PHILIPPINES BOARD OF INVESTMENTS

COLD CHAIN CONNECTS

THE PHILIPPINES

COLD CHAIN INDUSTRY ROADMAP

DTI PHILIPPINES

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U.S.-Philippines Cold Chain Standards and Innovation Workshop
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OBJECTIVES

Primary: To craft a stakeholder-driven, inclusive and market-oriented roadmap to guide the industry in the coming years and adapt to the "new normal" situation

Specific: To provide analytics and potential interventions on selected value chain corridors covering the main geographic clusters of **National Capital Region (NCR), North Luzon, South Luzon, Visayas and Mindanao**

1. provide a situational assessment of the Philippine cold chain industry;
2. present, describe and analyze the status and prospects for the Philippine cold chain industry;
3. identify supply/value chain gaps and required interventions;
4. set goals and strategies as well as plan targets to be competitive and enable the industry to contribute to the national goal of inclusive growth; and
5. recommend strategic directions and action programs in short to medium terms to enhance the industry.

STATUS OF THE INDUSTRY

PH COLD STORAGE WAREHOUSE (CSW) CAPACITY - estimated at 550,000 pallet positions or equivalent to about 500,000 tons in 2021

Luzon including NCR
320,000 pp

Visayas
130,000 pp

Mindanao
100,000 pp

- Only **60% of agricultural produce** passes through cold chain storage
- Gap in capacity estimated to reach **100,000 pallets of cold storage**
- New investments in cold chain storage to achieve the **increase in capacity of 50,000 pallet positions per year** from 2021 to 2023

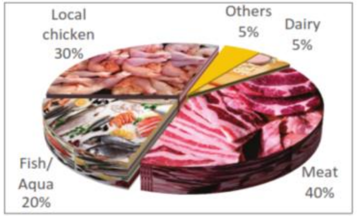
COLD STORAGE DEMAND DISTRIBUTION BY GEOGRAPHIC CORRIDORS

National Capital Region

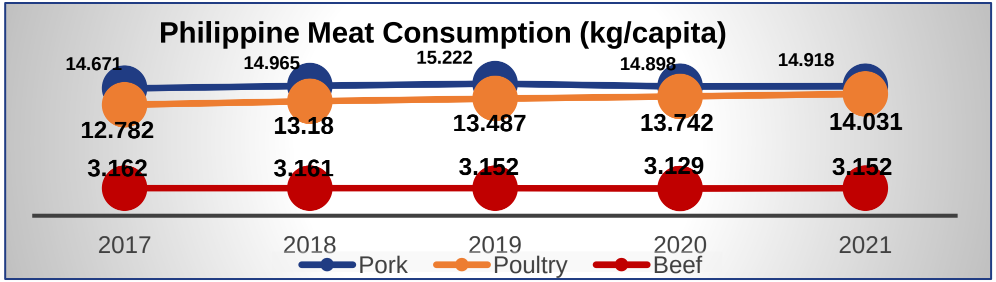
North Luzon

South Luzon

Visayas



Mindanao



Source: Organisation for Economic Co-operation and Development (OECD)-Meat Consumption

MAKE IT HAPPEN THE PHILIPPINES

Vision

An **avowed champion** for **food safety,** a recognized **benefactor to agribusiness development**, a **vital link** in the **supply chain** sector.

Mission

A **cohesive, functional and collaborative network** of cold chain stakeholders imbued **with** the **highest operating principles and standards, compliant** with **government policies and regulations**, and **responsive** to the needs of the Filipinos.

STRATEGIES AND POLICIES

THE GO-5 SYNERGY

5 *Goals*
Objectives
Focus Industries
Action Agenda

Go 5 in the next 5 years!!!

Industry Goals

1. An **organized Cold Chain Industry** with synergistic partnership among all stakeholders working in unison for the good of all.
2. A **strong logistics providers** (transports, ports, and road networks) to implement continuous cold chain protocol in transit and handling.
3. **Availability of more efficient, skilled and fairly-compensated labor force** – experienced refrigeration technicians and engineers, and skilled manpower on heating, ventilation and air conditioning (HVAC), drivers, NMIS inspector.
4. **Favorable government and public support** that would encourage increase in investments in the cold chain industry towards countryside development that will generate jobs and help alleviate poverty and improve the lives of the Filipinos.
5. Increase awareness on food safety

STRATEGIES AND POLICIES

The 5 focus industries shall be:

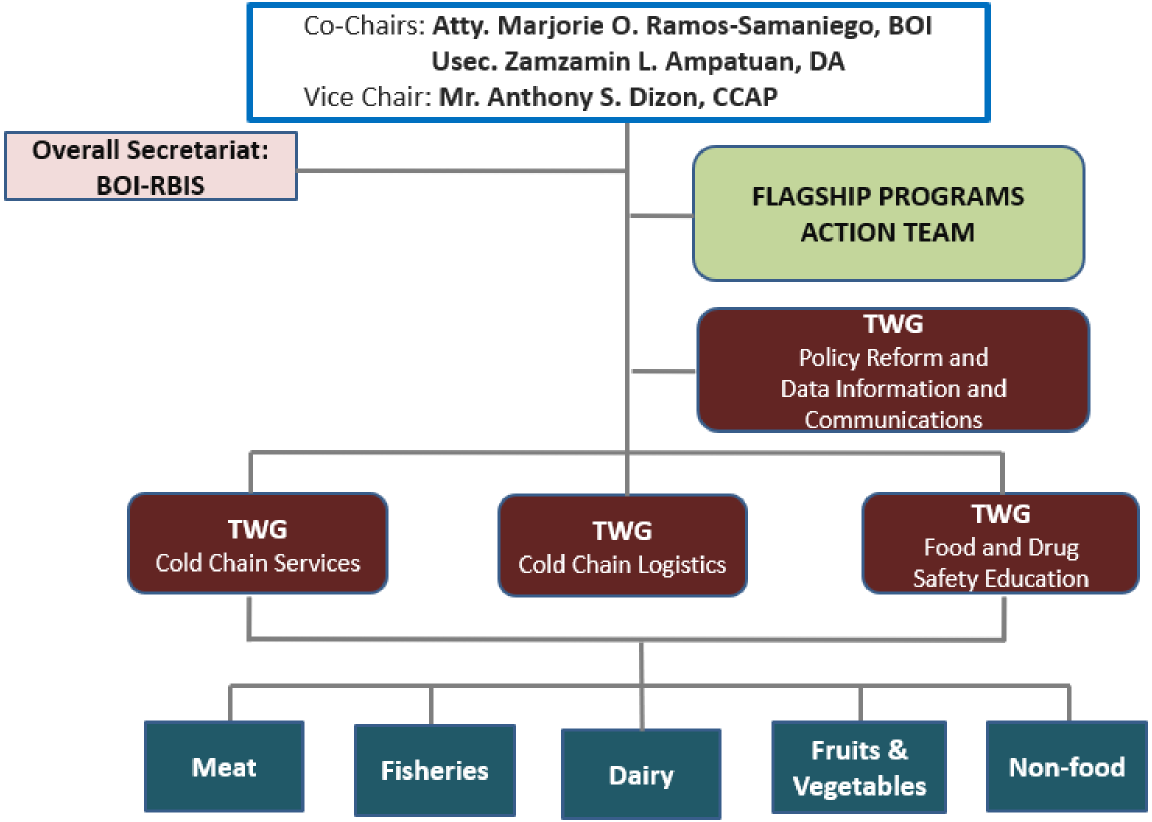
1. Meat/processed meat
2. Fisheries and aquaculture
3. Dairy
4. Fruits and vegetables
5. Non-food *(i.e. pharmaceuticals, electronics, etc.)*

5 ACTION AGENDA

1. Investments in cold chain facilities
2. Investments in cold chain logistics services
3. Demand enhancement – increase demand for cold chain services
4. Food safety education
5. Policies and regulations

IMPLEMENTATION OF THE ROADMAP

NATIONAL COLD CHAIN COMMITTEE



PHILIPPINE BUSINESS MODELS IN TERMS OF REFRIGERANT USED

Business Model	Compressor Used	Estimated Power Rate	Issue/Concern
1. Extensive	Ammonia and/or HCFC compressors with stand-by diesel power generators	40-50% of operating cost	Less vulnerable to the planned phase-out of HCFCs by 2040; can always extend their ammonia system to the cold rooms running on HCFCs
2. Less Extensive	HCFC compressors and ammonia/glycol system with stand-by diesel generators.	35-40% of operating cost	Planned phase-out of HCFC refrigerants will not happen in the next 15 years.
3. Limited	HCFC compressors and stand-by diesel power generators.	60% of operating cost	Vulnerable to the planned phase-out of HCFCs by 2040.

FACILITIES PER PHILIPPINE BUSINESS MODELS

Business Model	Facilities
1. Extensive	1. Blast Freezers at -40ºC 2. Cold Rooms at -20 ºC to -25 ºC 3. Chilled Rooms at 0 ºC 4. Air-Conditioned Rooms at 22 ºC 5. Dry goods rooms at ambient temperature 6. Plug-in service for reefer container trucks waiting to be unloaded
2. Less Extensive	1. Cold rooms at -18 ºC to -27 ºC 2. Chilled rooms at 0 to 4 ºC 3. Dry goods rooms at ambient temperature 4. Plug-in service for reefer container trucks waiting to be unloaded
3. Limited	1. Cold Rooms at -20 ºC to -25 ºC 2. Dry goods rooms at ambient temperature 3. Plug-in service for reefer container trucks waiting to be unloaded

GROWTH DRIVERS

- ✓ Growth in institutional markets
- ✓ Increased demand for frozen food, e.g., meat
- ✓ Increased demand for vaccines & other temperature drugs
- ✓ Growth of e-commerce & online grocery shopping
- ✓ Preference for just-in-time delivery
- ✓ Consideration on integrated end-to-end supply chain logistics, i.e., from farm to fork

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CSW INVESTMENT OPPORTUNITIES

1. integrated with cold chain logistics
2. with automated operations
3. utilizing alternative energy source (e.g., solar)
4. utilizing environment-friendly insulation panels
5. utilizing refrigerant with minimum environmental impact

INVESTMENT COST

PhP 60,000-100,000 per pallet position or approximately **US$ 1,146-1,910**

- amounts include building and equipment (except real estate)

By industry standards, a **typical cold storage facility** would have about **5,000 pallet positions**

PHILIPPINE ADVANTAGE FOR COLD CHAIN EXPANSION

- Philippines ranks 18th in the Agility Emerging Markets Logistics Index in 2022 and one of the countries to watch as a globally significant logistics market and investments destination
- Large local consumer base
- At a demographic sweet spot with median age of 25.7 years
- Increasing level of urbanization
- Consumer-led economy
- Household capacity to store frozen foods and heat-ready meals has been rising
- Proliferation of modern food retail businesses/service sectors and growth of “convenience” foods
- Rise of e-commerce and online shopping
- PH has preferential trade agreements
- Availability of financing/lending programs

- The country has a relatively young, English-speaking workforce. The Philippines ranked #18 of 112 countries in 2021 (high proficiency level) and #2 in Asia per EF English Proficiency Index
- The Philippines ranked 3rd among the 9 ASEAN member countries in the ease of finding skilled employees
- Business Administration and Related, top Discipline Group in Enrollment (AY 2019-20) and Graduates (AY 2018-19) while Engineering and Tech and IT-related ranks 3rd and 4th in both, respectively

ENABLING/RELEVANT LAWS

1. R.A. No. 9296 - The Meat Inspection Code of the Philippines
2. R.A. No. 10611 - Food Safety Act of 2013
3. R.A. No. 11032 - Ease of Doing Business and Efficient Government Service Delivery Act of 2018
4. R.A. No. 11534 - Corporate Recovery and Tax Incentives for Enterprises (CREATE) Act
5. R.A. No. 11647 - Foreign Investments Act of 1991 (as amended)
6. R.A. No. 11659 - Public Service Act (as amended)

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INCENTIVES FOR DOMESTIC-ORIENTED ENTERPRISES UNDER THE CREATE ACT

- Income Tax Holiday (ITH) from 4-7 years depending on location
- Enhanced Deductions
- Duty exemption on importation of capital equipment, raw materials, spare parts, or accessories

ENHANCED DEDUCTIONS

- Depreciation allowance of assets additional 10% for buildings; and additional 20% for machineries and equipment
- 50% additional deduction on labor expense
- 100% additional deduction on R&D
- 100% additional deduction on training expense
- 50% additional deduction on domestic input expense
- 50% additional deduction on power expense;
- Deduction for reinvestment allowance to manufacturing industry – the amount reinvested to a maximum of 50%
- Enhanced *Net Operating Loss Carry-Over*

PROGRESSION OF INCENTIVES DURATION PER INDUSTRY TIER

LOCATION	TIER I		TIER II		TIER III	
	EXPORT	DOMESTIC	EXPORT	DOMESTIC	EXPORT	DOMESTIC
National Capital Region (NCR)	**14** (4 years of ITH and 10 Years of ED/SCIT)	**9** (4 years of ITH and 5 Years of ED)	**15** (5 years of ITH and 10 Years of ED/SCIT)	**10** (5 years of ITH and 5 Years of ED)	**16** (6 years of ITH and 10 Years of ED/SCIT)	**11** (6 years of ITH and 5 Years of ED)
Metropolitan Areas[1] or Areas Contiguous and Adjacent to NCR[2]	**15** (5 years of ITH and 10 Years of ED/SCIT)	**10** (5 years of ITH and 5 Years of ED)	**16** (6 years of ITH and 10 Years of ED/SCIT)	**11** (6 years of ITH and 5 Years of ED)	**17** (7 years of ITH and 10 Years of ED/SCIT)	**12** (7 years of ITH and 5 Years of ED)
All other areas	**16** (6 years of ITH and 10 Years of ED/SCIT)	**11** (6 years of ITH and 5 Years of ED)	**17** (7 years of ITH and 10 Years of ED/SCIT)	**12** (7 years of ITH and 5 Years of ED)	**17** (7 years of ITH and 10 Years of ED/SCIT)	**12** (7 years of ITH and 5 Years of ED)

[1] *Metro Cebu and Metro Davao and other areas declared as metropolitan areas by NEDA or LGUs*

[2] *Bulacan (Meycauayan City, San Jose del Monte City), Cavite (Bacoor, Imus, Dasmarinas), Laguna (Binan, Cabuyao, Calamba, San Pedro, Sta. Rosa), Rizal (Antipolo, Cainta, Taytay) per BOI Memorandum Circular No. 2022-002 dated 27 May 2022.*

CURRENT INITIATIVES AND ACTIVITIES

1. Development of a Cold Chain Integrated Supply Chain Solution for Evidence-based Policy Making and Investment Programming

2. Collaboration on the Development of Guidelines for the Minimum Energy Performance for Sectors (MEPS) of the Cold Chain Industry within the framework of the project “Global Partnership for Improving the Food Cold Chain in the Philippines”

3. Pursuing Industry Collaborations with International Development Partners

4. Advocacy on the Safety of Frozen Foods to Increase Demand for Cold Chain Services

   A. Radio/TV Guesting to Discuss on Food Safety Education and Discuss on Investments Opportunities in the Cold Chain Industry
   B. Formulation of a Food Safety Communications Strategy/Plan

5. Supra-Regional Cold Chain Industry Roadshows

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Thank You!

SPEAK TO OUR TEAM AT
WWW.PHILIPPINES.BUSINESS

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