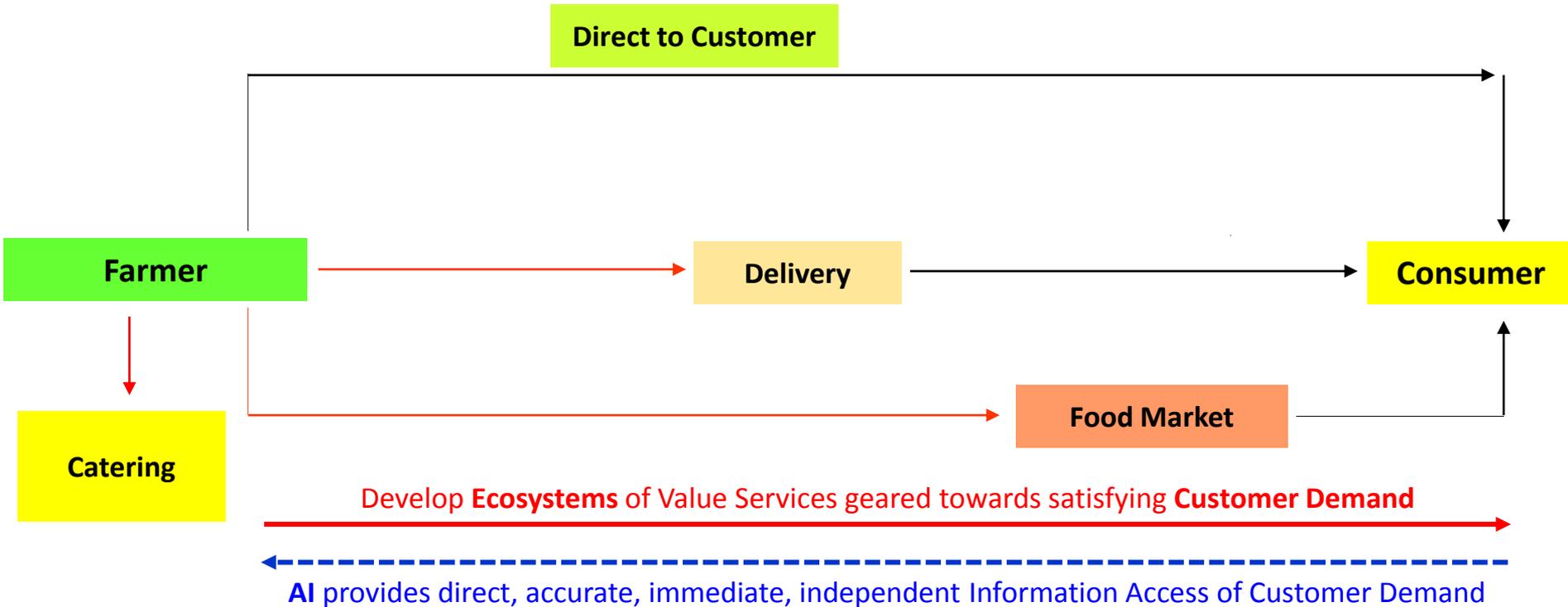


# Food Value Chain Tomorrow

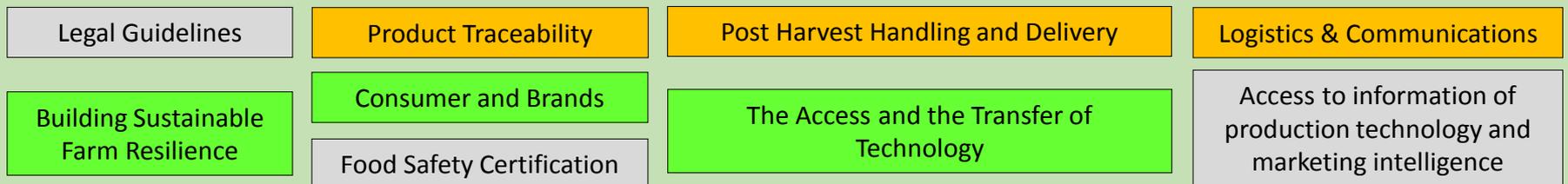


# Food Value Chain **Tomorrow**

Direct to Customer



## Enabling Factors and Parameters that will enhance the Leap for the Food Producer



# Future of Food Value Chains

Issues of food at stake	Vision of the world food situation Tomorrow
<ul style="list-style-type: none"> <li>• Consumption capacity</li> </ul>	<ul style="list-style-type: none"> <li>- There will be more wealthy and more economically weak consumers</li> <li>- The world has 9 billion mouths to feed</li> </ul>
<ul style="list-style-type: none"> <li>• Consumption behavior</li> </ul>	<ul style="list-style-type: none"> <li>- Rich consumers will have greater choice how they want their food to be</li> <li>- Technology will power the future of food (new food base / food source)</li> <li>- Buy natural, buy local (carbon footprint, food miles, etc.)</li> <li>- Direct to Consumer, Concierge Convenience</li> </ul>
<ul style="list-style-type: none"> <li>• Production capacity / sustainability</li> </ul>	<ul style="list-style-type: none"> <li>- <b>Technology</b> will drive production productivity</li> <li>- More stringent management of land, water, chemical &amp; GHG</li> <li>- New food are designed, how it is grown and how it is distributed</li> </ul>
<ul style="list-style-type: none"> <li>• Production behavior</li> </ul>	<ul style="list-style-type: none"> <li>- There are 2 major sources of food producers;               <ol style="list-style-type: none"> <li>Big commercial <b>plant factories</b> and large production owners</li> <li>The small farms (80%) make up shortfall in improved productivity</li> </ol> </li> </ul>
<ul style="list-style-type: none"> <li>• Impact of climate change on food production</li> </ul>	<ul style="list-style-type: none"> <li>- <b>Producers who can</b> weather and sustain against the new environment and <b>producers who cannot</b></li> <li>- Water stress/drought/flooding/rising temperature/extreme conditions</li> </ul>
<ul style="list-style-type: none"> <li>• Cost of food</li> </ul>	<ul style="list-style-type: none"> <li>- <b>Food cost</b> in the supply chain must give way to <b>food value</b></li> <li>- <b>Food loss</b> (farm), <b>food waste</b> (delivery), food production efficiencies</li> </ul>

# Paradigm shifts in Value Chain of Food Production Tomorrow

- Farmers / stakeholders move from preventing damage into mitigating damage
- Farmers will include carbon tax as new element of production cost
- Farmers and stakeholders work in an environment of resource scarcity
- Food delivery will be more local and direct and immediate
- Food focus on Productivity, Technology-led innovation, Food Waste, Food Safety, Traceability, Food Service,
- Government assistance will move to building resilience of producers against the impacts of climate change



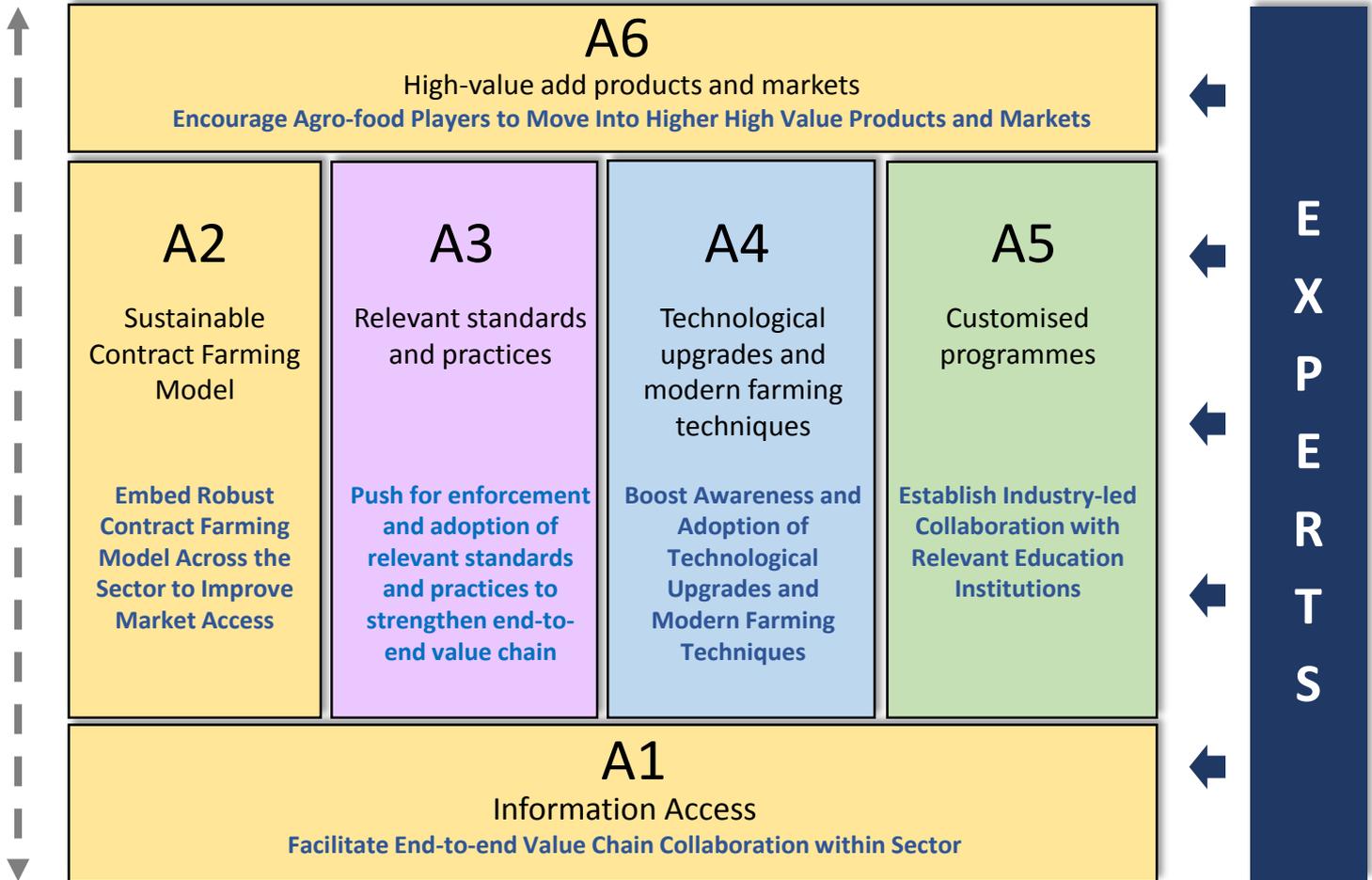
**AGROFOOD**  
**PRODUCTIVITY NEXUS**

# AGROFOOD SECTOR LEVEL INITIATIVES FRAMEWORK

**Tools**

Legend: (Thrust)

- Workforce
- Technology
- Industry Structure
- Eco-system



# Thank you

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