Supply of Quality and Safe Tropical Fruits Through Efficient Supply Chain

TFNet

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Global trends

- **Market liberalization**
- **Trade restructuring**
- **New shopping “lifestyles”**
- **Increasing power of retailers**

Push from EU

- Freshness
- Better quality
- Safety assurance
- Traceability
- Transparency
- “Value for money”
- Streamlined supply chains

ASEAN countries to follow?

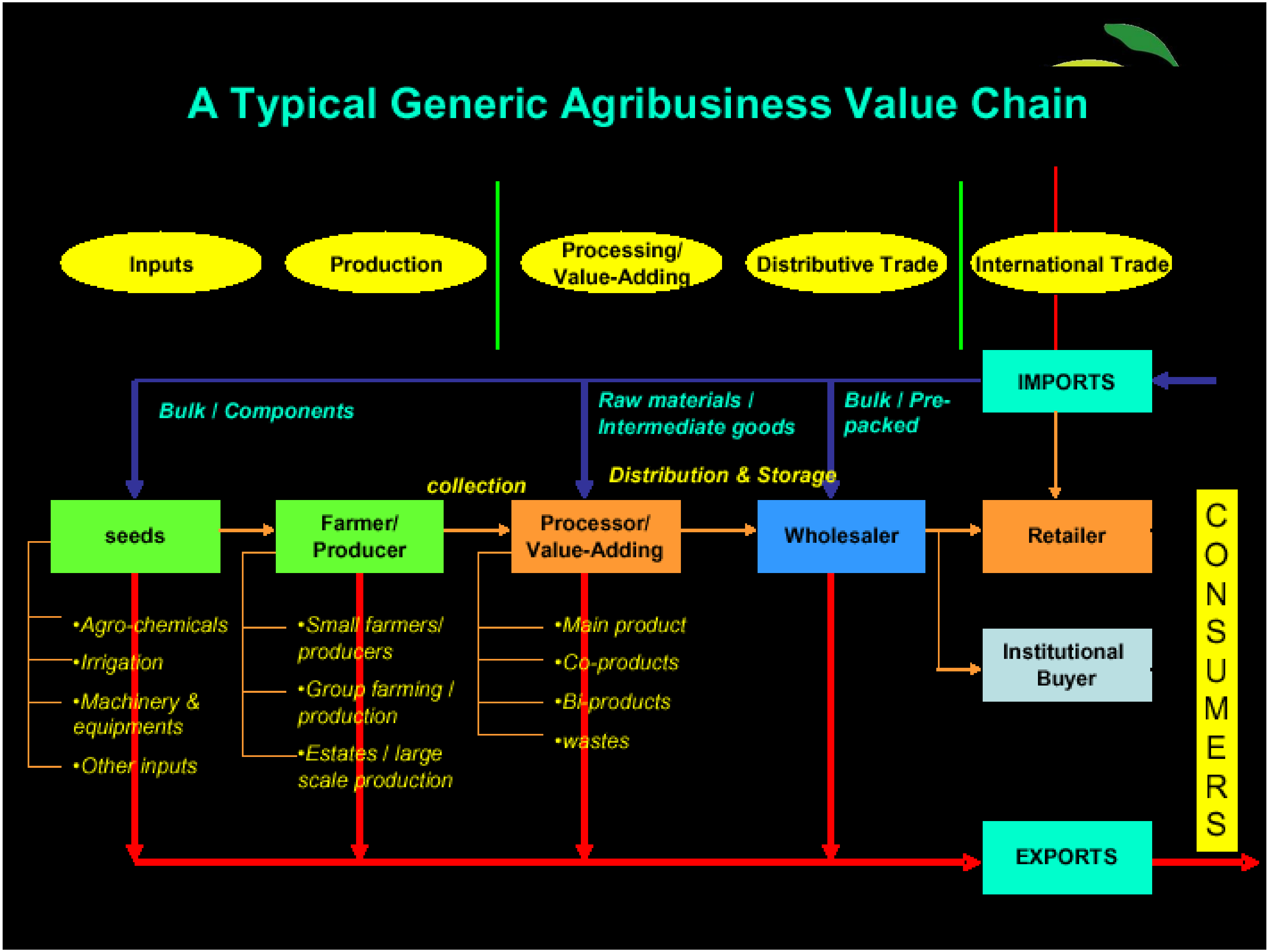
MAFC and Its Mission

- **A Supply Chain Management Company established in June 2006 with immediate focus at Malaysia’s middle chain (midstream activities)**
- **Catalyzing production by reorganizing and rationalizing the supply side and midstream activities that includes post harvest, value addition and cold chain logistics management, distribution and marketing**

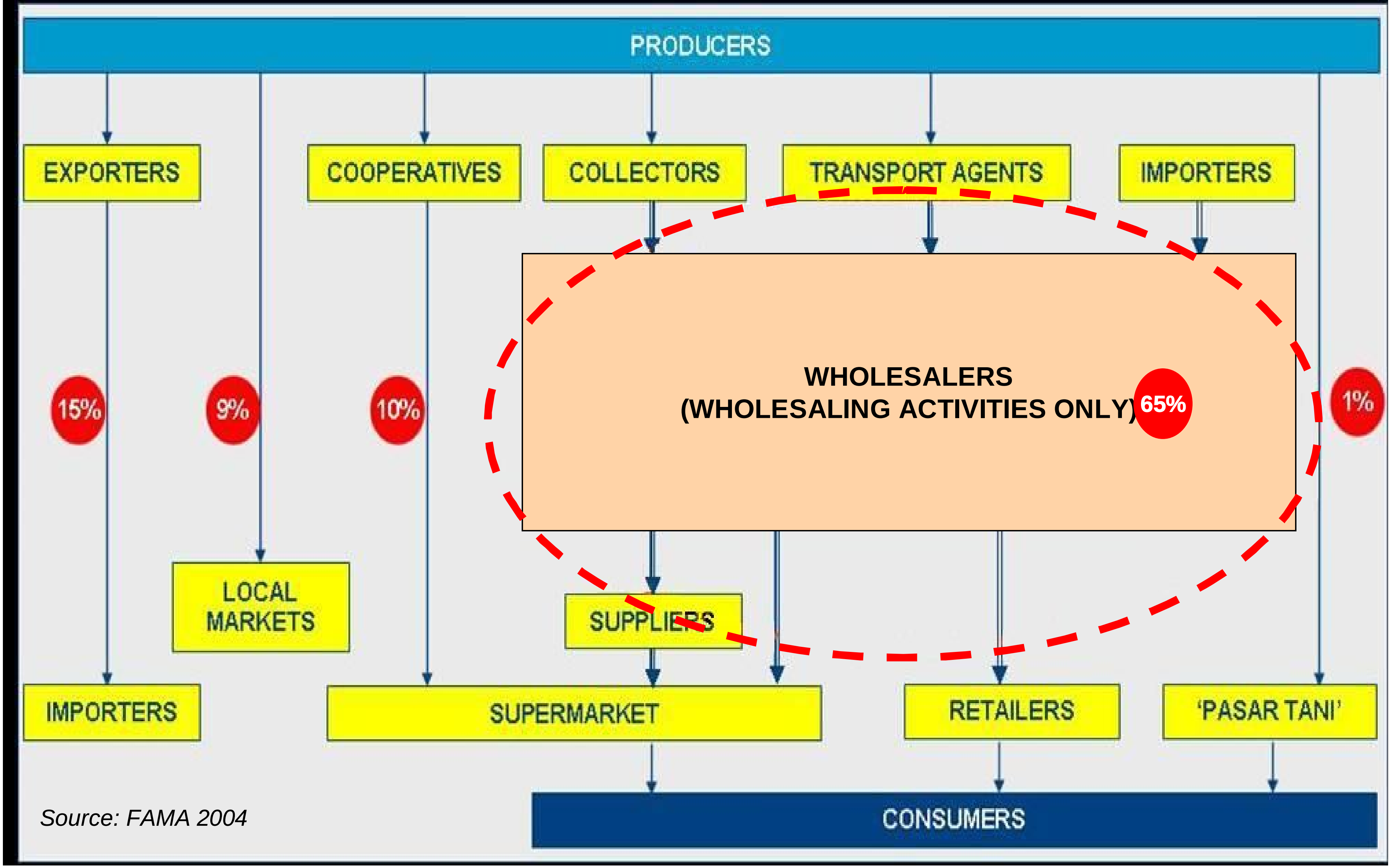
Mission :

“ to shape Malaysia’s food supply chain management, distribution and marketing system towards global standards in safety, quality and sustainability ”

In short: MAFC is a commercial outfit trying to realize social outcomes in the pursuit of economic, environmental and social goals


A Typical Generic Agribusiness Value Chain
Inputs
Production
Processing/ Value-Adding
Distributive Trade
International Trade
IMPORTS
Bulk / Components
Raw materials / Intermediate goods
Bulk / Pre-packed
collection
Distribution & Storage
seeds
Farmer/ Producer
Processor/ Value-Adding
Wholesaler
Retailer
Institutional Buyer
CONSUMERS
•Agro-chemicals
•Irrigation
•Machinery & equipments
•Other inputs
•Small farmers/ producers
•Group farming / production
•Estates / large scale production
•Main product
•Co-products
•Bi-products
•wastes
EXPORTS

Current Value and Trade Flow of FFV in Malaysia and the Channels of Distribution (US 1 billion / year est.)…cartel controlled



Source: FAMA 2004

Status of FFV Trade in Malaysia: Imbalanced Development Trend in Restructuring the Agri Food Chain ………and its implications on the small producers

Small farmers :- Quality, cost, services (grading, packaging) & scale

imports

Small farmers :- Logistics, marketing risks, services and complaints

Upstream

SLOW RESTRUCTURING OF FARMING CULTURE

- Slow to adopt GAP requirements
- Delayed in the development of national GAP to protect local producers and consumers
- Government intervention in the food chain is largely focused on upstream
- Few success stories in creating a new breed of modern farmers

Midstream

BASIC KNOWLEDGE IN POST HARVEST TECHNOLOGY AND MANAGEMENT

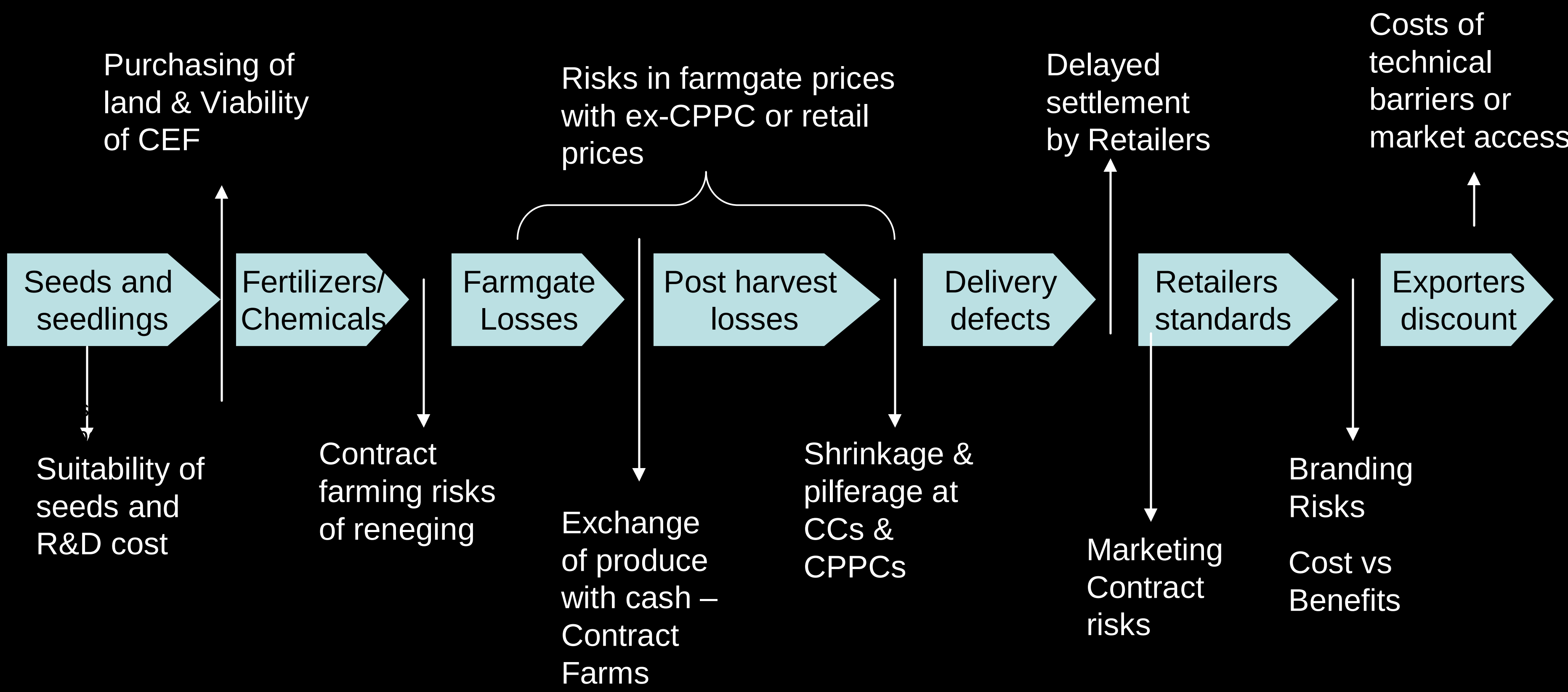
- No leadership in PH skills
- Less developed marketing infrastructure for consolidation and value adding
- Cold chain integrity and shelf life management is still undeveloped
- Very few logistics operators in FFV with HACCP & GMP certification

Downstream

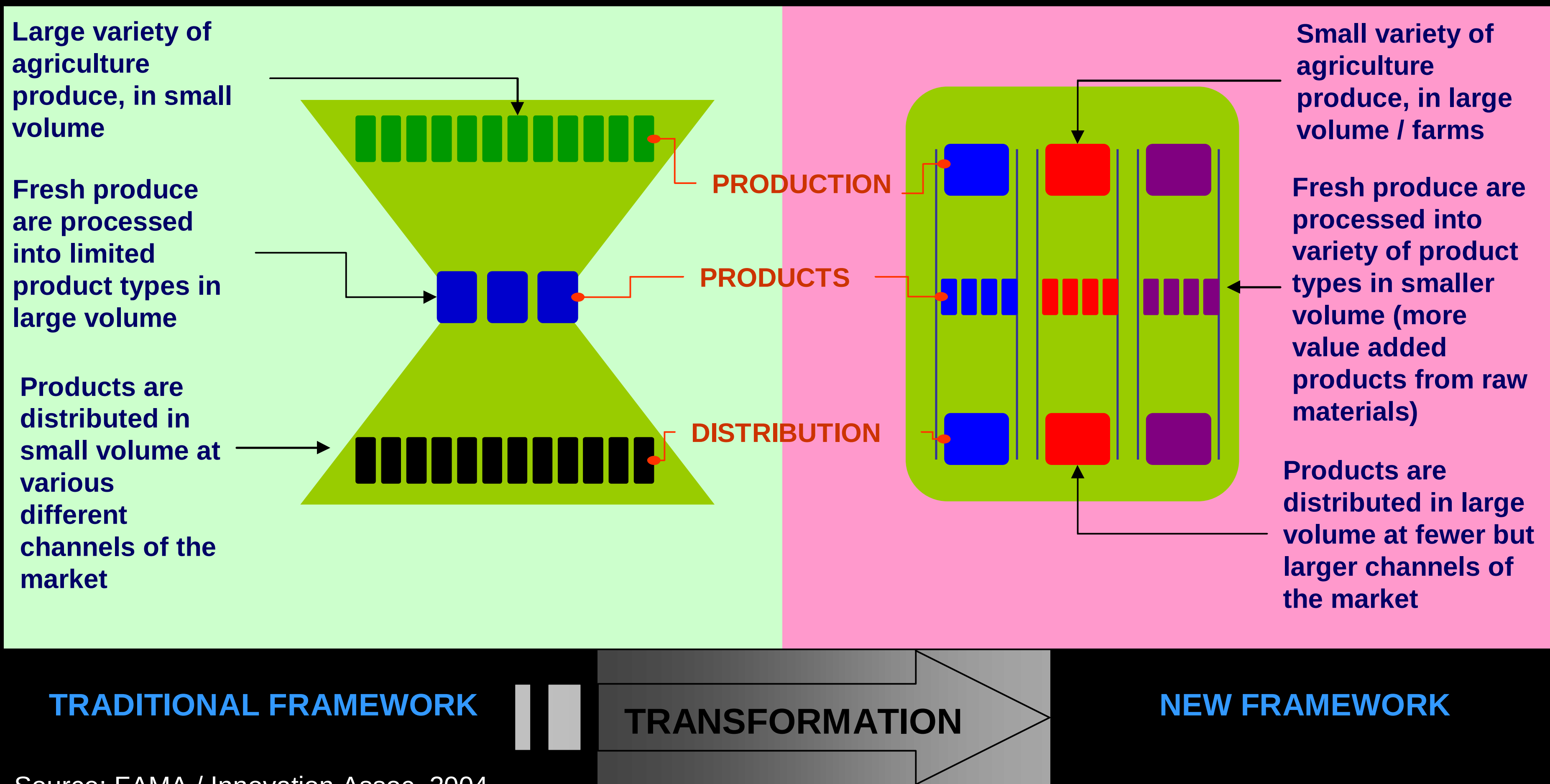
PRESSURE ON RESTRUCTURING OF DEMAND SIDE

- Market liberalization (WTO)
- Changing dynamics in consumer taste and preferences
- Enforcement of food safety and traceability
- Modernization of food processing and retailing
- The new lifestyle shopping at MNC food companies and the supermarkets

Risk Management Profile at MAFC

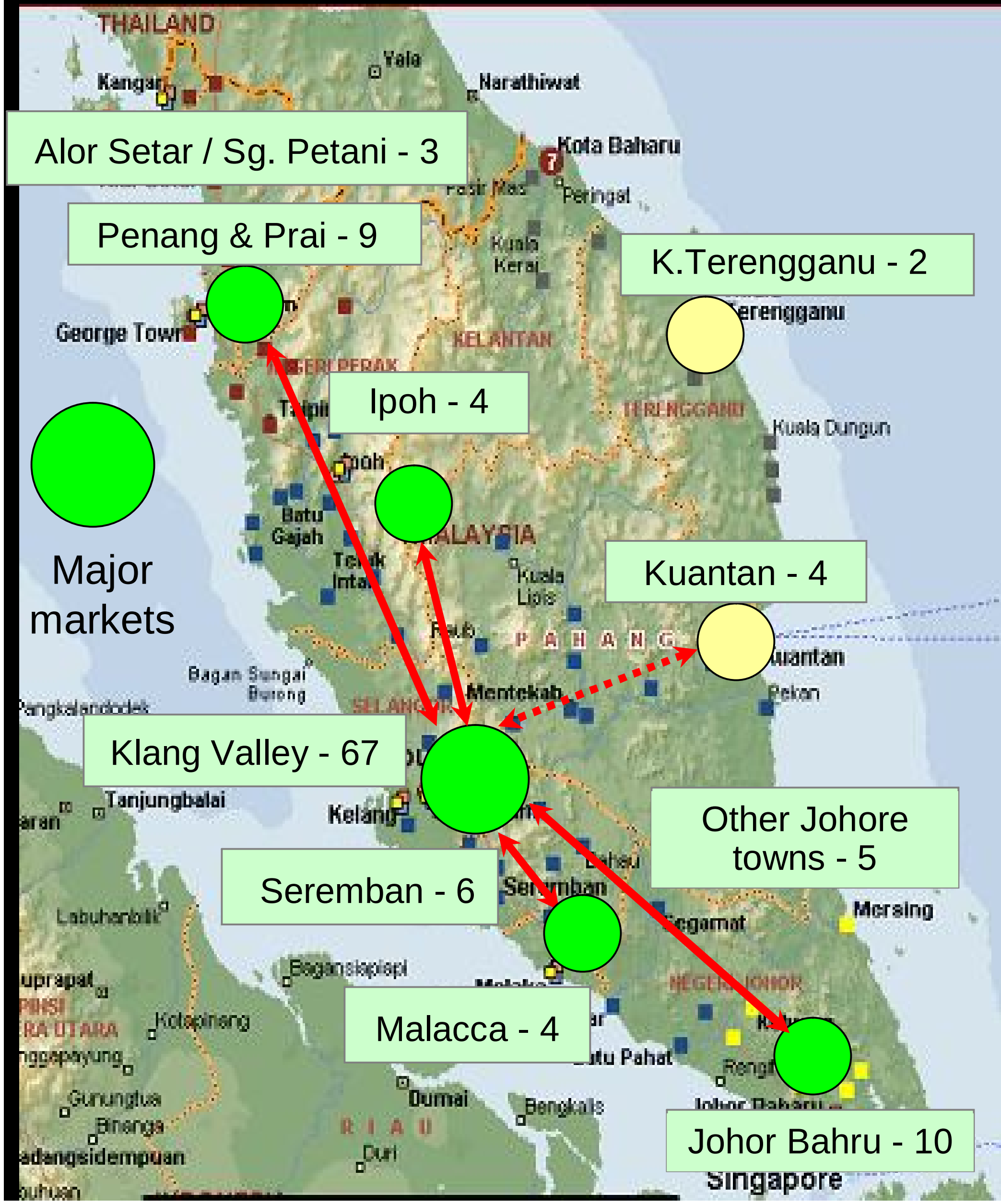


The new Malaysian supply chain



Source: FAMA / Innovation Assoc. 2004

SUPPLY CHAIN NETWORK DESIGN – HYPERMARKETS & SUPERMARKETS



- Sources of **<u>supply</u>** to be **closest to** where the **<u>markets</u>** are – major towns are in West Coast.
- **<u>Deliver direct</u>** from farms to customer, if possible. CPPC may need bigger storage space instead of storing at DC
- Sourcing & supply strategy – **<u>Clustering</u>** to maximise lorry load & reduce SC cost
- Get contract farmers to plant what the market requires
- **Produce can be sourced from places far away from the market only if the margin is good**
- At major towns, **<u>Cross Dock Points (CDP) with cold rooms</u>** can be set-up & use for temporary storage

MAFC's Integrated support services to fill the Knowledge Gaps and Marketing Intelligence for inclusive market development

Investments Upstream: Own production:

- Breeding programme
- Fertigation technology
- POC on greenhouse farming / CEF

Upstream (POC)

Services:

- Extension services & Training
- Feasibility studies for funding/ financing
- Buy-back arrangement (B2B)
- Increase productivity and income
- First mile transport to CPPC
- Good Agriculture practices (GAP) & Food Safety

Investments Midstream:

- Hard infrastructure development – CPPCs, ROs, DCs
- Soft Infrastructure – processes, procedures and SOPs, HACCP

Midstream (better value capture)

Value Adding Services:

- Cold chain logistics
- One touch system for MNC Retailers
- Cross docking facilities
- Nationwide Warehouse and cold room services
- Consolidation, sorting, grading, packaging and labeling

Investments

- 3- compartment 40 footer reefer trucks
- Peninsular-wide logistics backbone
- Dedicated FFV 'pipelines'

Downstream (product differentiation)

Services:

- Unbroken cool and cold chain services
- Low inventory management
- Branding – brand behind brands and own brand
- Market access - local & export
- Market intelligence and Mission Control Room services for forward and backward linkages

MAFC'S VALUE CHAIN MANAGEMENT

UPSTREAM

MAFC FARM OUTPUT

CONTRACT FARMING

OPEN SOURCING FROM CERTIFIED FARMS

- **ENABLERS**
- **Controlled Environment Farming (CEF)**
- **Contract Farming (CF)**
- **Corporate Contract Farming (CCF)**
- ***GAP, SALM Compliance***
- ***Collaboration with Chain Partners (DOA-TKPMs, FAMA-Contract Farms***

MIDSTREAM

- **Post-Harvest Management**
- **Aggregating, Grading, Packing, Packaging**
- **Value-adding**
- **Cold Chain Integrity**

- **ENABLERS**
- **Collection Centres [CC]**
- **Consolidation Packaging &**
- **Processing Centres [CPPC]**
- **Distribution Centre [DC]**
- **Cold Chain Logistics**
- ***HACCP, GlobalGAP***
- ***Compliance***

DOWNSTREAM

- **<u>Branding</u>**
- **Product Differentiation**
- **Product & Service Branding**
- **Quality & Safe Food**
- **<u>Marketing – Local & Int'l</u>**
- ***Collaboration with Chain Partners (MNC-Retailers]***
- **ENABLERS**
- **Hypermarkets/**
- **Supermarkets**
- **Food Service Sector**
- **Institutional Markets**
- **Exports**

Food Safety, Traceability, ICT, R&D

MAFC's role in sourcing, value adding, distribution through the building of alliances as in inclusive market development

1. MAFC's own farms and out grower crops to retailers and food Companies B2B Model

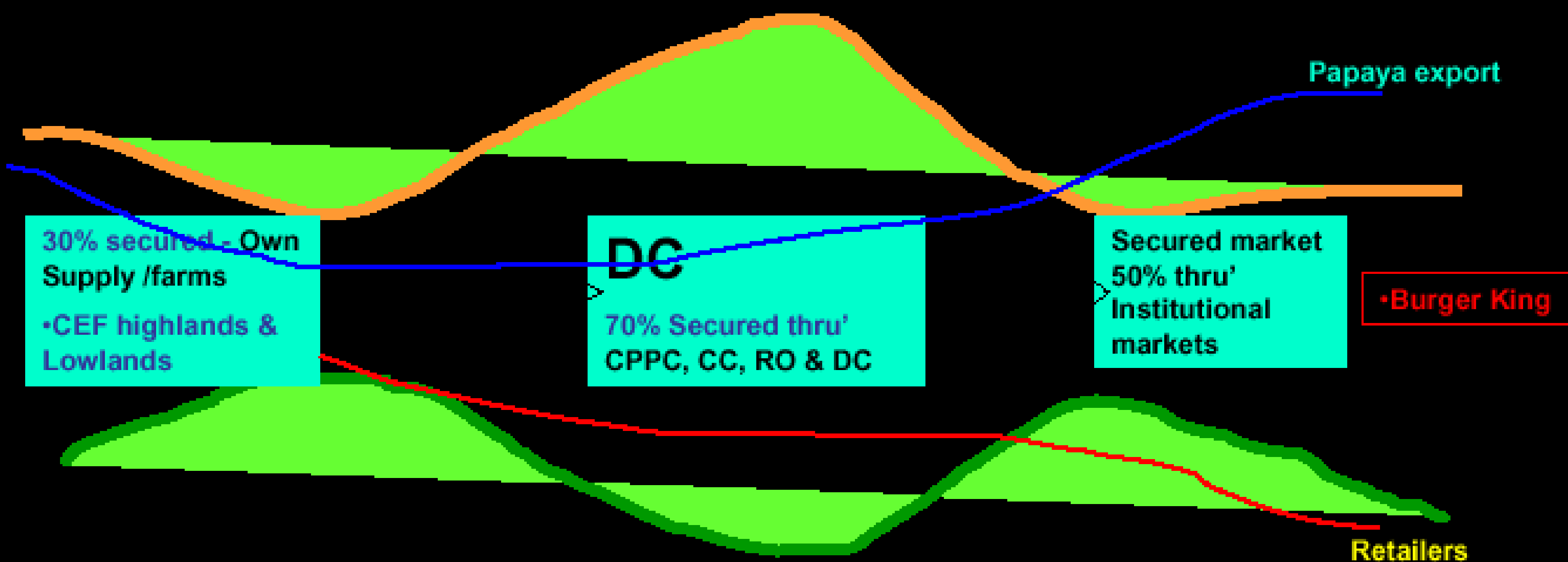
2. MAFC's anchor tenant to Government cluster farms to Retail gate B2B Model

3. MAFC sourcing from private farms and plantation houses to retail gate B2B Model

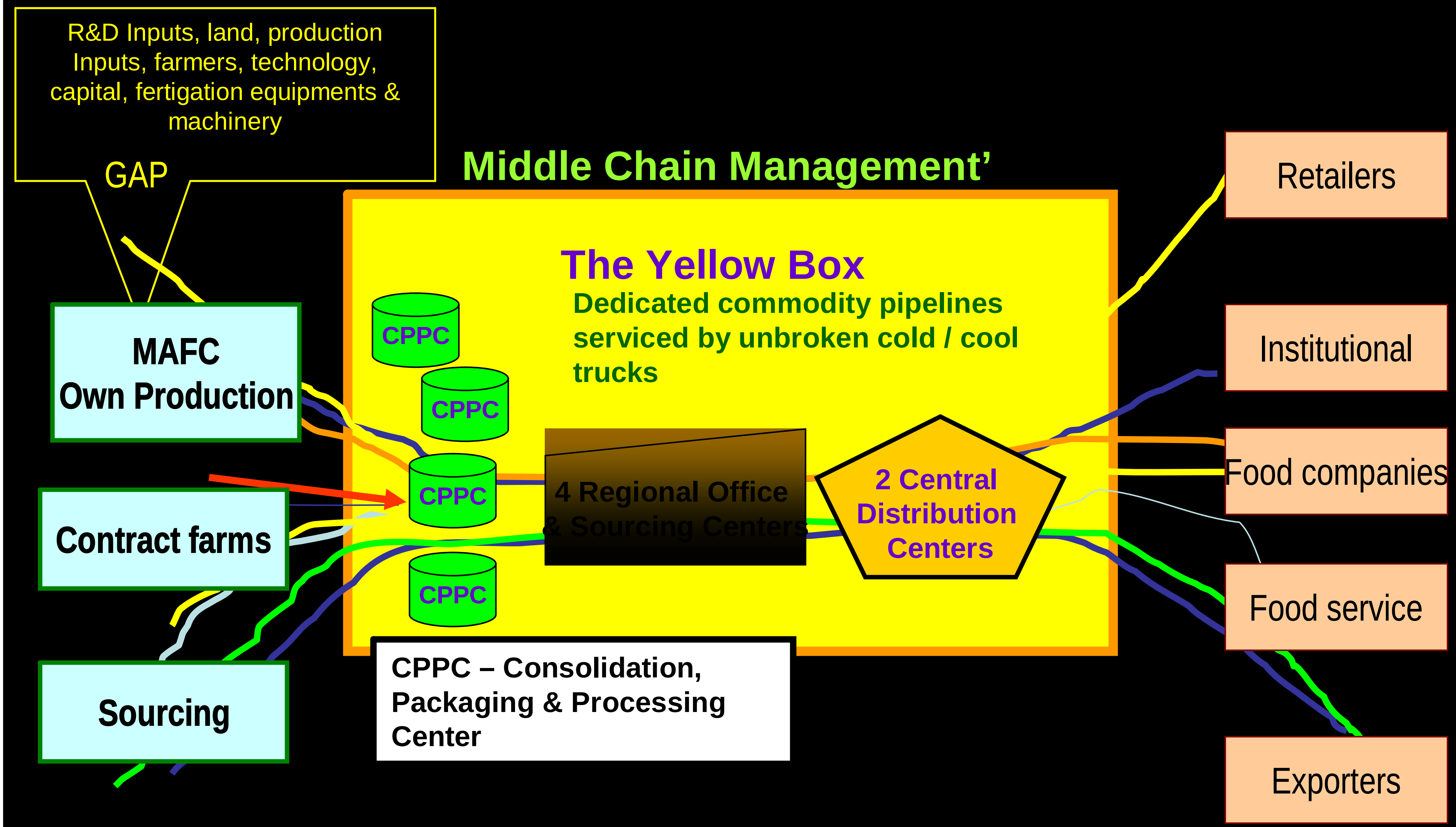
4. MAFC's own flagship crop - new breed papaya ISE

   B2C Model

Secured commodity pipeline – A New SCM Regime as Planned – 30% own supply, 70% logistics and 50% secured market

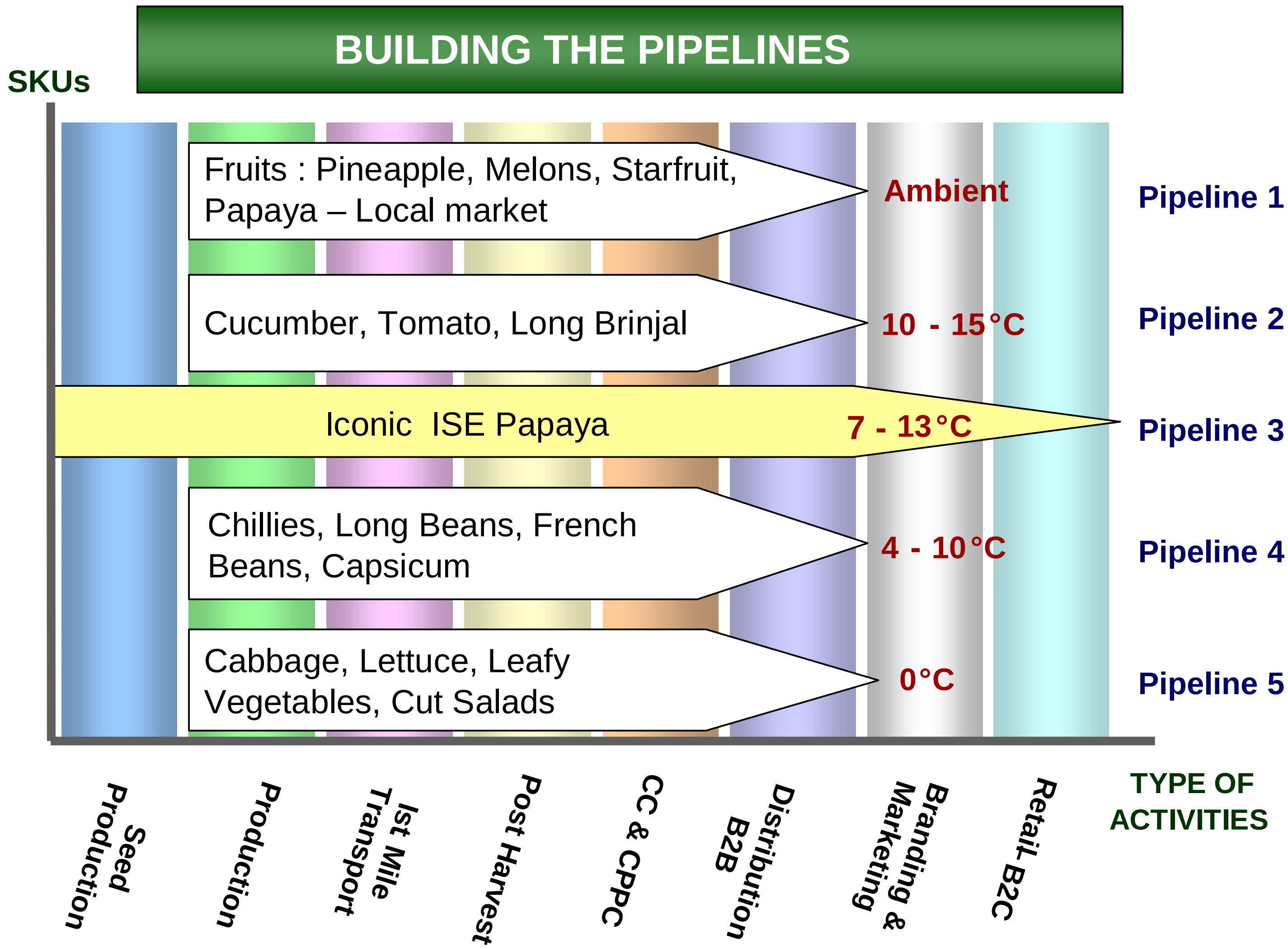


Finally, a snapshot of a typical MAFC's Dedicated Crop Commodities 'Pipeline' with focus at middle chain control or the 'Yellow Box'

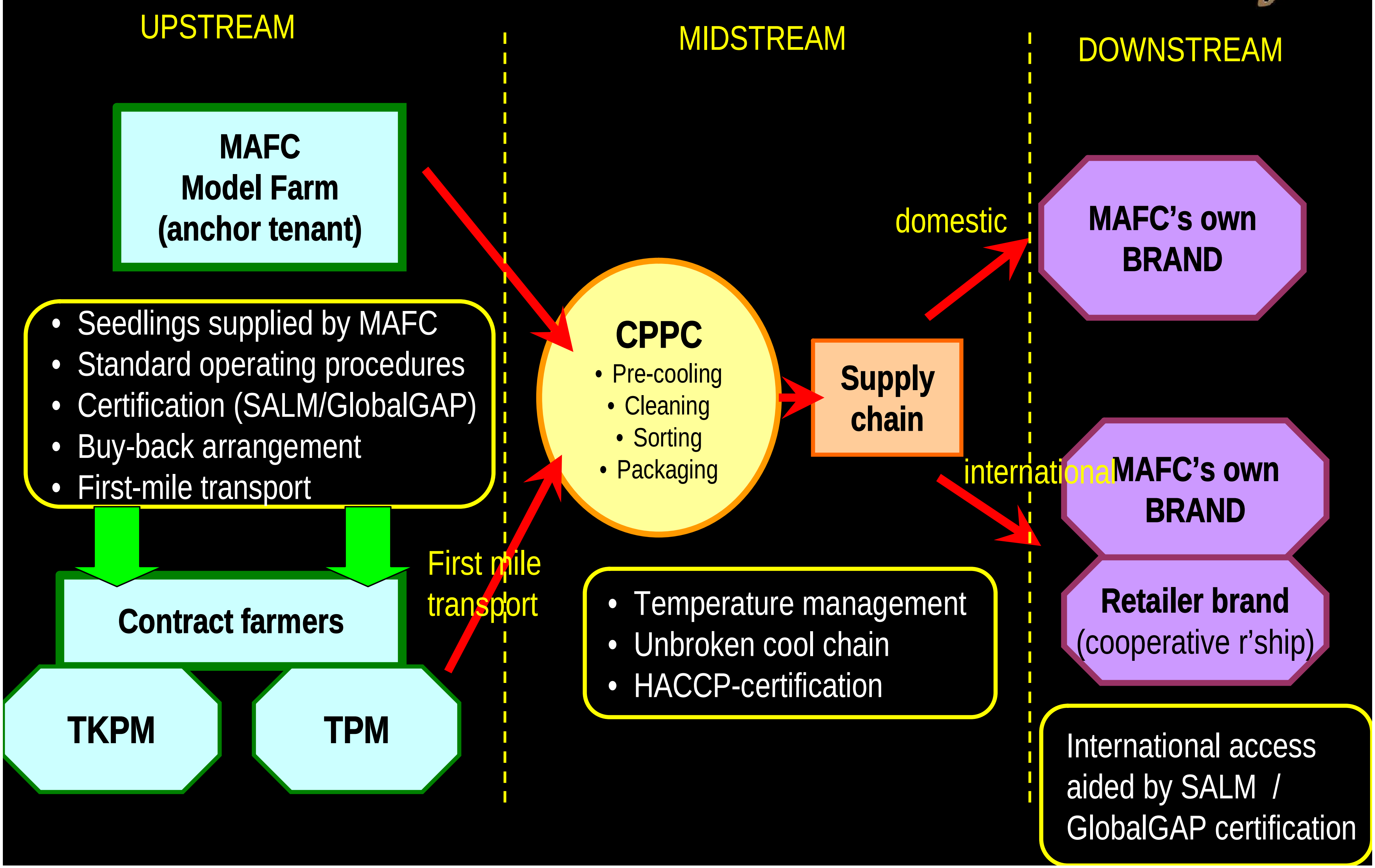


Source; Azizi MAFC (2008)

Fruit & Vegetable Pipelines



MAFC's papaya: end-to-end involvement



The ultimate objectives of MAFC

In Conclusion :-

- **MAFC as a Government policy instrument will ensure that all the chain partners comply with the global food safety standards**
- **Through value chain management, the efficient cost of production, delivery inclusive of quality and safety will benefit the consumers at large**
- **MAFC will realise its role to enhance the chain partners economic returns especially the small producers and in the process satisfies its own commercial objectives**

Thank You