



PUT OUR
HEART INTO FOOD





Put our
Heart
into **Food**

CPF operates our business with care for consumers. Our goal is to provide quality food to the world's population with attention to details and care in every production process, from the source to the hands of consumers. We also emphasize promotion of sustainability among the people and for the planet.



CPF is committed to promoting strong physical and mental health so that we can all live a long life on this healthy and livable planet.

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Sustainability Performance

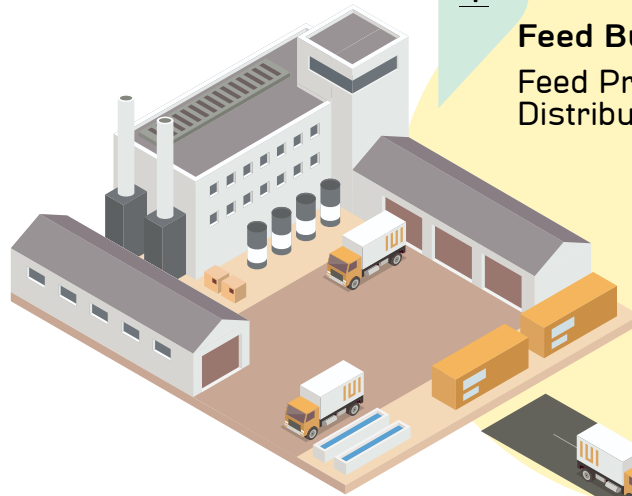
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CPF at a Glance: Business Overview



1

Feed Business
Feed Production and Distribution



Charoen Pokphand Foods Public Company Limited or “CPF” has developed an agro-industrial and food conglomerate, including livestock and aquaculture i.e., swine, broilers, layers, ducks, shrimps, and fish. The businesses are categorized into 3 categories, namely Feed, Farm-Processing and Food Businesses. In addition, we operate Food Retail Outlets. Our production process utilizes modern technology, follows international standards, and

is under close monitoring to ensure the delivery of high quality, safe products and services that are systematically traceable throughout the supplychain, and products and services that are friendly to the communities and environment. Moreover, we develop a win-win partnership with our business partners for sustainable mutual growth.

4

Food Retail Outlets

Expansion of Distribution Channels



2

Farm-Processing Business

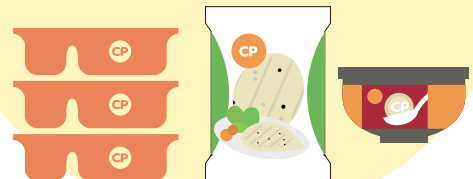
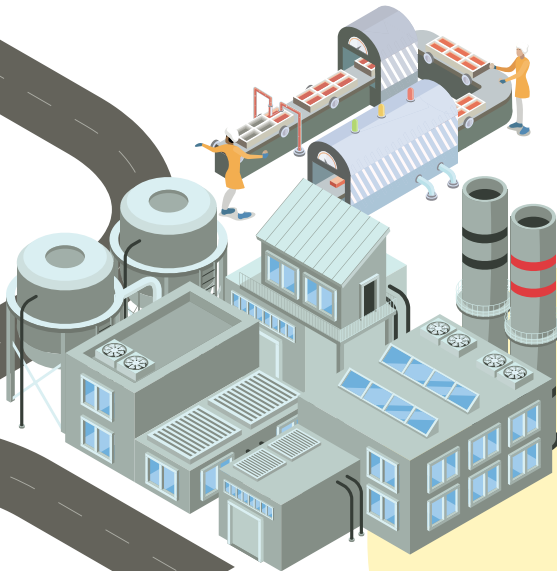
Animal Breeding,
Animal Farming,
and Basic Meat
Processing



3

Food Business

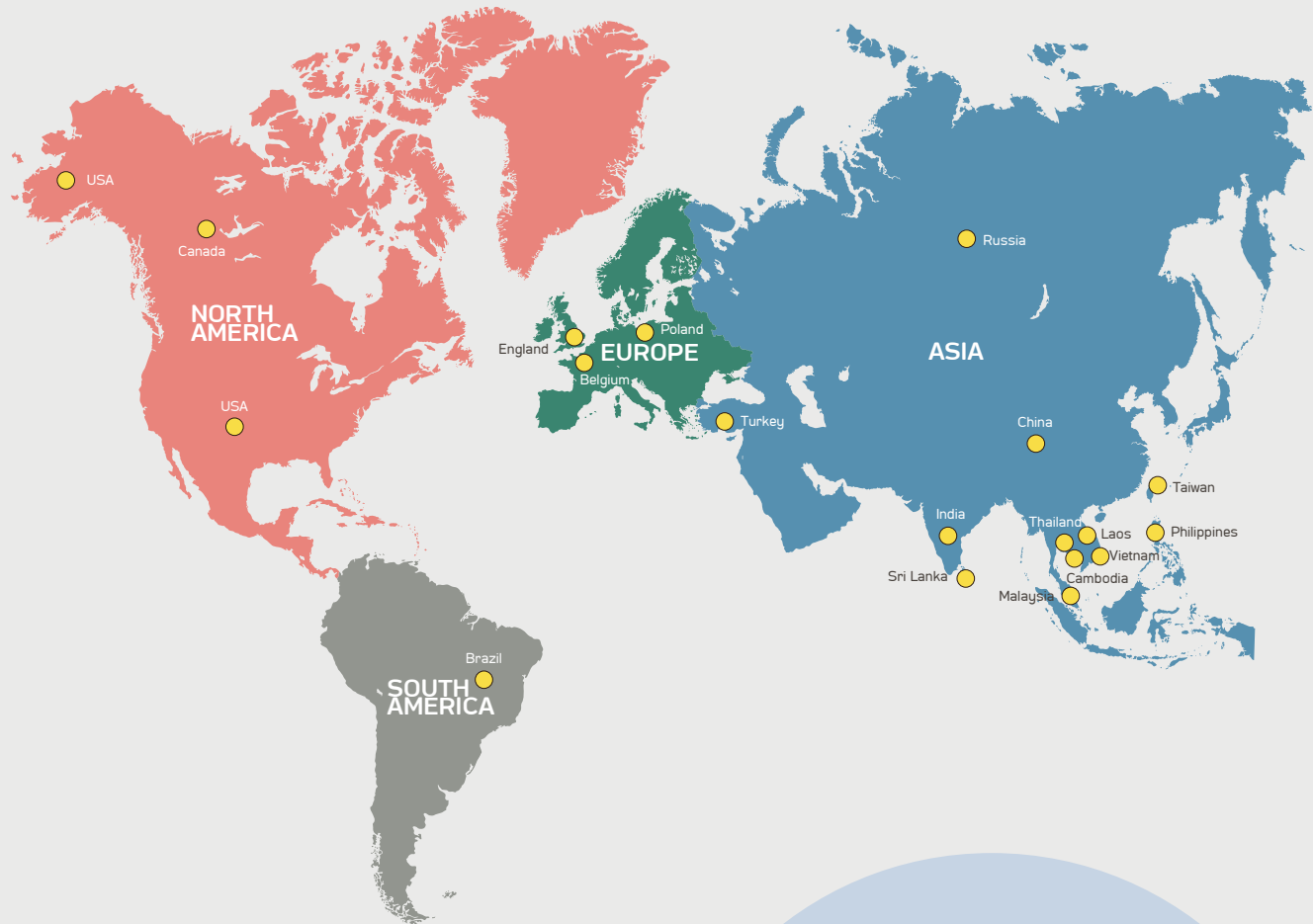
Production of
Semi-Cooked,
Cooked Meat,
and Ready-To-
Eat Products



With our vision “Kitchen of the World”, CPF delivers traceable, and environmentally-friendly food products with care in every production process, from the source to the hands of consumers.

Our Business

CPF has developed an **agro-industrial and food conglomerate**, which can be divided into three categories: **1) Feed Business** includes animal feed production and distribution; **2) Farm-Processing Business** includes animal breeding, animal farming and basic meat processing; and **3) Food Business** includes semi-cooked and cooked meat production, and ready-to-eat food production, together with Food Retail Outlets. We conduct our business with a balance between economic, social and environmental dimensions for our stakeholders based on good governance.








The scope of business operations can be divided into two key parts:

- **Thailand Operations:** conducting agro-industrial and food conglomerate businesses to distribute products in Thailand, and export meat, processed meat and ready-to-eat products to 30 countries in 5 continents. The operations cover livestock and aquaculture including swine, broilers, layers, ducks, shrimps and fish.
- **Overseas Operations:** conducting agro-industrial and food businesses overseas in China, Vietnam, United Kingdom, India, United States, Cambodia, Russia, Turkey, the Philippines, Malaysia, Laos, Belgium, Sri Lanka, Poland, Brazil and Canada.






CPF operates in 17 countries,
exports to more than
30 countries across
5 continents.

Our Operations in 17 Countries






Asia

Country	Feed Business	Farm-Processing Business			Food Business
		 Swine	 Poultry	 Aquaculture	
Thailand	●	●	●	●	●
China	●		●	●	●
Taiwan	●	●	●		●
Vietnam	●	●	●	●	●
India	●		●	●	●
Cambodia	●	●	●		●
Philippines	●	●	●	●	
Malaysia	●	●		●	●
Laos	●	●	●		●
Sri Lanka					●






Europe

Country	Feed Business	Farm-Processing Business			Food Business
		 Swine	 Poultry	 Aquaculture	
United Kingdom					●
Russia	●	●	●		
Turkey	●		●		●
Belgium					●
Poland			●		●

North America

Country	Feed Business	Farm-Processing Business			Food Business
		 Swine	 Poultry	 Aquaculture	
United States				●	●
Canada	●	●			●

South America

Country	Feed Business	Farm-Processing Business			Food Business
		 Swine	 Poultry	 Aquaculture	
Brazil				●	



Mr. Soopakij Chearavanont
Chairman

Mr. Prasit Boondoungprasert
Chief Executive Officer

Message from the Executives

“

As the digital age accelerates the speed of change, the world has witnessed an emergence of various new challenges with both positive and negative consequences on the economy, society and the environment. Our ability to maintain the global equilibrium, as well as the quality of human life, is dependent upon whether or not we can adopt appropriate mindsets and practices for the world with limited resources, in order to sufficiently respond to human needs, on a foundation of sustainability. ”

CPF has not been idle amid these pressing challenges and global trends. On the contrary, we have been ceaselessly working towards developing our organization into the “Kitchen of the World”. This aspiration is based on two important principles: first, we must maintain competitiveness and deliver good returns in order to secure continuous business growth; and second, we will assume a leadership role in the agro-industrial and food conglomerate with sustainability, embodying a balance within the economic, social and environmental dimensions.

Consequently, CPF has taken various initiatives to manage its material sustainability issues in 2019. In the economic dimension, we focused on adding value to our business through managing efficiency throughout the production process and within the final products to deliver new experiences to our customers and consumers. We also increase their satisfaction beyond their expectations, through continuously innovating new food products. In advancing innovation, CPF established the CPF Food Research and Development Center to function as a modern, reliable, and effective driver of food industry development. We also prioritize healthy food products, such as the “**Benja Chicken**”, the world’s first fresh chicken product produced from chickens fed with brown rice. The Benja Chicken also serves as a fitting case study of the use of innovation to ensure that food is produced based on food quality and safety, as well as animal welfare principles, both of which are material sustainability issues for us in 2019. The product also demonstrates our responsibility as a leader in the agro-industrial and food conglomerate.

In the social dimension, CPF prioritizes our labor practices in compliance with the basic principles of the United Nations’ Universal Declaration of

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FTSE4Good



Thailand's Private Sector Collective
Action Coalition Against Corruption



Corporate Governance in Thai Listed
Companies by the Thai Institute of
Directors Association (IOD)

Human Rights, in parallel with caring for and developing our employees. This includes upskilling our employees to enhance their existing skills and reskilling them to develop their new skills to ensure that our people are ready to apply digital technology in our business and support the organization's digital transformation. We have also been supporting our business partners through creating networks and exchanging knowledge to steadily grow together, advancing the competence of the contracted farmers, and caring for communities around our operations.

In the environmental dimension, we have adopted **the Circular Economy** principle to optimize resource use efficiency in our business. CPF has proactively looked for solutions to reduce food loss and food waste generated in our business and to increase energy and water consumption efficiency to the highest levels possible. We have also developed plans to manage energy consumption and water consumption in locations with risks of water scarcity and have been using renewable energy and reducing our greenhouse gas emissions. In order to take part in the fight against the global plastic waste crisis, we have continuously reduced the use of single-use plastic throughout our value chain and taken efforts to design environmentally-friendly food packaging. Furthermore, we place importance to protecting and restoring mangrove forests and watershed forests, which are important sources of natural resources in the country that affect food security.

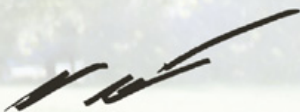
CPF believes that implementing partnership initiatives with external stakeholders contributes to increasing efficiency and reducing risks in business through exchanging opinions and new experiences with the public, private and civil society sectors, both in Thailand and abroad. For example, we drive sustainable fishery practices through participating in the Seafood Taskforce and the SEABOS initiatives; implement and promote sustainable consumption and production through the World Business Council for Sustainable Business Development (WBCSD)'s FReSH initiative; and advocate for good human rights practices together with the Global Compact Network Thailand (GCNT). Ultimately, we hope that our actions will contribute to the advancement of the standards of practice of the food industry, in order to pave the way towards achieving the United Nations' Sustainable Development Goals (SDGs).

CPF's efforts to drive sustainable business based on good corporate governance continued to be recognized in 2019. We were listed in the 2019 Dow Jones Sustainability Emerging Markets Index (DJSI - Emerging Markets) and the FTSE4Good Emerging Index for the fifth and third

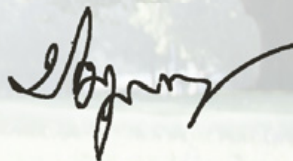
consecutive year, respectively. The Stock Exchange of Thailand has awarded CPF with the Highly Commended in Sustainability Award, and included CPF in the 2019 Thailand Sustainability Investment (THSI) Index. Additionally, we have received other awards, both nationally and internationally, for our performance in labor, safety and corporate social responsibility.

Looking forward, CPF will continue to drive our business towards producing healthy, safe, quality and affordable food, while pursuing economic, social and environmental development with balance, following our “Three-Benefit” core principle (benefits to the country, the people, and the Company) which we have always adhered to, and the three pillars of our sustainability strategy, “Food Security, Self-Sufficiency Society, and Balance of Nature”. To that end, we have a range of plans in place to develop products which satisfy the basic nutritional needs of our consumers that meet international standards, and to produce food products that tackle challenges in food security, proper nutrition and environmental stewardship. Producing plant-based protein, for example, is one of the ways we reiterate our commitment to upholding sustainability leadership in the agro-industrial and food conglomerate.

Finally, on behalf of the Board of Directors, executives, and all employees, CPF extends our sincere gratitude to the investors, communities, business partners, suppliers, farmers, financial supporters, the private sector, the public sector and all other related parties for their part in continually inspiring, developing and supporting our journey in growing sustainably while adding economic value, creating social value and restoring balance in nature. We recognize that our business is a key part to achieving food security for humanity, and therefore, pledge that we will conduct our business on good governance principles, with consideration towards social and environmental balance. We will remain a sustainable organization and will continue to stand with our country and citizens, while fulfilling our role as the “Kitchen of the World”.



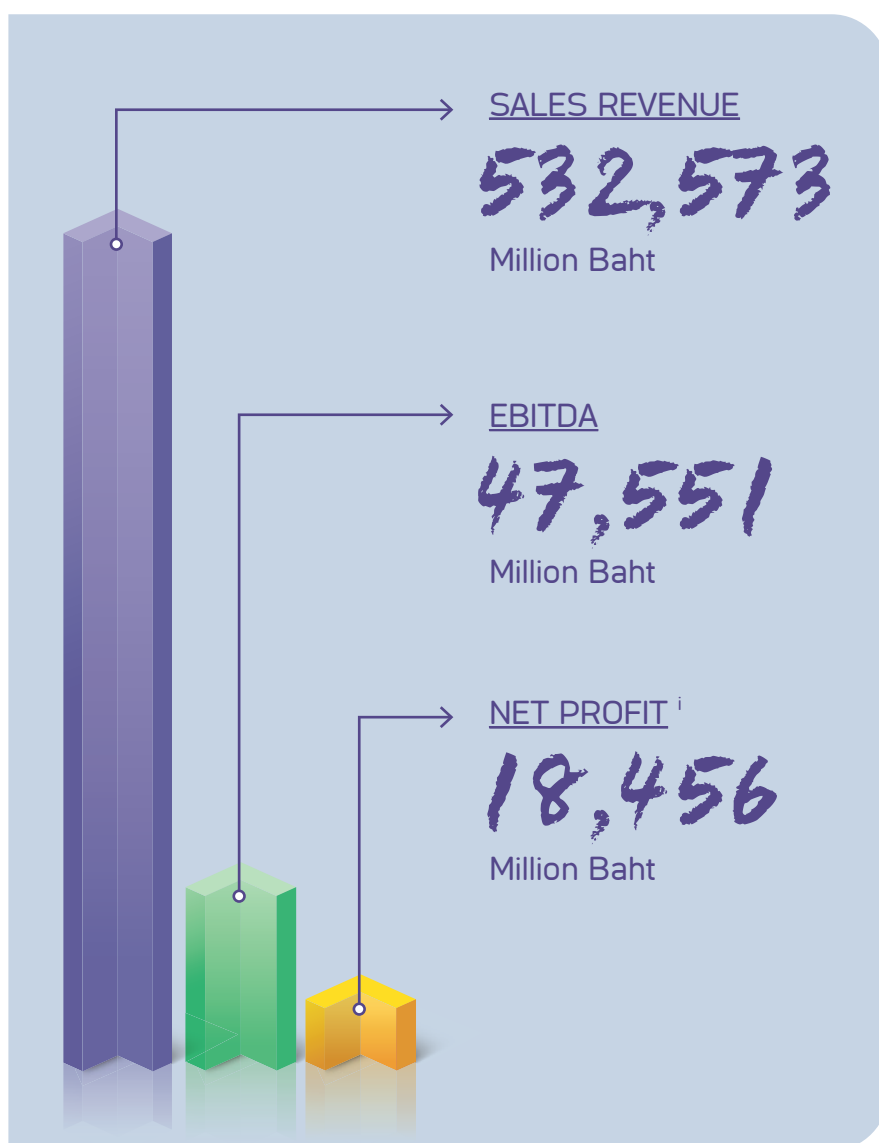
Mr. Soopakij Chearavanont
Chairman



Mr. Prasit Boondoungprasert
Chief Executive Officer

2019 Highlights

Strong operational results, distribution of economic value to stakeholders for sustainable growth.



EARNINGS PER SHARE

2.18

Baht

DIVIDEND PAID TO SHAREHOLDERSⁱⁱ

6,028

Million Baht

RETURN ON EQUITY (ROE)

11.06%

RETURN ON ASSETS (ROA)

3.82%

INCOME TAX PAIDⁱⁱⁱ

4,897

Million Baht

FINANCE COSTS

13,785

Million Baht

INVESTMENT ON HUMAN CAPITAL

60,318

Million Baht

ⁱ Net Profit is profit attributable to equity holders of the Company.


ⁱⁱ Board of Directors Meeting on 20th February 2020 arrived at a consensus at the 1/2020 Annual General Meeting of Shareholders, to propose a dividend payment for the Company's 2019 performance at 0.70 Baht per share or a total value of 6,028 million Baht to the shareholders.

ⁱⁱⁱ Income Tax Paid is from the Statements of cash flows in Consolidated Financial Statements of Charoen Pokphand Foods PCL. (CPF) and its subsidiaries.

Awards and Recognition

MEMBER OF

**Dow Jones
Sustainability Indices**

In collaboration with  **SAM**
a RobecoSAM brand

 **SAM** | Sustainability Award
Silver Class 2020

Continuously listed as a member of the Dow Jones Sustainability Index in the Food Products (FOA) industry since 2015, and received the Silver Class distinction, as reported in the 2020 Sustainability Yearbook by SAM and S&P Dow Jones Indices.



FTSE4Good

Continuously recognized as a constituent member of the FTSE4Good Emerging Markets Index since 2017 as assessed by FTSE Russell.



Received the “Asia’s Best CEO” Award, “Asia’s Best CFO” Award, “Best Investor Relations Company” Award and “Best Investor Relations Professional” Award in the 9th Asian Excellence Award 2019

by Corporate Governance Asia Magazine

THSI
THAILAND
SUSTAINABILITY
INVESTMENT 2019



Continuously listed in the “Thailand Sustainability Investment (THSI)” Index since 2015 and granted the SET Sustainability Awards: Highly Commended Category (Former Outstanding) for the second consecutive year at the SET Awards 2019 organized by the Stock Exchange of Thailand.



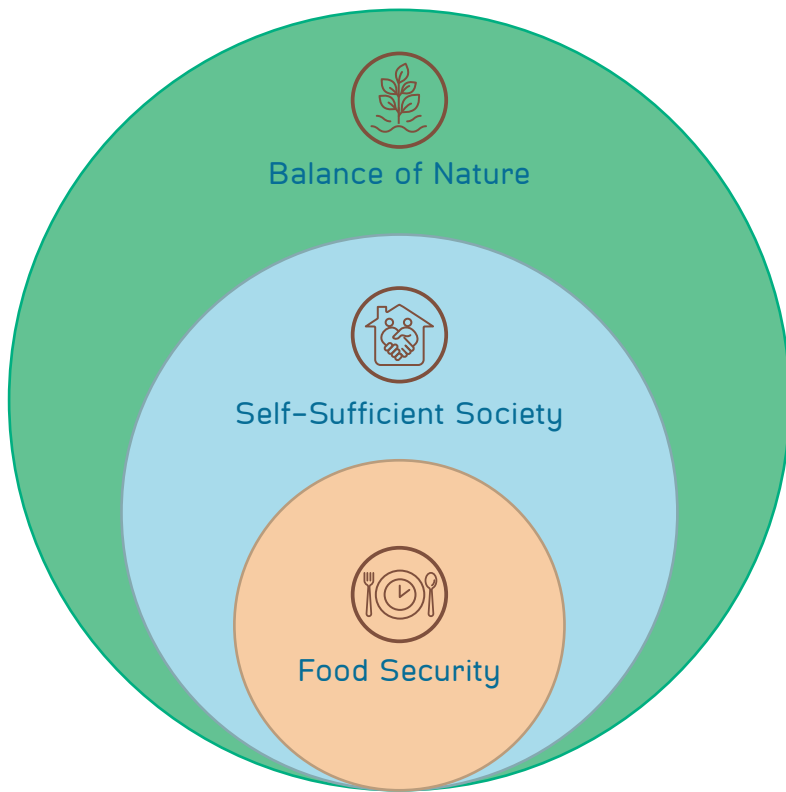
Continuously received an “Excellent Corporate Governance Scoring” Rating since 2016

by the Thai Institute of Directors (IOD) under the support of the Stock Exchange of Thailand.

C.P. Vietnam was honored as one of the Top 100 Sustainable Businesses in Vietnam based on the Corporate Sustainability Index (CSI) for the second consecutive year.

by the Vietnam Business Council for Sustainable Development (VBCSD).

CPF's Sustainability Strategy



Concern

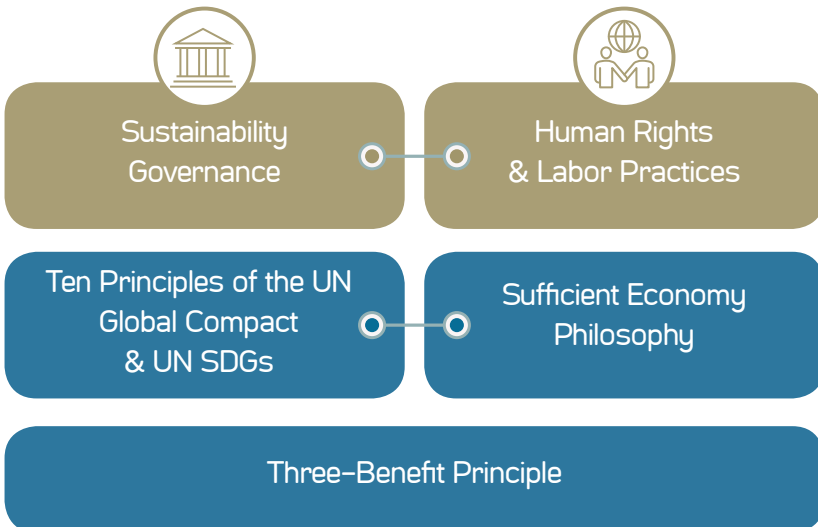
- Sustainable Packaging
- Environmental Impact
- Biodiversity

Care

- People
- Partners
- Communities

Create

- Food Innovation
- Animal Welfare
- Food & Knowledge Accessibility for Sustainable Consumption



CPF's Support for the United Nations Sustainable Development Goals

CPF has integrated Sustainable Development Goals (SDGs) into our sustainability practices based on the three pillars of our sustainability strategy – “Food Security, Self-Sufficient Society and Balance of Nature”. We directly support 11 out of 17 SDGs which are in line with CPF’s capability and potential to support sustainable and inclusive development.

The integration of SDGs into our sustainability strategy allows us to identify issues to which we can efficiently contribute in order to create positive impacts or at least to reduce negative impacts. We link our materiality issues with SDGs to ensure that we know which activities in CPF’s value chain are most suited in supporting the Goals, directly and indirectly.



WE SUPPORT



In addition, CPF operates its business in accordance with the ten principles of the United Nations Global Compact (UN Global Compact). We are also one of the fifteen founding members of the Global Compact Network Thailand (GCNT) with the aim to drive the Thai business sector to adhere to the ten principles in operating their business.

CPF's 2019 Sustainability Performance to Support the United Nations Sustainable Development Goals (SDGs)

PLANET: Protecting our Planet



36% of water withdrawal per production unit was reduced, compared to the base year 2015.

21% of water was reused or recycled

99.99% of plastic packaging was reusable, recyclable, upcyclable or compostable.

481,000 tons of carbon dioxide equivalent (CO₂e) was reduced and sequestered.

2,388 rai of mangrove forests were preserved and restored.

5,971 rai of terrestrial forests was preserved and restored.



PEOPLE: Improving Quality of Life



Employment prospect and quality of life of **42,090** farmers, small entrepreneurs and vulnerable groups were improved.

291,997 children and youth have accessed to food, and food-related knowledge or skills.

34% of our new products were healthier and more nutritious.

94% of executives and employees were trained to develop knowledge and understanding to enable business sustainability.

48:52 represented a proportion of male employees to female employees.
14:9 represented a proportion of average training hours of male employees to female employees.



PEACE: Building Peace



We implemented Human Rights Policy in line with the United Nations Guiding Principle on Business and Human Rights (UNGPR) to eliminate forced labor, and condemn slave labor and human trafficking

PARTNERSHIP: Partnering for Collaboration



We participated in the "Food Reform for Sustainability and Health (FReSH)" which is an initiative emerging from a partnership between World Business Council for Sustainable Development (WBCSD) and EAT foundation.

PROSPERITY: Creating Prosperity



2.88 million gigajoules of energy were produced from renewable energy sources.

Human Rights Due Diligence was conducted throughout the organization and supply chain.

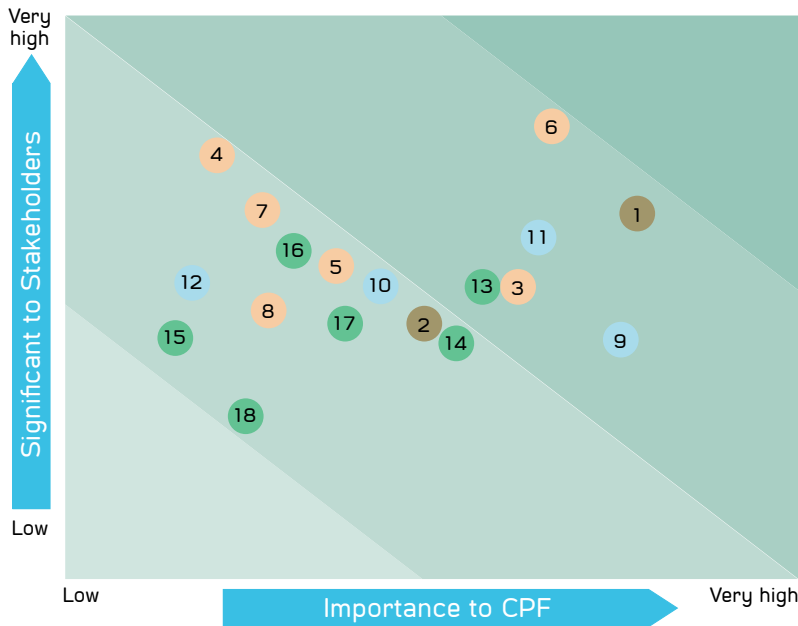
2,964 million Baht was spent on research and development.

757 disabled people were employed.

98% of waste was recovered.



Materiality Assessment



Self-Sufficient Society

- 9. Human Resources Management
- 10. Occupational Health and Safety
- 11. Responsible Sourcing
- 12. Community Development and Support

Balance of Nature

- 13. Packaging Management
- 14. Climate Change Management
- 15. Energy Management
- 16. Waste Management
- 17. Water Management
- 18. Biodiversity and Ecosystems

Foundation

- 1. Governance, Risk Management and Compliance
- 2. Human Rights and Labor Practices

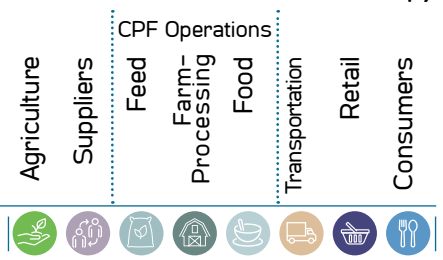
Food Security

- 3. Innovation Management
- 4. Health and Nutrition
- 5. Animal Welfare
- 6. Food Quality and Safety
- 7. Responsible Marketing and Product Labeling
- 8. Food Loss and Food Waste Management

Level	Description
Very high	Materiality issues of the organization that are of very high interest of key stakeholder groups, and could pose very high organization-wide risks, if not managed well. Their targets are set and the performance is actively managed.
High	Materiality issues of the organization that are of high interest of key stakeholder groups, and could pose high organization-wide risks, if not managed well. Their targets are set and the performance is actively managed.
Medium	Materiality issues of the organization that are of interest of certain stakeholder groups , and could pose risks to the organization, if not managed well. Their performance is monitored and disclosed in this report, as necessary .
Low	Materiality issues of the organization that are of interest of small groups of stakeholders, and unlikely to pose risks to the organization. Their performance is monitored and disclosed in this report, as necessary .

Materiality Boundary

	Topics	Materiality Issues
 SUSTAINABILITY FOUNDATION	Sustainability Governance	Governance, Risk Management and Compliance
	Human Rights & Labor Practices	Human Rights and Labor Practices
 FOOD SECURITY	Food Innovation	Innovation Management
	Animal Welfare	Animal Welfare
	Food & Knowledge Accessibility for Sustainable Consumption	Food Quality and Safety
		Responsible Marketing and Product Labeling
		Food Loss and Food Waste Management
 SELF-SUFFICIENT SOCIETY	People	Human Resources Management
		Occupational Health and Safety
	Partners	Responsible Sourcing
Communities	Community Development and Support	
 BALANCE OF NATURE	Sustainable Packaging	Packaging Management
	Environmental Impact	Climate Change Management
		Energy Management
		Water Management
	Waste Management	
Biodiversity	Biodiversity and Ecosystems	



Response to Materiality Issues

	Agriculture	Suppliers	Feed	Farm-Processing	Food	Transportation	Retail	Consumers
Conduct the business with adherence to good corporate governance, promote ethical conducts for all employees, under the Corporate Governance Policy, the Six Core Values (CPF Way) and our Code of Conduct	●	●	●	●	●	●	●	●
Emphasize human rights in supply chain especially forced labors, migrant labors and health, safety and well-being of employees and contractors within the operations.	●	●	●	●	●	●	●	●
Advocate our employees to be innovators among all business functions, and organize a range of innovation awards in order to create more innovators and to share knowledge and ideas on their innovations at the organization level.	●	●	●	●	●		●	●
Create healthier and more nutritious products through advanced technology	●	●	●	●	●		●	●
Apply animal-friendly approaches to farm management and promote antimicrobial stewardship in food animals.				●				●
Enhance food quality and safety from innovative research and development through operation global standards management, certified by third-party, along with providing quality control through quality analysis and assessment together with traceability systems and product recalls.	●	●	●	●	●	●	●	●
Provide safe, high quality and traceable food with affordable price and responsibly communicate to consumers.					●		●	●
Add market value to food loss and strengthen the operations from it and develop food packaging to extend food product shelf life resulted in reducing of unconsumed food.	●	●	●	●	●	●	●	●
Develop and retain our "Talents", promote leadership skills and career enhancement of all employees throughout their time of employment with us, based on our sustainability performance and to be a "Home of Happiness" for our employees.			●	●	●		●	
Ensure workplace safety and promoting employee well-being, in accordance with the Safety, Health, Environment and Energy Policy, and review our performance every year to improve emergency management.	●	●	●	●	●	●	●	
Encourage suppliers to operate in adherence to CPF's Sustainable Sourcing Policy and Supplier Guiding Principle, and engage and share knowledge with business partners and relevant stakeholders to develop a win-win partnership in doing sustainable business.	●	●	●	●	●			
Enhance the quality of life of communities and vulnerable groups by carrying out projects based on the "4Cs to Sustainability: Competency + Creation + Collaboration + (Connection)" framework.	●	●	●	●	●		●	
Develop sustainable packaging design and management of based on circular economy throughout value chain to reduce packaging waste and to promote the use of environmentally-friendly packaging materials.			●	●	●	●	●	●
Emphasize the importance of finding the effective climate change mitigation and adaptation approaches to ensure that our business, the society, and the environment are going to be least affected in the near and far future.	●	●	●	●	●	●	●	●
Promote energy efficiency, and increase the use of renewable energy.			●	●	●			
Increase water recycling to reduce water withdrawal and conduct water scarcity risk assessment to develop water risk-related management plan.			●	●	●			
Optimize our resource use and minimize waste based on circular economy, comply with the management standards and valorize waste from our production process.	●		●	●	●			
Protect biodiversity through the CPF Grow-Share-Protect Mangrove Forestation Project and the CPF Rak Ni-Ves, Pasak Watershed, Khao Phraya Doen Tong project, and support sustainable fisheries and good agricultural practices through our Sustainable Sourcing Policy which should be traceable throughout the value chain.	●	●						

Sustainability through Partnerships



Details of the management approach are available at www.cpfworldwide.com under "Sustainability" topic: "Sustainability through Partnerships"

Recognizing that driving sustainable development cannot be achieved by CPF alone, we seek collaboration, promotion and support from others. Therefore, we partner with networks, associations, external institutions, and public and civil society sectors to drive positive changes at the national policy and operational levels. This is one of our responsibility to society and countries in which we operate, and our support in sustainable development and drive towards international sustainability.

2019 Progress

EU lifted the yellow card on Thai fishing industry.

CPF collaboratively supports fisheries with legal fishery equipment. We have been leading the Sub Group 4 which focuses on Vessel Behavior Analysis in the **Seafood Task Force**. We support the Thai Department of Fisheries to improve the efficiency of the Vessel Monitoring System (VMS) to cover tasks for vessel Monitoring, Control and Surveillance (MCS) which are significant to the the European Union's (EU) consideration to lift the yellow card on the Thai fishing industry.

In addition, on 21 February 2019, Thailand won second place in the 3rd STOP IUU FISHING AWARD from the achievement in "Fish Product Traceability System: the Key Tool for Combating IUU Fishing of Thailand" which was submitted by the Thai Department of Fisheries to the International MCS Network during the 6th Global Fisheries Enforcement Training Workshop in Bangkok,



Thailand. The achievement has been awarded as a result of the development in Thailand's traceability system, of which the VMS is a part, including electronic controlling and examining marine animals captured from Thai vessels and imported from overseas.

Establishing the Fisherman's Livelihood Enhancement Center (FLEC) to eradicate illegal labor in vessels, leverage quality of life of fishery labors and their families. The efforts resulted in concrete outcomes of the country's reputation on labor issues and expansion of networks to avoid future problems. Such outcomes **are a part of achievement from the yellow card removal from the EU**. In 2019, CPF provided labor practices related training and consultations on healthcare, rights and welfare, services in nursing room and first aid kit on vessels to 2,089 fishermen.



From the achievement of CPF and collaborative network resulting in the yellow card removal from the EU in the IUU Fishing case, **we presented our experiences on business respect for human rights by promoting stakeholder partnerships throughout the supply chain with the Seafood Task Force.** We conducted the presentation in the name of **Global Compact Network Thailand (GCNT)** at the United Nations through a conference on the multi stakeholders initiatives promoted by States to drive business respect for human rights – effectiveness and lessons learned at United Nations Office at Geneva, Switzerland.

CPF collaborates with the **Thai Sustainable Fisheries Roundtable (TSFR)** in the name of Thai Feed Mill Association in trawler fishing projects in both the Gulf of Thailand and the Andaman Sea. In the Gulf of Thailand, we have adopted the Global Standard for Responsible Supply (IFFO RS) Version 2.0, the latest version, for GAP analysis and assessment. We also consistently collaborate with the IFFO RS to develop assessment guidelines for mixed trawl fisheries management to **pilot and initiate the first sustainable fishery standard** in the world that is applicable to the Southeast Asian region. Read more in the “Self-Sufficient Society” chapter under the topic of **Showcase: Sustainable Development at the Sources of Raw Materials Used for Aquatic Animal Feed and Capacity Building to Advance Fishmeal Supplier Practices towards the Global Standard for Responsible Supply (IFFO RS).** (Page 63)

SeaBOS and the Global Dialogue on Seafood Traceability (GDST) which have 60 member companies, globally, have **announced the collaboration between two global sustainable fishery associations** at the Seafood Exhibition of North America (SENA) in Boston, USA. The announcement aimed at **constituting new sustainability standards to the global seafood industry** through a modern traceability system, ensuring the consumers that their seafood products are quality, sustainable, and responsible for society and communities.

SEAFOOD BUSINESS FOR OCEAN STEWARDSHIP



CPF and Thai Union Group PCL partnered in hosting an annual meeting of the **Seafood Business for Ocean Stewardship (SeaBOS)** under the Global Connectivity – Consolidating and Accelerating Change theme and **issuing a statement on tackling modern slavery to ensure no illegal labor in our supply chains**. The attendants agreed to support the integration between science and the industrial sector to increase sustainable seafood production that is consistent with consumers' needs. They also agreed to tackle the IUU Fishing and forced labors, improve seafood traceability, and work to support sustainable fishery management.

CPF collaborated with **Global Dialogue on Seafood Traceability (GDST)** to develop **"the Interoperable Traceability Systems"**. We volunteered to conduct a pilot test in order to find suitability and efficiency of the systems in real situation. Data throughout the supply chain of our shrimp products have been recorded following the Key Data Elements (KDEs) which we co-developed with the GDST. The data collecting and analyzing processes following the KDEs have already been piloted, and the GDST will promote the use of the Interoperable Traceability Systems with seafood companies globally in 2020.



Co-establishing and Participating as a Committee Member in the Sustainable Fisheries Research and Development Institute (SFRD). This has been transformed from the "Catch the Trash" Project aimed to reduce ocean waste and promote long-term sustainability. Read more in the "Balance of Nature" chapter under the topic of **Raising Awareness and Contributing to Plastic Waste Management. (Page 83)**




Partnering with Global Leading Companies in the "Food Reform for Sustainability and Health (FReSH)" Project. In 2019, CPF set specific goals and management approach of food loss and food waste management. Read more in the "Food Security" chapter under the topic of **Showcase: Food Loss and Food Waste Tackling. (Page 48)**





















Collaborating with the "Thailand Responsible Business Network (TRBN)" to drive positive changes in Thailand. The collaboration covered three key topics which are low pollution business, equal opportunity business and good governance business. The collaboration was conducted under the Promoting Good Governance Stock Market Project to celebrate the Royal Coronation Ceremony of King Rama X. The aim is to raise awareness of responsibility for Environment, Social and Governance (ESG). We have been a part of this by conducting activities related to **Circular Economy and Climate Change**.

























Sustainability Performance



Our Commitments and Progress

Progress:  In Progress  Target Achieved

Food Security	 <p>Food Innovation</p>	<p>30% of our new products are developed to be healthier and more nutritious by 2020 </p> <ul style="list-style-type: none"> Advancing innovation and technology in the agro-food industry for healthier and more nutritious products Creating organizational culture for innovation Collaborating with external stakeholders to create innovation 	   
	 <p>Animal Welfare</p>	<p>100% of animals to be raised in accordance with the Five Freedoms principles, and antibiotics to be used responsibly and prudently** </p> <ul style="list-style-type: none"> Transitioning farms for pregnant breeder sows towards a group housing system Transitioning layer farms towards a cage-free system Having Poultry Welfare Officers (PWO) on all broiler farms in Thailand and overseas operations Reducing the use of antibiotics for disease prevention and Shared-Class antibiotics for growth promotion 	 
	 <p>Food and Knowledge Accessibility for Sustainable Consumption</p>	<p>1.3 million children, youth, and consumers to have access to food, food-related knowledge or skills, nutrition-related knowledge, and sustainable consumption by 2020 </p> <ul style="list-style-type: none"> Delivering safe food products to consumers Promoting access to food, and knowledge or skills about food and nutrition in children and youths Promoting access to knowledge or skills about food, nutrition, and sustainable consumption in consumers Food Loss and Food Waste Tackling 	   
Self-Sufficient Society	 <p>People</p>	<p>100% of executives and employees to be trained to develop knowledge and understanding to enable business sustainability by 2020 </p> <ul style="list-style-type: none"> Enhancing employees' knowledge and skills to enrich our people and enable business sustainability Promoting occupational health and safety in workplace (for employees and contractors)) 	 

Self-Sufficient Society	 <p>Partners</p>	<p>100% of critical suppliers in direct raw material groups (i.e. animal feed raw materials) and indirect raw material groups (i.e. food ingredients and packaging) to be audited on their sustainability by 2020</p> <ul style="list-style-type: none"> Encouraging business partners to conduct supplier sustainability self-assessment Auditing critical suppliers on sustainability 	   
	 <p>Communities</p>	<p>Employment prospect and quality of life of 50,000 smallholder farmers, small entrepreneurs, and vulnerable groups to be improved by 2020</p> <ul style="list-style-type: none"> Creating social value by improving employment prospect and income of smallholder farmers, small entrepreneurs and vulnerable groups 	 
Balance of Nature	 <p>Sustainable Packaging</p>	<p>100% of plastic packaging for food products to be reusable or recyclable or upcyclable, or compostable by 2025 and 2030*</p> <ul style="list-style-type: none"> Designing and developing sustainable packaging Reducing unnecessary plastic packaging throughout the value chain 	 
	 <p>Environmental Impact</p>	<p>25% of direct and indirect GHG emissions per production unit to be reduced compared to the base year 2015 by 2025</p> <ul style="list-style-type: none"> Reducing greenhouse gas emissions Increasing energy efficiency Promoting renewable energy Managing risks of water scarcity Optimizing water use throughout the production process Collaborating with communities to manage water resources Maximizing waste recovery Increasing the proportion of Green Revenue from Green Product 	    
	 <p>Biodiversity</p>	<p>9,000 rai of mangrove forests and watershed forests in strategic areas and green areas within the boundary of our operations to be conserved, protected, and restored by 2020</p> <ul style="list-style-type: none"> Responsible Sourcing of agricultural raw materials Promoting sustainable agriculture Preserving, protecting and restoring biodiversity of land and marine ecosystems 	     

Remarks: Unless stated otherwise, scope covers Thailand operations

* is referred to the scope of overseas operations

** is referred to the scope of Thailand and overseas operations

Sustainability Foundation



“CPF’s sustainability governance follows the sustainability governance structure to align sustainability practices throughout the organization.”

“All members of the Board, executives, employees and workers acknowledged and duly understand policy and procedures to prevent corruption in their line of work.”

“CPF reviewed and conducted Human Rights Due Diligence covered all groups including vulnerable groups throughout the organization in Thailand and supply chain.”



Sustainability Governance

Commitment: Sustainably develop the organization on the foundation of good corporate governance

Details of the management approach are available at www.cpfworldwide.com under the "Sustainability" topic: "Sustainability Governance".



To align sustainability practices throughout the organization, apart from good governance through our policies, CPF has sustainability governance structure which comprises the Corporate Social Responsibility and Sustainability Development Committee (CSR & SD Committee) whose role is to provide directions and strategies, and monitor sustainability performance

before reporting to the Board of Directors. The CEO drives sustainability practices through and different working groups, and communicates the practices within and outside of the organization so that our sustainability efforts are accurately and transparently communicated to stakeholders.



Details of the management approach are available at www.cpfworldwide.com



"Corporate Governance"

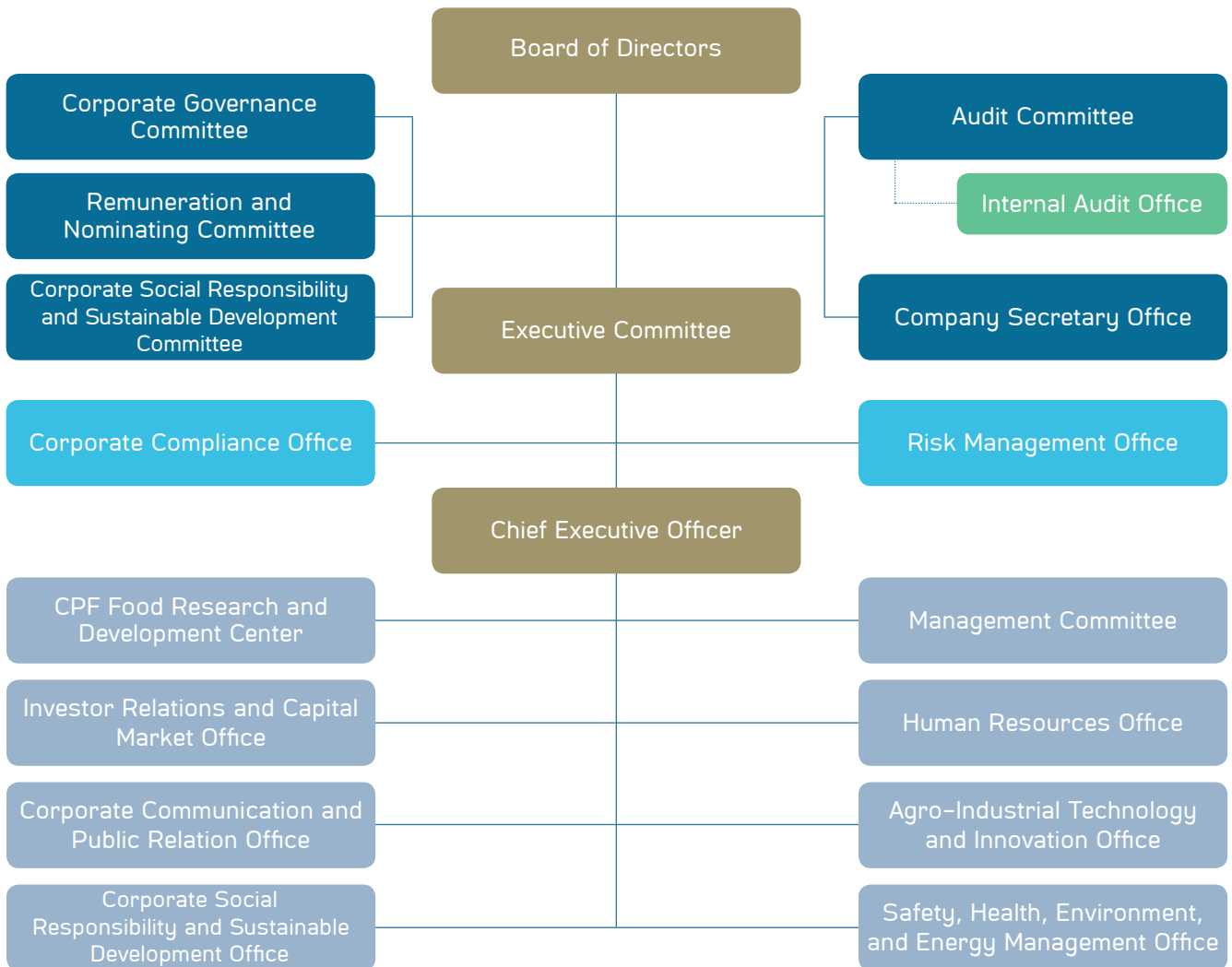


"Anti-Corruption"



"Risk Factors"
In Annual Report
2019

CPF Sustainability Governance Structure



Relevant Working Groups

Economy

- Risk Management Working Group
- Code of Conduct Review Project Working Group
- Digital Transformation Working Group
- Digital Product Traceability Working Group
- Animal Welfare Working Group
- New Product Development Working Group
- Personal Data Protection Project's Steering Committee and Working Group

Society

- Sustainable Supply Chain Management Working Group
- Working Group for the Study on Establishing Social Enterprise

Environment

- Safety, Health, Environment, and Energy Management Working Group
- Environmental Sustainability Sub-Committee
- Sustainable Packaging Working Group
- Strategic Mangrove Working Group
- Rak Ni-Ves Working Group

Human Rights and Labor Practices

Commitment: Respect human rights and have good labor practices in place

Details of the management approach are available at www.cpfworldwide.com under the "Sustainability" topic: "Human Rights and Labor Practices"



Respect and Support for Human Rights

In 2019, CPF's employees were trained on human rights using real-life situations. The three-hour training was conducted in the form of group discussion where participants were encouraged to express their opinions on a real case. This allows for interactive learning on human rights issues between participants and trainers. Employees were also informed of grievance channels in different languages operated by the Labor Protection Network (LPN). The training was carried out in 20 batches, of which 79 percent of participants were foreign workers. After the training, the participants demonstrated a better understanding on human rights issues, increasing from **44** percent prior to the training to **88** percent post-training.



Human Rights Due Diligence

In 2019, CPF reviewed and conducted the Human Rights Due Diligence Process, covering all groups of stakeholders, including vulnerable groups such as ethnic or religious minority groups, disabled group, and children. The process integrated within all the business units in Thailand. The salient human rights issues are as followed:

- Working conditions;
- Health and safety of employees;
- Communities' health and safety;
- Data privacy;
- Use of illegal labor (i.e. child labor, forced labor and illegal migrant workers) in the supply chain
- Sub-contractors and suppliers' health and safety; and
- Community safety and standard of living in the supply chain

This year, CPF received four human rights grievances from both Thai and foreign workers through the Labor Voices Hotline by LPN. They were about inquiry and complaint. The investigation confirmed that the inquiries were about employment conditions according to Memorandum of Understanding (MOU) and the complaints were about employee's concerns and miscommunication on the rules and process of working. We settled the cases and informed all involved parties. This reflects our persistent adherence to human rights principles.

In addition, CPF also conducted a survey on acknowledgement of the Labor Voices Hotline by LPN in six factories where there are a high number of foreign workers. The results showed that 75 percent knew about the grievance channel through the Labor Voices Hotline by LPN.



Employee Diversity Management

Total Employees: **73,941** persons



To support our *employees at any level and business functions*, according to our policies, CPF encourages employees to join the Welfare Committee as a member. They *act as representatives* of other employees to *suggest* CPF consider improving *benefits and welfare, including facilitating employees in the workplace.*

In 2019, there is **74%** of total employees in Thailand operations were benefited from the improvement.



Food Security



Layer farms in Thailand are transitioned towards a cage-free housing system

NO product recall incidents that would affect public health

34% of the new products were developed to be healthier and more nutritious

100% Broiler farms in Thailand and overseas operations have Poultry Welfare Officers (PWO)

100% Thailand operations have no usage of antibiotics for disease prevention and Shared-Class antibiotics for growth promotion

41% of sow's crates in Thailand operations

28% of sow's crates in overseas operations are group gestation pen

291,000 of children and youth have access to food-related knowledge or skills, nutrition-related knowledge, and sustainable consumption



Food Innovation

Commitment: Advance innovation and technology in the agro-food industry

Details of the management approach are available at www.cpfworldwide.com under "Sustainability" topic: "Food Innovation"

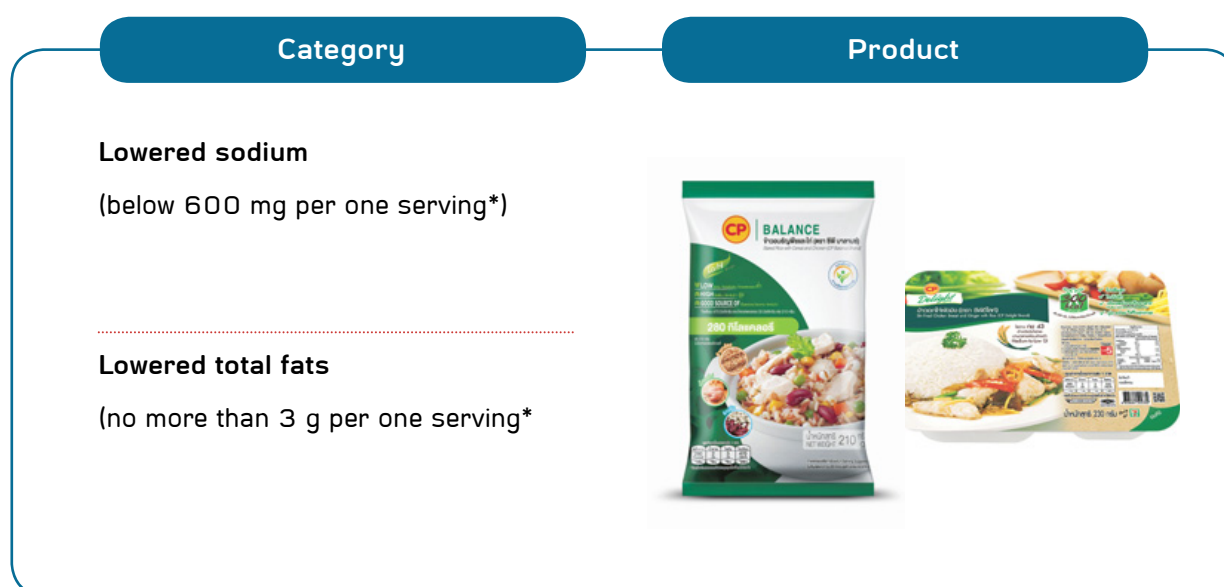


"CPF Food Research and Development Center"

As consumer behaviors change constantly, CPF aims to persistently create, develop and innovate, in order to respond to changes in the global food industry. We drive this through the CPF Food Research and Development Center. Read more on the food innovation topic in [Showcase: Food Innovation \(Page 39\)](#).

Healthier Products

CPF supports our consumers in having good health by developing healthier and more nutritious products with lowered contents of sodium and total fats.



* Compared to the nutrients for Thai recommended daily intakes for ages of 6 years and above (Thai RDI), based on the energy demand of 2,000 kilocalories/day

Nurturing Organizational Culture for Innovation

CPF encourages employees to adapt to changes, create innovations and develop themselves to become innovators according to the TRIZ¹ guideline through a variety of trainings and initiatives following the CPF Way. We also apply international innovation management standards, the European Committee for Standardization (CEN) CEN/TS16555 Innovation Management Standards, as the guidance for setting, maintaining and developing systematic innovation management procedures as we gear towards becoming an innovative organization.

¹ Developed by Genrich S. Altshuller, TRIZ is the Theory of Invention Problem Solving, a theory for managing thinking that focuses on understanding problems, having a problem-solving process in place and analyzing problems using different tools without being hindered by human nature. The theory is widely known and implemented.

As of 2019, CPF has created **1,006** innovators according to the TRIZ guideline

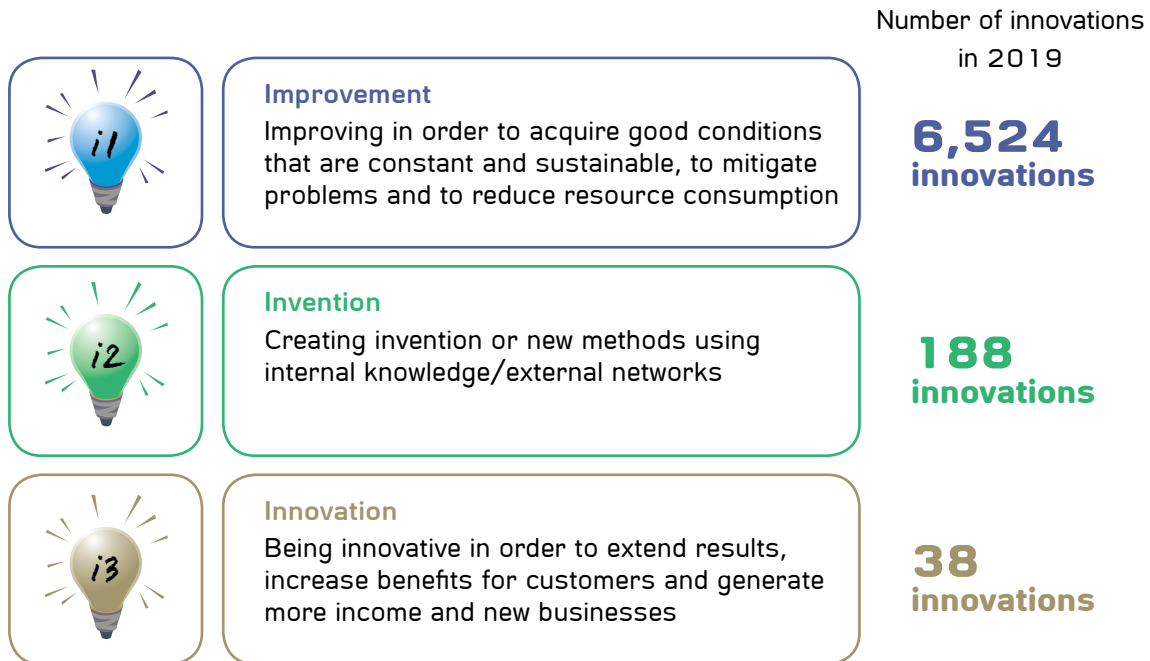
Target: to create 1,000 innovators by 2020



Promoting Creation of Innovation in the Organization

To promote the value of innovativeness within the organization, CPF encourages employees not only to create innovations that can be registered patents or petty patents, but also to create and improve work processes or new inventions. We do this through the iScore system, scoring individual employees, in order

to repay and reward those who create innovations for the organization. This paves the way to developing employees to become innovators according to the TRIZ guideline. We categorize innovations according to the **3i framework; Improvement, Invention, and Innovation.**



Initiatives to Promote Organizational Culture for Innovation

CPF shared the knowledge and exchanged experience in creating innovations with C.P. Group at the CP Innovation Exposition which is held every two years. The 2019 exposition was the fourth time that it was organized. We also took our scholars and innovators to participate in the academic forums on innovation including innovation in functional food, in engineering for the production process and in information technology.

Automatic Washing System for Poultry Drinking Water Pipe By Mr. Supoj Prawat

Is one of our innovations to reduce sediment and germs, and maintain quality of water in the drinking water pipe system in poultry house. This helps ensure that chickens can always drink clean water.

The result from water monitoring showed that the system can potentially reduce coliform counts and bacterial counts by more than **99%** after washing pipes.

Preparing the Organization for Changes

To prepare employees in the organization for changes towards the complete digital era, CPF provides trainings for employees to understand the benefits and opportunities in applying innovation to the work processes and in using technology to analyze data. The trainings also help create awareness on access to information, both personal and CPF's confidential information, in compliance with laws, requirements and internal regulations. Our trainings also aim to enable our employees to use technology as a tool to increase business competitiveness, increase the speed and accuracy at work, and keep themselves updated with changes in the digitalized world through self-learning and post-training assessment via our e-learning system.

In 2019, **81%** of employees were trained on innovation

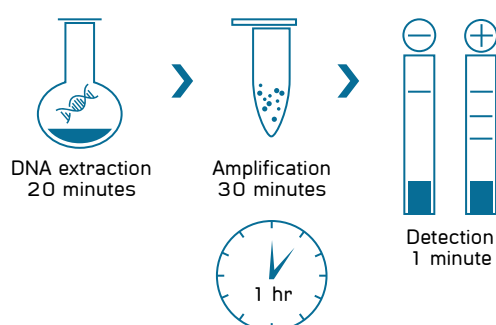
As of 2019, **6,750 innovations** have been created in the organization

252 innovations have been registered patents and petty patents

Collaborating for Innovation

CPF recognizes the importance to collaborate with external parties, locally and internationally, to create innovations and at the same time, to be able to bring commercial and social benefits through a variety of partnerships:

- **Academic Sector: Universities and Research Institutes**

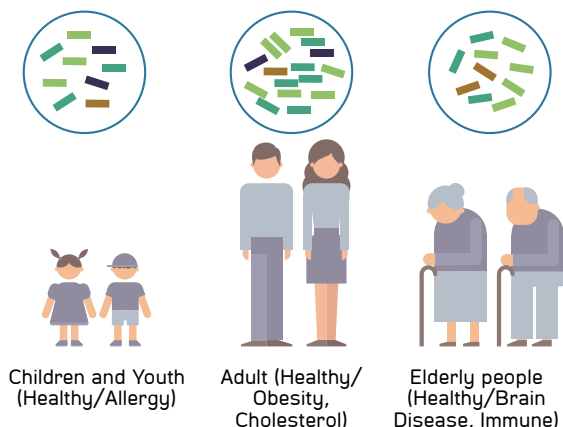


Duplex *Listeria* ssp./*Listeria monocytogenes* DNA strip test

CPF understands the importance of the *Listeria Monocytogenes* (LM), the bacteria in the *Listeria* species in the human body which can cause diarrhea, meningitis, and miscarriage. We, therefore, collaborated with Faculty of Medicine, Srinakharinwirot University to invent a testing kit which can test food product to be delivered to consumers and objects from an external environment to reduce cost, increase the accuracy at the DNA level, and reduce testing time to one day. The tool kit received a gold prize from the International Trade Fair for Ideas, Inventions and New Products (iENA) 2018, Germany, as well as a certificate from the National Research Council of Thailand, and was publicized in an international journal (*Journal of Chromatography B: CHROMB_121834*). We are in the process of applying for a petty patent (No. 1803001735 and 1803001736) and commercializing the tool kit.



Microbiota



Food Innovation for Sustainable Health of the Elderly

CPF collaborated with Mahidol University to develop human gut microbiome of Thai people in three different age ranges, to develop products for sustainable health for consumers at all ages. This is considered a food innovation which responds to the need of a sustainable society in line with the United Nations Sustainable Development Goals (UN SDGs). With the products being value-added, the product development contributes to stimulating economic growth which is aligned with the government’s policy, and increasing capacity of relevant personnel within the government and private sectors across different scientific fields, such as medical science, pharmacology and food science.

• Private Sector: Innovation Projects e.g. Spin-Off



One Stop Service Center

Recognizing that developing new products can be time-consuming for small and medium enterprises, the CPF Food Research and Development Center utilizes its expertise and capability to establish a one-stop service center where customers can save time when creating new products, producing sample products and designing products and packaging that could take up from 30 days to just 3 days. The experts from the CPF Food Research and Development Center are available to advise the customers step by step. At the same time, our staff members benefit from learning-by-doing when they provide these services.



CPF Food Research and Development Center at Wang-Noi, Phra Nakhon Si Ayutthaya Province

Showcase: Food Innovation



It has been projected that global population will increase to 9.7 billion by 2050². This will result in an increase in global food demand by 70 percent, equivalent to the consumption of 470 million tons of meat³. Moreover, the food loss and food waste that have been accounted for 1.3 billion tons per year or approximately a third of global consumption⁴ have tremendous impacts on the global food security and can be a cause of global warming and climate change. In response to this, the food industry needs to prepare to produce food sufficient to feed the population around the globe. Food innovation has, therefore, become an important tool for the food

industry, especially innovation in plant-based and cell-based protein. It is one of the food trends consumers pay attention to, as they have become more aware of the environmental impacts due to the greenhouse gas emissions from the livestock sector, and as the number of flexitarians⁵ and vegans⁶ increase by almost three times between 2014 and 2019⁷. There has also been an estimate that sales of alternative protein in the global market will increase from 1 percent to 10 percent of the total meat product sales within the next ten years⁸.

As the surrounding environment and consumer behaviors change, the CPF Food Research and Development Center was established to create food innovations for the world's population to have better health, and for consumers to meet their needs, thus leading happy lives. The Center also collaborates with different sectors including the education and private sectors to develop food innovations to best meet consumers' demand, which are:

- Production innovations, e.g. robots, software, food loss
- Food production innovations, e.g.:
 - Advanced/upgraded core products: healthier food product
 - Value-added co-products
 - Innovative products: alternative protein products



Made from high quality natural ingredients

- ✓ No nitrites*
- ✓ No preservatives
- ✓ No MSG

CPF developed innovation in sausage products from premium quality "Benja Chicken" using outstanding technology. This is to create innovative products that are healthier, tasty and easy to eat for the family.

*Nitrites are carcinogens and add pink color to the products

² UN News, United Nations

³ Global agriculture towards 2050, Agricultural Development Economics Division, FAO, 2009

⁴ Food and Agriculture Organization of the United Nations, Global Food Losses and Food Waste, 2011.

⁵ A flexitarian is a semi-vegetarian who consumes less meat.

⁶ A vegan consumes no meat or uses no animal products, which also include animal-based goods.

⁷ The European market for meat substitutes, Rabobank, 2019

⁸ Euromonitor alternative meat market in Europe and USA, Barclays Bank.



- ✓ Tasty, clean and good quality
- ✓ Good for health
- ✓ Tracable

CPF developed innovation in value-added co-products from surplus from the meat production process to optimize resources. The circular economy principle has been adopted to reduce food loss within the production process. These products include crispy fish skin from the operation in Vietnam.



100%
PLANT-BASED
PROTEIN

- ✓ High protein
- ✓ High fiber
- ✓ No cholesterol

CPF developed innovation in alternative protein products with the same nutritional value to meet the demand of the increasing flexitarian consumers.

Moreover, CPF collaborates with other parties such as local and international education institutes to respond to the increasing needs of health-conscious consumers, the elderly and consumers with Non-Communicable Diseases (NCDs). With the idea of “producing food as medicines”, as a food producer, we saw an opportunity to produce food which can promote health and meet the needs of these groups of consumers. The objective is for them to have better health in line with suitability of their bodies at different age ranges. The implementation of this idea is supported by the CPF Food Research and Development Center.



“

Determined to be the “Kitchen of the World”, the CPF Food Research and Development Center has a vision to produce healthy, nutritious, safe and tasty food which also meets consumers’ demand and creates aesthetic experience for consumers. Sustainability is built from continuously developing products to be up-to-date and to respond to the constantly changing consumers’ demand.

”

Dr. Sommai Tachasirinugune
Executive Vice President

Animal Welfare

Commitment: Operate our business in line with animal welfare principles, and responsible and prudent use of antibiotics

Details of the management approach are available at www.cpfworldwide.com under "Sustainability" topic: "Animal Welfare"



Animal Welfare Monitoring

CPF is committed to elevating our business practices to be animal-friendly in line with the internationally accepted framework, known as the 'Five Freedoms'. We are also committed to raising employee awareness to support our endeavor to promote animal welfare on company-owned and contracted farms under the Contract Farming Project. We have clear policies, manuals and standards of operating practices on animal welfare, and integrated them into our management of broiler, layer, duck, swine and aquaculture farming in every operating country. This is to prevent the animals from hunger and thirst, discomfort, fear and distress, and pain, injury or disease, and to support their freedom to express normal behaviors.



Remote Monitoring

CPF emphasizes livestock farming installed with a real-time CCTV monitoring system, so that broilers, ducks, and layers on our farms can be monitored at all time. The monitoring system will be especially useful when the animals show initial symptoms of illness through their physical and mental expressions, and if any irregularity on our farms occurs.

Physical Alterations

Thanks to our close attention and provision of good environment, the animals raised on company-owned and contracted farms are strong and healthy, and experience much less pain. At present, CPF has implemented the following initiatives:



100%
of our operating
countries with
the broiler
business.

- **No Beak Trimming**

Understanding that it is natural for chickens to scratch and peck, CPF supports their freedom to express normal behaviors by installing objects in their housing for them to peck. As a result, beak trimming, to prevent the chickens from pecking one another which could lead to pain and distress, is unnecessary. Only when necessary for the male breeders and layers, we use the infrared beak treatment technology to reduce risks of pain to the minimum.

- **Female Non Eyestalk Ablation**

For the shrimp larvae hatchery and nursery business, since CPF has applied biotechnological innovation to allow female shrimps to reproduce naturally, there is no need for the application of eyestalk ablation on female shrimps.

• **Swine Farming Following the 3'Ts Alliance (No Testicle Castration, No Teeth Clipping and No Tail Docking)**

CPF raises the swine in a closed housing system with proper ventilation. We also try to reduce, avoid and stop physical alterations in forms of castration, teeth clipping, and tail docking.

Necessity for Castration

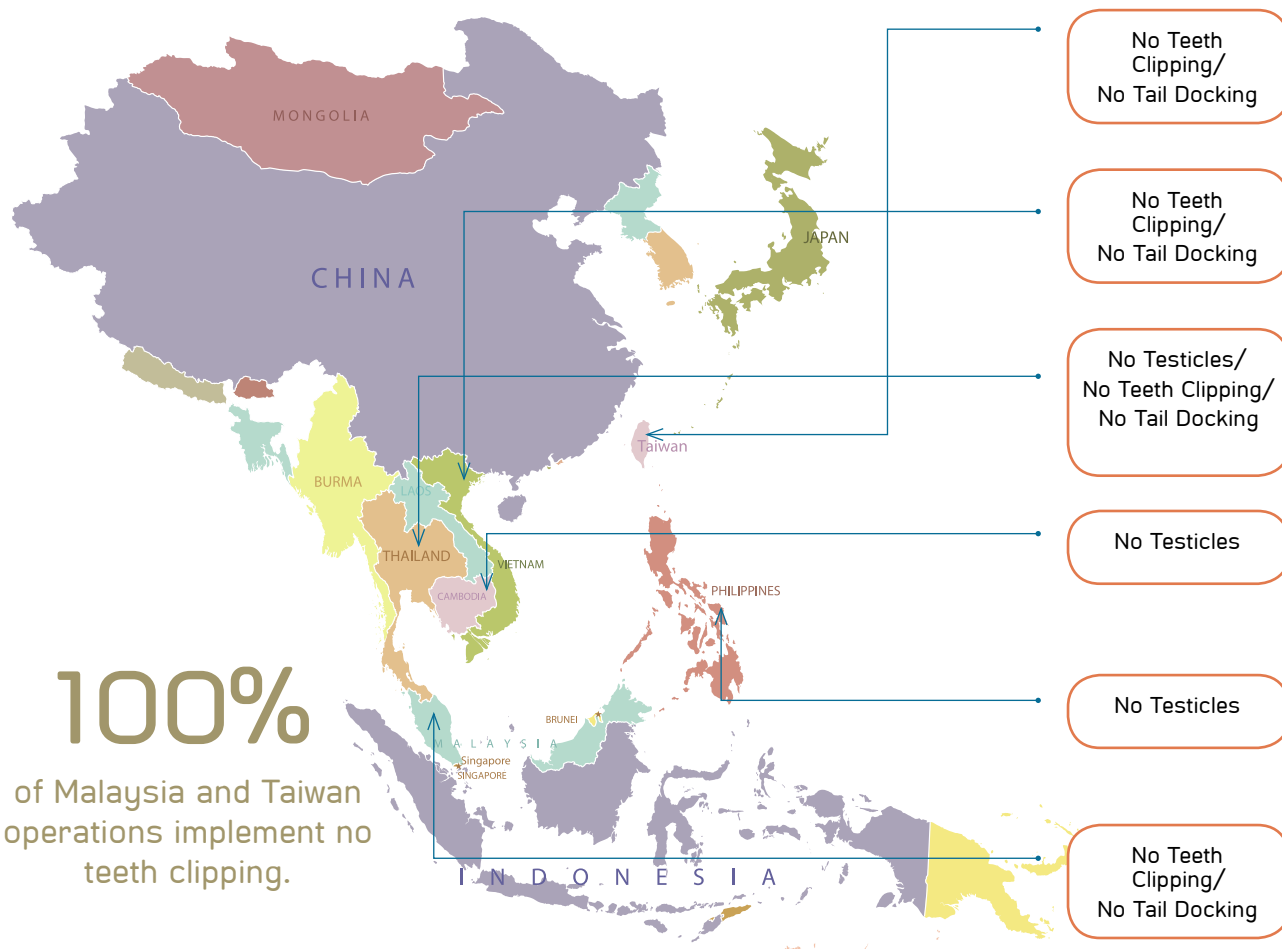
Testicles of male swine release a substance that creates body odor, leading to smelly pork. In many countries, male swine are often castrated so that the pork does not have an unpleasant scent to consumers.

Necessity for Teeth Clipping

Swine are playful and like to bite and chew. Often times, piglets bite their sow's nipples, tails of other piglets or one another. In many countries, their teeth are often clipped or grinded so that they cannot hurt other piglets.

Necessity for Tail Docking

From their biting and chewing habits, swine also like to bite or chew others' tails. In many countries, tail docking of piglets is often a solution to prevent inflammation from wounds from being bitten by other piglets.

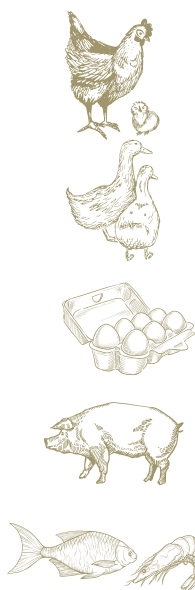


In 2019, the swine business in Thailand operations implemented the no castration policy on 721,000 piglets, the no teeth clipping policy on 2.1 million piglets, the no tail docking policy on 3,000 piglets and the no ear notching policy on 3.2 million piglets, from the total production of 5.4 million piglets.

Welfare Outcome Measures (WOMs)

Good livestock management can contribute to the promotion of good physical and mental health in animals. In order to assess that the animals are raised with high animal welfare standards according to animal welfare principles, Welfare Outcome Measures (WOMs) are necessary. The WOMs are relevant to good physical, emotional and behavioral characteristics of the animals. CPF has livestock WOMs in both Thailand and overseas operations, as follows:

Example of WOMs



Survival rate, wastage rate, carcass quality, fear, comfort and normal behavior expression

Wastage rate, fear, comfort and normal behavior expression

Drinking and eating behaviors, rate of drowsiness, rate of crouching and attention to surrounding environment




Normal behavior expression, stress, fear, health, wounds, scratches and carcass quality

Survival rate, carcass quality, growth rate and wounds

Promoting Animal Welfare in the Value Chain

To ensure consumer confidence in our animal-friendly farming, our operations in each operating country have defined their stocking density for company-owned and/or contracted farms by considering a variety of factors including housing system, growth, climate and expression of different natural behaviors. CPF assessed animal welfare performance of our main products throughout our global value chain, as follows:

Promoting Animal Welfare in the Value Chain

Product	Animal Welfare Promotion	Percentage of Global Production
Fresh chicken 	With stocking density less than or equivalent to 30 Kg/m ²	35*
Fresh eggs 	Raised in a cage-free housing system	1**
Fresh pork 	From sows raised in group gestation pens	32

* The average stocking density is at 33 Kg/m² in Thailand, and 38 Kg/m² in Europe.

** In Thailand, we have implemented on the layer farm in Saraburi Province, whereas in overseas operations, the implementation is in progress.

Responsible and Prudent Use of Antibiotics

CPF is determined to produce safe and quality food that adheres to sustainability principles through the responsible and prudent use of antibiotics on both our own farms and those under the Contract Farming Scheme. Accordingly, the farming practices must be:

- free from human-only antibiotics;
- free from shared-class antibiotics which are medically important to humans as a growth promotor; and
- free from hormones as a growth promotor.

CPF has a target to stop using shared-class antibiotics as a growth promotor in all of our animals and in all operating countries by 2026. We also have a target to stop using antibiotics to prevent diseases in all of our animals and in all operating countries by 2030. Presently, we have stopped using shared-class antibiotics as a growth promotor in all of our animals in Thailand, Vietnam, Cambodia and Turkey operations.

Innovation in Animal Welfare

CPF focuses on research and development to promote animal welfare throughout our global supply chain.

- In 2018, adapted from a broiler farm, the Wang Somboon farm in Saraburi province was transitioned towards a cage-free housing system.
- In 2019, our swine business assigned our employee to take a role as a member of the 3Ts-Alliance (Teeth, Tails and Testicles), organized by the World Animal Protection. The objective of the initiative is to reduce pain in swine in the global swine industry through gathering knowledge and experience from relevant experts around the world.
- In 2019, our broiler business started to study the application of the smart farming system to support production efficiency while promoting animal welfare on broiler farms. To support this, anemometers, thermal scan cameras, ammonia (NH₃) meters, carbon dioxide (CO₂) meters and automatic height adjusting feeding and watering tools were installed. These tools can be controlled by a computer system and IP cameras. The database can be used for analysis and further developed into Big Data for future development.



Showcase: Cage-Free Eggs



Egg consumption has increased in every country, as eggs are a good source of protein. It has been estimated that global egg consumption will increase by 50 percent between 2015 and 2035. In the global market, the majority of eggs come from layers raised in conventional cages. With growing awareness of animal welfare⁹, a group of consumers demand cage-free eggs. CPF began piloting its first cage-free housing system in 2019 on the Wang Somboon farm in Saraburi Province. The first batch of eggs will be ready in March 2019,

where:

- The layers are raised in accordance with the biosecurity hi-tech farming practice,
- The layers are raised without antibiotics,
- The layers are raised in line with the Five Freedoms: in appropriate and hygienic conditions, live in comfort, fed with sufficient food and water, and able to express their natural behaviors in the housing,
- Seven layers/m² are raised in the housing (below the stocking density standard at nine layers/m²),
- The layers come from a special breed in the USA,
- The layers have freedom to interact with one another and are physically and mentally healthy, and thus there is no need for antibiotics,
- The most advanced technology in Southeast Asia has been adopted at the hatchery facility,
- Production process is controlled by a computer system,
- The egg storage room is temperature-controlled, and
- Production capacity in 2019 was five million eggs.



We believe that "A healthy layer can lay quality eggs".

Vitamin B1 supports body growth and muscles, and nourishes brains

High nutrition value

Vitamin A helps increase moisture in skin and nourish eyes, supporting vision

Vitamin B2 helps increase visual efficiency, alleviate eye fatigue and nourish skin, nails and hair

Fresher than normal eggs



Golden and bulging egg yolks

Clear and round egg whites

No egg smell

High protein helps support body growth and muscles, and repair muscle tears

⁹ WATT Executive Guide to World Poultry Trends 2017, The Statistical Reference for Poultry Executives, www.WATTAgNet.com

Food and Knowledge Accessibility for Sustainable Consumption

Commitment: Improve access to food, food-related knowledge or skills, nutrition-related knowledge, and sustainable consumption



Details of the management approach are available at www.cpfworldwide.com under "Sustainability: topic: "Food and Knowledge Accessibility for Sustainable Consumption"

Enhancing Food Quality and Safety throughout the Chain

Quality and safe food comes from our stringent production control that meets international food quality and safety standards.

International Food Quality and Safety Standard Certifications in 2019



¹⁰ AI Compartment is an Avian Influenza Compartment standard used in poultry, established by the Department of Livestock Development

¹¹ FAMI QS is referred to Feed Additives and Pre-Mixtures Quality System.

¹² Food Processing plants cover basic meat processing plants, semi-cooked and cooked meat products manufacturing plants, and processed products or ready-to-eat products manufacturing plants.

The CPF Digital Traceability System



CPF began food product traceability according to the CODEX international food standards.



We successfully implemented the CPF Digital Traceability in the broiler business across the chain in Thailand operations.



We successfully implemented the CPF Digital Traceability in the shrimp business across the chain in Thailand operations.

We successfully implemented the CPF Digital Traceability in the broiler business across the chain in India operations.



of our businesses in Thailand have successfully implemented the CPF Digital Traceability.



We developed the CPF Digital Traceability throughout the value chain, covering feed, farm-processing and food businesses.



We successfully implemented the CPF Digital Traceability in the broiler business across the chain in Vietnam operations.



We plan to expand the implementation to other businesses in Thailand operations.

CPF Food Standard Certification

2019

CPF successfully established the CPF Food Standard covering quality, safety and sustainability of poultry meat products throughout the value chain (covering feed, farm-processing and food businesses).

2020

We plan to expand the implementation to the broiler and duck businesses throughout the value chain.



Promoting Access to Food, Food-Related and Knowledge or Skills, Nutrition-Related Knowledge, and Sustainable Consumption

Promoting Access to Food, and Knowledge or Skills about Food and Nutrition in Children and Youth

CPF helped children and youth improve their access to food by providing them knowledge and skills on food production and/or on consumption of safe and nutritious food with the aim to address malnutrition.



1989

We have been working in partnership with the Rural Lives' Development Foundation under the support from C.P. Group and our employees together with other partners on the **"Raising Layers for Students' Lunch Project"** to help improve continuous access to protein sources among the youth in remote areas.



2015

We collaborated with the Officer of the Basic Education Commission, Ministry of Education to implement the **"CPF Growing Happiness, Growing Futures Project"** which helped improve nutrition of students around our factories and farms.



เปิดโลก
การเรียนรู้

2006

We began the **"Open the World of Learning Project"** to enhance knowledge and understanding of children and youth nationwide on the production of quality, safe and nutritious food.



ส่งเสริมเด็ก
และเยาวชน

2019

We supported children and youth through:

- the Raising Layers for Students' Lunch Project in 772 schools, accumulatively
- the CPF Growing Happiness, Growing Futures Project in 80 schools, accumulatively
- reducing the number of malnourished students in the Projects from 15 percent to 11 percent.

Promoting Better Consumer Health and Well-Being



Creating balance,
wholly nutritious, not sweet/oily/salty
Low baddies, High goodies

To support CPF's consumers in changing their consumption habits which pose risks of developing the Non-Communicable Diseases (NCDs), we develop products under CP Balance brand. The products are ready-to-eat products which create a balance for consumers, contain the five food groups, and are low in calories, sodium and saturated fat but high in fiber. Prior to consumption, consumers can read the Guideline Daily Amounts (GDA) nutrition facts label on the products which display amounts of energy, sugar, fat and sodium contents.

CPF also supports the Food and Drug Administration (FDA) in campaigning the "Voluntary Sodium Reduction in Food" Project, in order to demonstrate our commitment to promoting good health among Thais. The Project aims to raise consumer awareness of sodium (salt) reduction in food.

CP Balance Products

Lo/Hi

- LOW Cholesterol "โคเลสเตอรอลต่ำ"
- LOW Saturated Fat "ไขมันอิ่มตัวต่ำ"
- GOOD SOURCE of Fiber "เป็นแหล่งของใยอาหาร"

พลังงาน 20 เท. ต่อ 210 กรัม
โซเดียม 470 เท. ต่อ 210 กรัม

คุณค่าทางโภชนาการต่อ 1 เทด

พลังงาน 210 กิโลแคลอรี	น้ำตาล 2 กรัม	ไขมัน 2.5 กรัม	โซเดียม 470 มิลลิกรัม
*11%	*3%	*4%	*20%

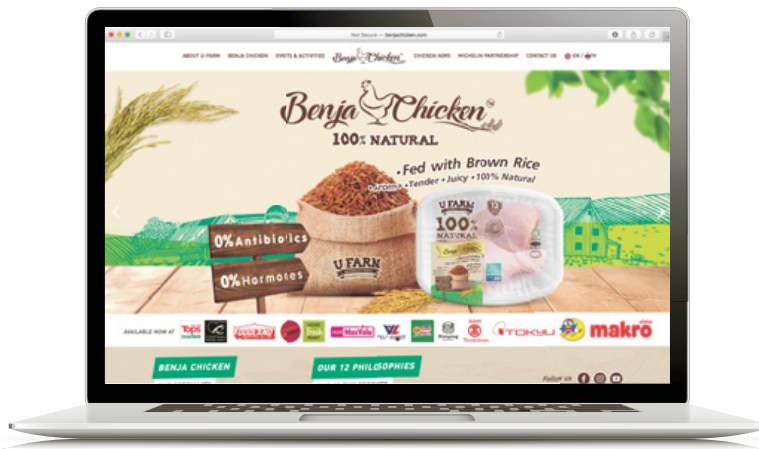
*คิดเป็นร้อยละของปริมาณสูงสุดที่บริโภคได้ต่อวัน



Remarks: The Healthier Choice logo is a simple nutrition label displayed on the front of food products which have met the criteria of proper amounts of sugar, fat and sodium (salt). The logo is an easy tool to communicate and facilitate consumers in their buying decisions when it comes to products with lower sodium, sugar and/or fat contents. This is to reduce risks of the NCDs.

Promoting Access to Knowledge or Skills about Food, Nutrition, and Sustainable Consumption in Consumers

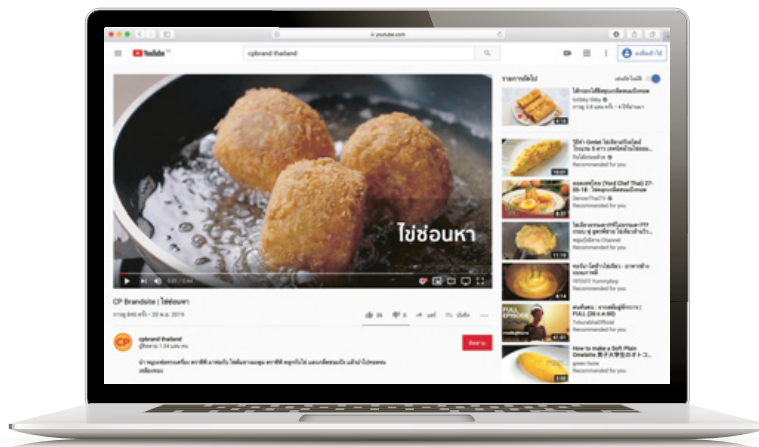
CPF recognizes the responsibility to take part in promoting healthy diets and sustainable consumption, through the development of healthy products. With the aim to promote health and well-being, we disseminate knowledge in food and nutrition for each age group to consumers through a variety of channels including our product labels, promotional campaigns, advertisement at the point of sales and online platforms such as corporate website, CP Brand site, Facebook and YouTube.



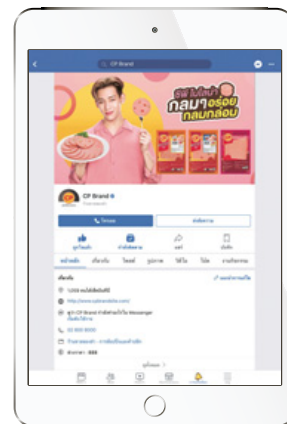
www.benjachicken.com



www.cpbrandsite.com



[cpbrand thailand](https://www.youtube.com/cpbrandthailand)



[CP Brand](https://www.facebook.com/cpbrand)



100%

of main course meals that must be stored in fridges and freezers throughout their shelf lives

under the



and Smart Meal brands show the amounts of energy, sugar, fat and sodium under the GDA label.

Moreover, CPF went beyond legal requirements to show the GDA label on cooked food products, appetizer category such as CP brand's Mexican Chicken Wing Stick, Roasted Teriyaki Chicken, Chicken Nuggets Classic, as well as CP Delight's Tender Chicken Breast.

GDA Label

Nutritive values per.....

Consumption should be split into Times

Energy	Total sugar	Total fat	Sodium
..... kcal g g mg
*.....%	*.....%	*.....%	*.....%

*calculated as percentage of recommended daily intake



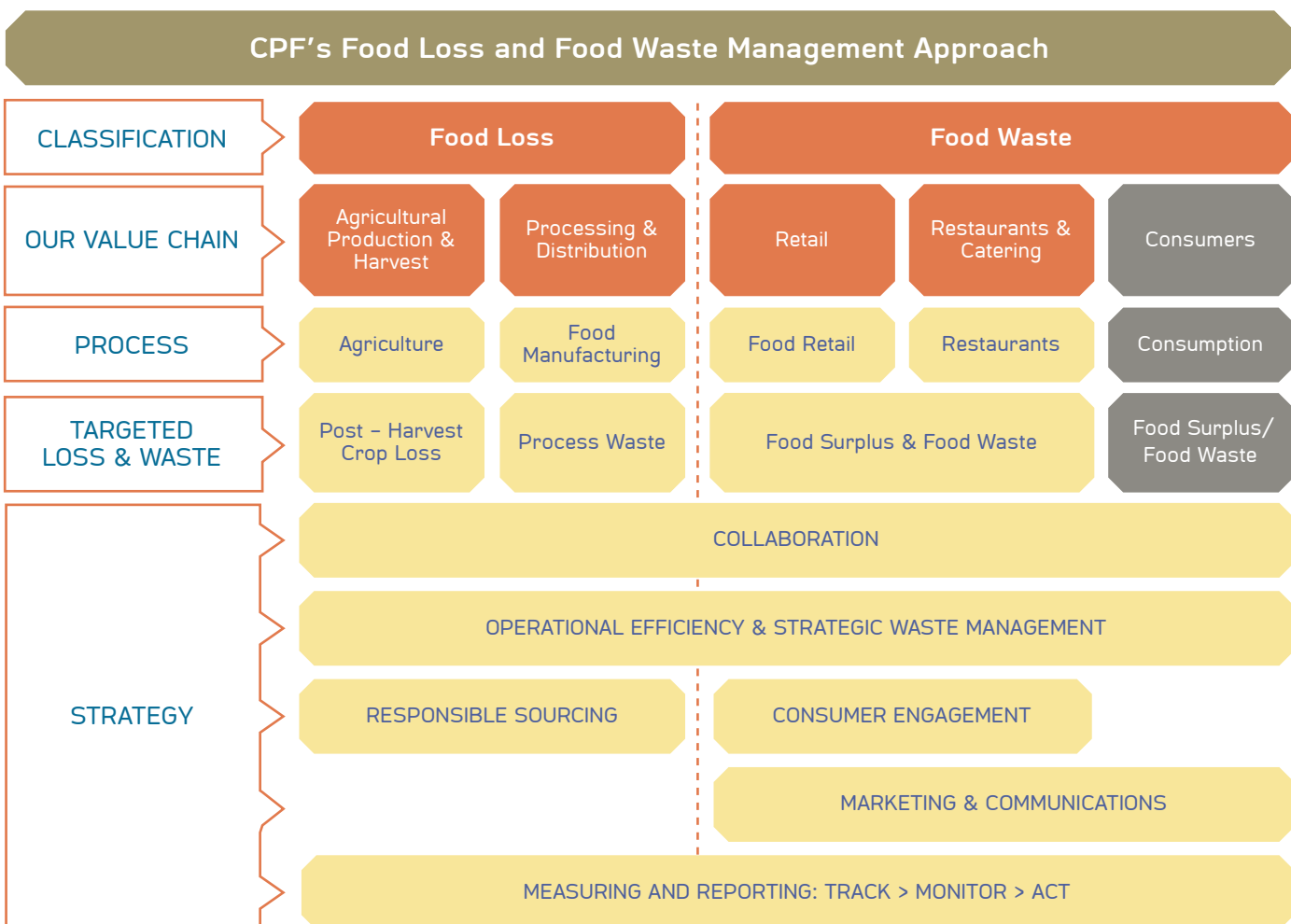
Showcase: Food Loss and Food Waste Tackling



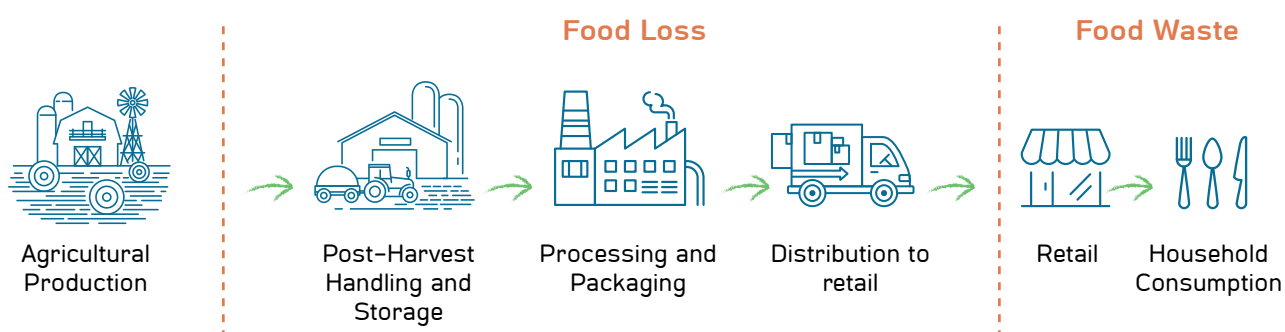
At present, approximately 30 percent of food around the world has been wasted in the production process and after consumption. On the other hand, there are still many people suffering from hunger. Due to these problems, food loss and food waste have become a global issue. It not only affects food security, but also causes greenhouse gas emissions to the atmosphere, a critical factor behind global warming and climate change.

In order to promote sustainability in production and consumption at the global level, CPF supports UN SDG 12.3 in reducing food loss and food waste. As an agro-industrial and food conglomerate, we implement

a range of projects and initiatives to support our determination to reduce food loss and food waste in the food production supply chain. We adopt the food loss and food waste management and reporting frameworks developed by the Food and Agriculture Organization of the United Nations (FAO), the World Business Council for Sustainable Development (WBCSD) and the World Resources Institute (WRI), to be in line with our business practices. This is to add value to the economy, society and environment, and to take into consideration our stakeholders across our food supply chain.



Commitment and Goals:



1. Reduce food loss in the production value chain to support UN SDG 12.3

2. Achieve zero food waste in our business operations by 2030

Our Practices and Initiatives to Reduce Food Loss and Food Waste in 2019

- **In the supply chain** – Food Loss Reduction in the Corn Supply Chain Project. CPF collaborated with Bangkok Produce Merchandising PLC. to implement the Food Loss Reduction in the Corn Supply Chain Project as corn is at the upstream of our food production process. The objectives are to promote and raise awareness of relevant stakeholders (i.e. corn farmers and collectors) and to promote reduction in during-and-post-harvest loss of corn.
- **In the CPF process and production value chain** – CPF places high emphasis on optimizing raw materials in the food production process and supports the implementation of the Adding Value to

By-Product from the Production Process Project. This is to reduce loss within our manufacturing plants, in accordance with the circular economy principle.

- **Food loss and food waste data collection** – CPF has a plan to start collecting such data from 2020 onward. The data collection methodology will be adopted from that of the FAO. The first pilot business unit will be broilers as the unit has the highest export volume. We aim to pilot this business unit to provide the best practice which we will later implement in other business units and establish a policy framework to minimize food loss and food waste.



“

Food loss and food waste are a critical global issue. Good management across the production supply chain can help reduce loss of resources and waste problems. Adding value to by-products and waste from the production process can also contribute to the greenhouse gas emissions reduction and is in line with the circular economy principle. In addition, having a plan in place to produce and distribute products to match the demand, so that there is no food waste, can help reduce waste and ensure food security, and most importantly, supports the UN SDGs.

”

Ms. Kularb Kimsri

Vice President of Global Standard System Center

Self-Sufficient Society



94%

of executives and employees in Thailand operations were trained to develop knowledge and understanding to enable business sustainability

100% of critical suppliers in Thailand operations were assessed with the sustainability self-assessment for business partners

86%

of our critical suppliers in direct raw material groups and indirect raw material groups in Thailand operations were audited on sustainability.

Employment prospect and quality of life of **42,090** smallholder farmers, small entrepreneurs, and vulnerable groups have been improved.



People

Commitment: Be a learning organization and develop human capital

Details of the management approach are available at www.cpfworldwide.com under "Sustainability" topic: "People"



Talent Management

Management Trainee Program

CPF aspires to create talents from the new-generation employees, both in Thailand and overseas, to ultimately develop capable employees into new-generation leaders equipped with knowledge and understanding of overview of the business and flexibility in adapting to fit the organizational culture. The program aims to develop employees with a variety of skills, including business management, leadership, as well as skills in strategizing career paths according to their 'Individual Development Plans' (IDP).

Succession Management

In order to respond to the constantly changing business environment and support our continuous business growth, we have secured succession readiness for key positions in CPF through establishing the 'Succession Management Framework' for 'Talents' who have had outstanding performance with the proper skills and knowledge needed to assume key positions in the future. This Framework also supports us in retaining and motivating our talents to remain with the organization in the long run.

Employee Development

CPF develops employees with professional skills, placing emphasis on developing 'Functional and Technical Competencies' through the business line 'Learning Centers', both in Thailand and overseas. We continuously support rigorous specific skill development for important businesses. We also develop leadership skills for both our executives and employees to empower local employees to advance towards executive positions allowing them to obtain skills and capabilities in international business management.

We have built
243
new-generation leaders.



CPF has secured succession
readiness for
100%
of our key positions



“

CPF develops employees using a 'Competency-Based' framework, in parallel with developing our people's 'Mindsets' and encouraging compliance with our core value, or the 'CPF Way'.

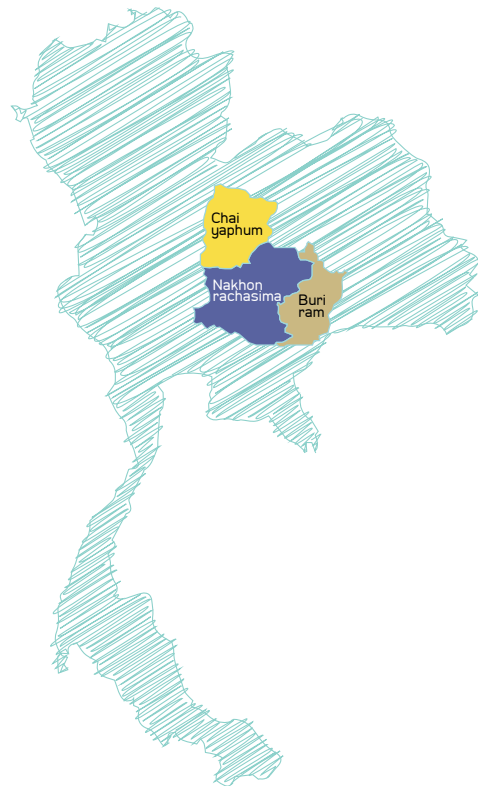
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Developing Leaders through the Partnership School Project, or CONNEXT ED

CPF has promoted and developed leadership skills, and instilled volunteerism within our employees through providing them with opportunities to join the Partnership School Project (CONNEXT ED)¹ as new-generation leaders, or School Partners (SPs) for the third consecutive year. The CONNEXT ED is an initiative to execute national strategic policies to reduce inequality, develop human capital and enhance national competitiveness while advancing Thai education standards and building talents. Employees who volunteer as SPs work alongside school principals and teachers to develop school development plans and provide the schools with educational



opportunities. Additionally, we have provided the necessary resources to develop education and specialized knowledge, such as agriculture, vocational education and academic knowledge.



66

As of 2019, CPF has accepted



249 schools
in 3 provinces



out of a total of
4,700 schools



under our 53 SPs'
supervision

out of a total of 550 SPs from the private sector across the country. 99

Promoting Engagement in the Workplace

CPF recognizes that having employees who are engaged and dedicated in their work is partly a success factor in becoming a global organization. In promoting engagement in the workplace, we care for our people from their first day of employment through **On-Boarding** them which is a process that welcomes new employees and supports them in adapting to their new coworkers, providing a friendly working environment, and exhibiting the CPF Way corporate culture, which promotes and supports talents. We also continuously care for and develop our employees, with remuneration and benefits that are competitive with leading industries. To determine the remuneration and benefit package and ensure a positive working experience, we have participated in the annual

employee compensation and benefit survey. Secondly, we support employees in living happy lives during their time of employment with us until their retirement. We take initiatives such as training employees on safety in the workplace, promoting internally organized activities for employees, organizing annual health check-ups and facilitating employees in different sites as needed, to ensure that employees have good work-life balance. Lastly, we support employees' families through providing scholarships for employees and employees' children who have outstanding academic performance. We also care for injured and/or sick employees through financial support as well as appropriate medical care and treatment.

¹The original name of the Project was the Sarn Palang Pracharath Project.

Get Out of Debt, Get Happy, and Get Savings Project

In light of financial management challenges faced by employees, namely credit card debts and informal debts which usually have high interest, CPF has initiated a project to increase employee awareness and understanding of financial management, to establish good saving habits, to provide the know-how on creating household income and expenditure accounts, and to help employees avoid more debts. The Project has been carried out since 2015 to alleviate employees' debt problems, to motivate employees, reduce stress and anxiety, which can undermine employee productivity, and to create employee happiness and engagement with the organization.



Employees repaid over

384 Million Baht

Of high interest debts.

(According to credit limit approved by the financial institution, with the Company acting as a middle person)

Group Business for Employee Project

To prepare employees to live in an aged society, ensure that they can lead happy post-retirement lives, reduce the above mentioned challenges in the future and increase income opportunities for families of employees whose parents are in retirement, in 2019, CPF organized the "Group Business for Employee Project" seminar for employees in the CPF IT Center and other businesses. The seminar was intended to provide employees with the knowledge, understanding and information needed to start a business, and was led by representatives from ten business groups within Charoen Phokphand Group (C.P. Group) that have accomplished success in business and business expansion. As part of the seminar, we also provided interested employees with special benefits in starting their own business in the Five Star business, Muan Chon Coffee business, dim sum business of CP RAM, 7-11 business, Bellinee's Bake & Brew business, True Shop business, Makro's wholesale business, Chia Tai's Home Garden business (for safe consumption and distribution), Panyapiwat Institute of Management business (to provide consultation services in recruitment), and CP Land business (to provide knowledge on site selection for business).



110 employees attended the seminar and expressed interest in conducting business. Some of the attendees have proceeded to start business within the Group

Showcase: People Development of Accounting and Finance Function in the Digital Transformation Era



In the Digital Disruption era where the World is facing the fast growth of new technologies, which in turn changes current work practices, including the unforeseen rise of new digital technology notions and skills. C.P. Group and CPF have set our strategy to prepare for the changes in according with the CPF Way which emphasizes people development. The development shall bring digital literacy and technologies into our organization to improve our working procedures in terms of 'Speed and Quality', 'Standardization', 'Simplification', and 'Innovativeness', but not limited to, knowledge and skill development in order to 'Adapt to such Changes'. This will improve working efficiency and emphasize 'Value Creation' among employees.

Given the reasons above, our Top management of Accounting and Finance Function, therefore, encourages and supports relevant projects to comply with the CPF strategy. The important projects are as follows:

- Organizing knowledge sharing sessions from individuals outside CPF to create an adaptive attitude to ensure readiness for the digital transformation; supporting employees to participate in external seminars related to new technologies and trends and to share the knowledge gained from such seminars among their coworkers.
- Organizing innovation awards to encourage innovativeness among employees. Winners receive an opportunity to travel abroad to study best practices and share the knowledge with their units. This opportunity can bring new ideas which can improve the current working processes.
- Developing basic computer programming skills and training on using Robotic Process Automation (RPA) or a software with a set of working criteria or standards that can perform routine works to minimize workforce. The success of this project has allowed for expansion of knowledge into other functions within CPF and our Group. In addition, we have established a learning center to apply RPA technology which can provide knowledge sharing, trainings, recommendations and consulting services for implementing RPA to interested parties in C.P. Group.
- Developing data analysis skills and increase accuracy in decision making by using technologies to help analyze Data Insight.
- Organizing employee trainings for the use of the ACL (Audit Common Language) software to audit work processes and internal control

In the future, CPF also plans to develop employees in accounting and finance function in terms of notions, attitude, creativeness and application of new technologies such as Artificial Intelligence (AI) and blockchain technology in order to increase working efficiency. This will allow us to become the Future Finance and a professional business partner that responds to changes in the digital era.

An Example Project Using RPA in Accounting and Finance Function

This project has applied RPA in our Accounting and Finance Function, starting with our Finance Shared Service Center (SSC) in reviewing purchases of products and services, in recording accounts payable. It was later expanded to other tasks within the SSC and to our business operation units. The establishment is a collaboration between the developing team who are our employees with basic computer programming skills in SSC and other users in the working process.





4,000 - 30,000
documents per day



Convert data from
paper to digital copies



RPA software can run
continuously for
24 hours



Data processed and
ready to be used/data
sent to partners to
shorten process

The Results of Applying RPA

Employees can work in valued
tasks (*Value Creation*)
and *Reskill* to
increase
analytics skills in their job

Upskill e.g. the ability to
write a program to improve
RPA, the ability to provide
consulting services in applying
RPA to other functions within
CPF, knowledge on accounting
and finance standards, and
other professional skills
development

The function has *changed*
its structure and
procedures in order to
adapt to the digital era
sustainably.

Shorten time and reduce
steps e.g. in giving notice to
customers from approx. 2
working days to within two
hours (after working hours)

Shorten time and reduce steps
in providing information on
credit line to customers from
three hours per cycle to

15 minutes

At present, SSC has applied
RPA in more than

130 processes

This *helps increasing* efficiency and *improving*
the number of sell cycles.



“

With the digital transformation, digitalized accountants has to 'Adapt to Change' using their attitude, vision, knowledge and skills to be able to respond to changes. We also emphasize 'Value Creation' works, 'Innovativeness', more technologies to help in working process and working with 'Speed and Quality' in order to perform well as a professional 'Business Partner'.

”

Mr. Paisan Chirakitcharern,
Chief Financial Officer

CPF Safety, Health, Environment and Energy Management Standard (CPF SHE&En Standard)

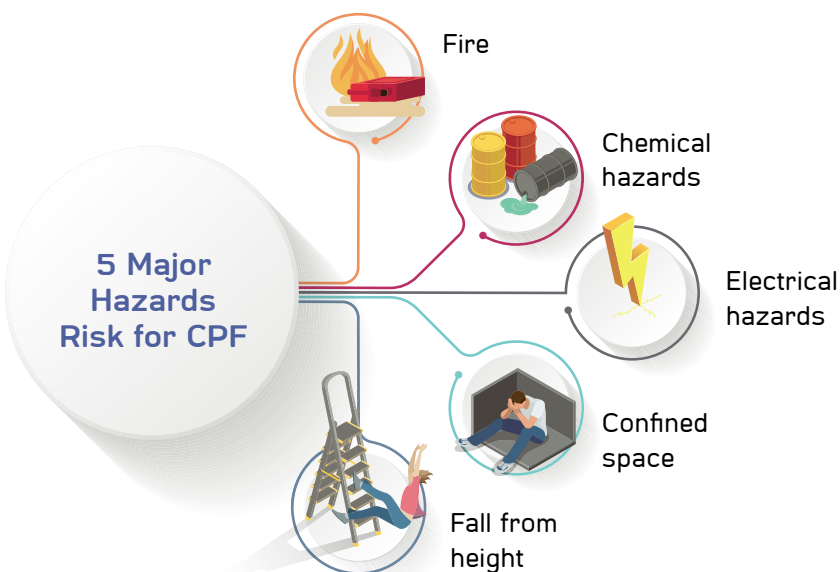
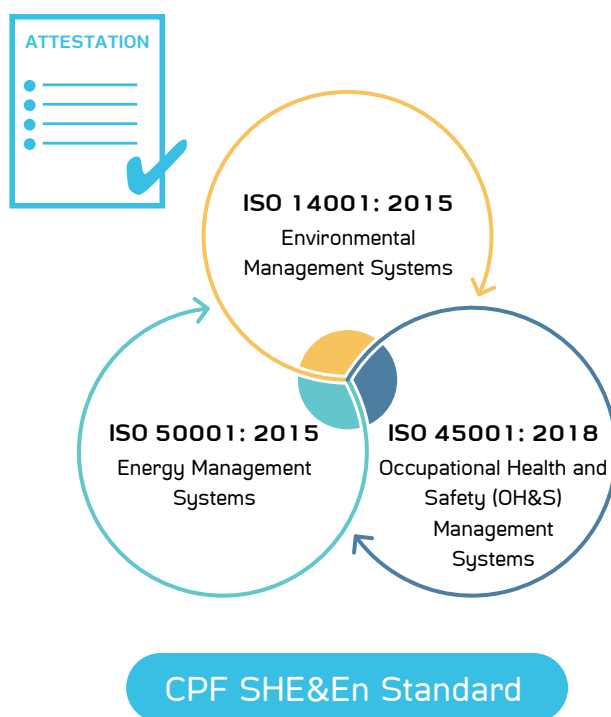
Recognizing and emphasizing the importance of the safety for employees and contractors for good health and great working environment, social and environmental responsibility, and commitment to the efficient use of resources, CPF continually improved its CPF SHE&En Management Standard as known as

CPF SHE&En Standard to address the changing organizational context and the interest of the global community. The Management Standard is used as a tool to manage safety, health, environment and energy risks. It is implemented throughout all the functions under CPF's operational control.

CPF SHE&En Standard

1. Technical Standard was developed in accordance with the international standards on specific risk management e.g. water resource management, greenhouse gases management, wastewater and waste management, occupational health and safety, management of change, and emergency response.
2. Management Standard was developed to manage each risk following the Plan-Do-Check-Act principle which would lead to continual improvement.

In 2019, CPF SHE&En Standard was undertaken an attestation by Lloyd's Register International (Thailand) Limited (LRQA), ensuring that it was developed based on the risk management principles in accordance with international standards.

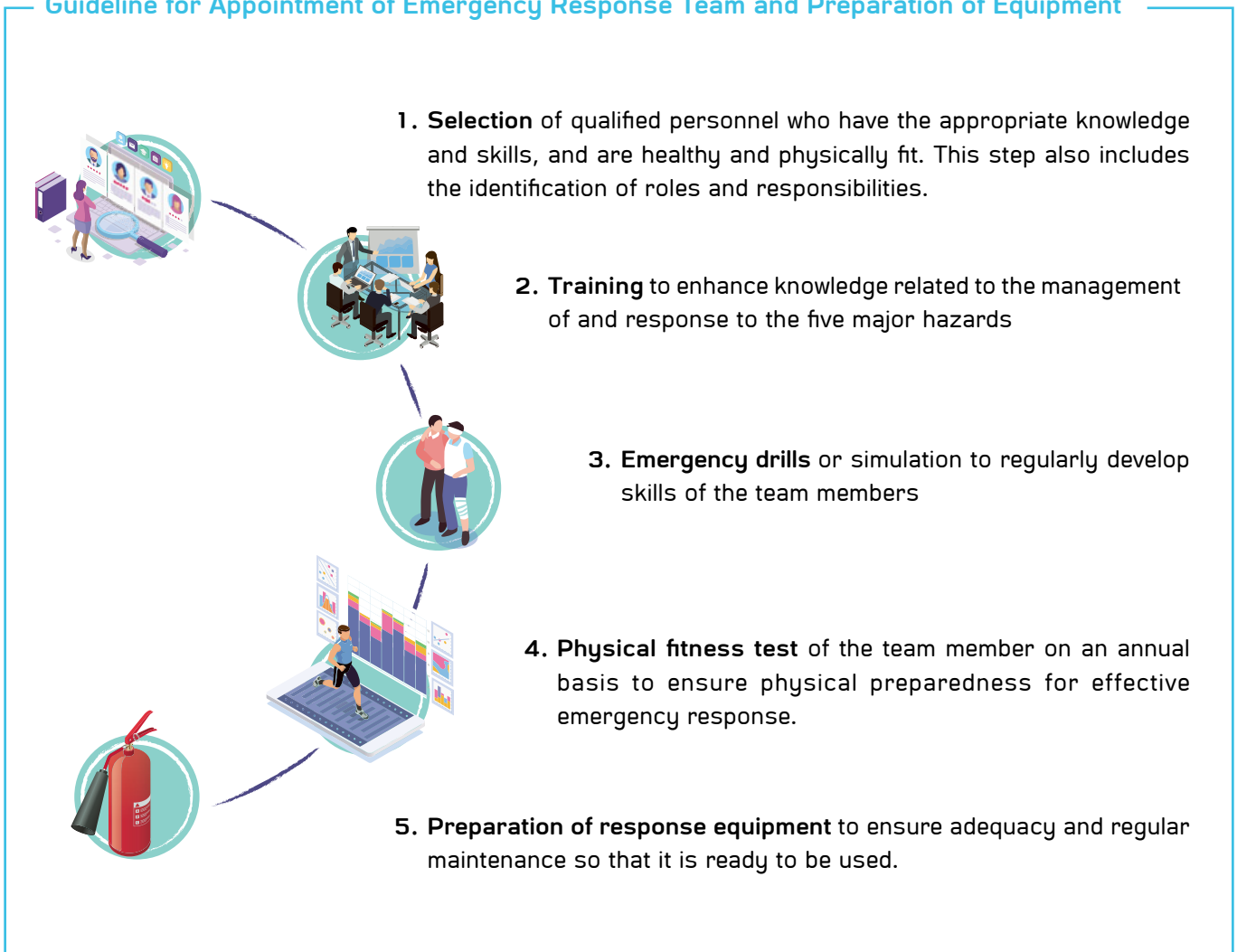


5 Major Hazards and Emergency Preparedness

CPF places high importance on preventing major hazards and risks of the organization which include fire, electrical hazards, chemical hazards, fall from height and working in confined space. In order to ensure that we are prepared to respond to these 5 major hazards to reduce physical and financial loss, and ensure business continuity, the following measures have been put in place:

1. Providing training on “Five Major Hazards in Your Workplace” to raise employee awareness and understanding of five key hazards and accidents in the workplace. The training also aims to provide all levels of employees with the first aid skills. This year, more than 66 percent of employees at all levels have participated in this training program.
2. Improving the working environment to ensure higher safety.
3. Establishing Emergency Response Team according to the Guideline for Appointment of Emergency Response Team and Preparation of Equipment describing the preparation of personnel in forming the emergency response team, required training programs, emergency drills, fitness testing, and preparation of equipment adequate for each function.

Guideline for Appointment of Emergency Response Team and Preparation of Equipment



Lost Time Injury Frequency Rate of Employees (case per 200,000 hours worked)

The commitment to and the implementation of CPF SHE&En Standard to manage occupational health, safety, environment, and energy during the past decade (2005 – present) resulted in increased safety awareness and understanding of employees. They are able to systematically analyze the cause, develop preventive measures and organize proactive activities. These include Near Miss Finding Program, Kaizen, consultation services and increased participation of employees. Our efforts resulted in tending to decrease of Lost Time Injury Frequency Rate (LTIFR) from 0.67 cases per 200,000 hours worked in 2008 to 0.35 cases per 200,000 hours worked in 2019. We also set our long-term target to reduce our LTIFR to

0.12 cases per 200,000 hours worked by 2025. In addition, it is likely that we are able to continuously maintain our Occupational Disease Rate (ODR) at zero.



Details of the management approach are available at www.cpfworldwide.com under "Sustainability" topic: "Occupational Health and Safety Performance"



Applying Innovation and Technology in Occupational Health and Safety

iPermit

CPF IT Center and CPF SHE&En Center collaborated in developing a mobile application to facilitate the management control of contractors working in our operational sites. This helps ensure that they follow our safety procedures from applying for permit to work between functions to coordinating with responsible persons in each area, checking of equipment they bring in, and safety check of pre-during-post work. The mobile application allows for real-time monitoring of each step, helping prevent accidents caused by contractors who do not comply with safety standard.



The Incident Fact Finding Program

It is an occupational health and safety program designed for reporting and finding incidents using the Root Cause Analysis method to analyze causal factors systematically. This helps prevent repetition by considering sensibleness through the use of Cause and Effect scientific model which would help us to solve problems accurately. It also helps prevent subjectivity of investigators and those that are investigated, allowing us to develop reactive measures and communicate with relevant persons swiftly.

Applying the ALOHA (Ariel Location of Hazardous Atmosphere) Program

CPF applies the ALOHA program which is a hazard modeling program that estimates how a toxic cloud might disperse after a chemical release according to the climate conditions and property of the chemicals. Developed by the U.S. National Oceanic and Atmospheric Administration (NOAA), the Program was designed for emergency responders to prepare for emergencies relating to potential chemical release to the outside of the premises. This allows us to assess the potential scope and impact that could occur to those performing the work or the surrounding communities. The data from the modeling will be used for planning and preparation for emergencies.

Towards Safety Culture

It is of great challenge for CPF to expect every employee to be aware and have good attitude towards safety which would ultimately lead to safety behavior and culture. However, as CPF has so many employees with difference in knowledge, education, social background, ethnicity and environment, it is very important that we have a strategy to improve the safety culture of the organization to address changes.

At present, fostering of safety culture has been integrated into the CPF SHE&En Standard. We build leadership in safety so that our leaders understand their responsibilities and act as role models, we reward safe behavior to encourage participation, and we provide an environment that allows people to exchange information, news, knowledge and good practices. We also organize various activities to promote safety culture e.g. safety talks, lesson-learned sharing sessions for operation employees and executives, safety weeks, safe behavior promotion through the "Think before Act" Project, the "Friend Helps Friend" Project and the "Behavior-Based Safety Observation". We also monitor, provide suggestions and create positive motivation.



Partners

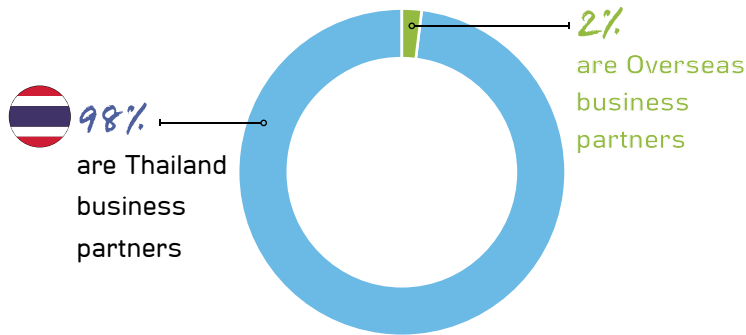
Commitment: Develop suppliers to grow together

Details of the management approach are available at www.cpfworldwide.com under "Sustainability" topic: "Partners"



Sustainability Management in the Supply Chain

CPF constantly and continuously communicates and operates according to our **Supply Chain ESG Management Approach**, in order to assess and mitigate sustainability risks, and contribute to assisting the development of our raw material business partners. We also aim to raise operating standards to ensure compliance with regulations and international standards, allowing us and suppliers to sustainably grow together.



Supply Chain ESG Management Approach

“ 100% of our business partners in Thailand operations were communicated about the Sustainable Sourcing Policy and Supplier Guiding Principle ”

Online Supplier Sustainability Self-Assessment



CPF is now ready to communicate about and use the Online Supplier Sustainability Self-Assessment with critical suppliers in the direct and indirect raw material groups. In 2020, the online self-assessment which covers Environmental, Social and Governance (ESG) aspects will be applied to all 13 groups in line with the established target. Presently, we have adopted the 4Ps Principle from the **Sustainable Sourcing Policy and Supplier Guiding Principle** in the sustainability self-assessment as criteria for selecting new suppliers. This is to manage supply chain risks at the starting point of our raw material sourcing process.

“ 100% of our critical suppliers in Thailand operations signed acknowledgement of the Sustainable Sourcing Policy and Supplier Guiding Principle. ”

Auditing Business Partners

CPF has achieved our roadmap in conducting sustainability audit on critical suppliers as established in our strategy. This is to ensure that business partners, in particular critical suppliers in direct raw material groups (i.e. animal feed raw materials) and indirect raw material groups (i.e. food ingredients, and packaging) operate according to legislations as well as our principle, policy and standards. In 2019, we identified aspects to assist business partners in improving

various areas including the provision of compensation, recording working hours and occupational health and safety in their operations, all of which are not considered important to affect the business cooperation. Moreover, recommendations and experiences associated with the above mentioned areas were shared and exchanged so that business partners can consider and adopt lessons learnt as they see appropriate.

“ 100% of high-risk critical suppliers in Thailand operations were audited on sustainability.”

Business Partner Capacity Building

Recognizing the risks associated with labor management and practices within the supply chain, CPF annually organizes seminars on business partner capacity building and focus group meetings. The objectives are to communicate and develop material sustainability issues and to collaborate with the government sector to raise awareness on appropriate labor regulations, and international practices and standards.

Together with the Department of Labor Protection and Welfare of Thailand, we organized the **Capacity Building for Partnership 2019** conference to develop capacity and understanding of regulatory requirement and appropriate labor practices, and to enhance the capacity to align practices with international standards such as the International Labor Organization (ILO) and the United Nations Development Programme (UNDP). Additionally, we held a **Supply Chain Sustainability Focus Group** meeting between critical suppliers and our representatives to communicate and discuss findings from the conducted audits.

“ 100%

of critical suppliers in Thailand operations participated in capacity building seminars and focus group meetings.”



“More than 200 business partners in Thailand operations across 13 main business groups participated in the Capacity Building for Partnership 2019 conference”

“In 2019, 12 ‘outstanding business partners’ drove a sustainable supply chain with us and shared their experiences”

Furthermore, CPF signed a Memorandum of Understanding (MOU) together with the Department of Labor Protection and Welfare to operate in line with the **“Partnership Development Project towards Thai Labor Standards”**, in order to provide knowledge regarding labor management. It also aims to support companies in the supply chain to manage labor with responsibility and in compliance with regulations, and improve well-being, in line with our Sustainable Sourcing Policy and Supplier Guiding Principle. We have set a 2021 target to achieve at least 300 participants in the Project, who are also able to complete self-assessment as required by the Thai Labor Standards (TLS. 8001-2553).



“More than **120** companies participated in the Partnership Development Project towards Thai Labor Standards in 2019”

In Vietnam Operations: After CPF achieved our target to conduct sustainability audits for critical suppliers in Vietnam in 2019, we worked together with the government of Vietnam to arrange capacity building session under the topic of **“Labor Practices and Occupational Safety in Compliance with Regulations”** for critical suppliers, in accordance with our Sustainable Sourcing Policy and Supplier Guiding Principle. Suppliers are, therefore, able to apply the knowledge gained from the session to their operations with compliance with international standards, to promote safety and improve labor well-being.



“ **100%** of critical suppliers in Vietnam operations were audited on sustainability. ”

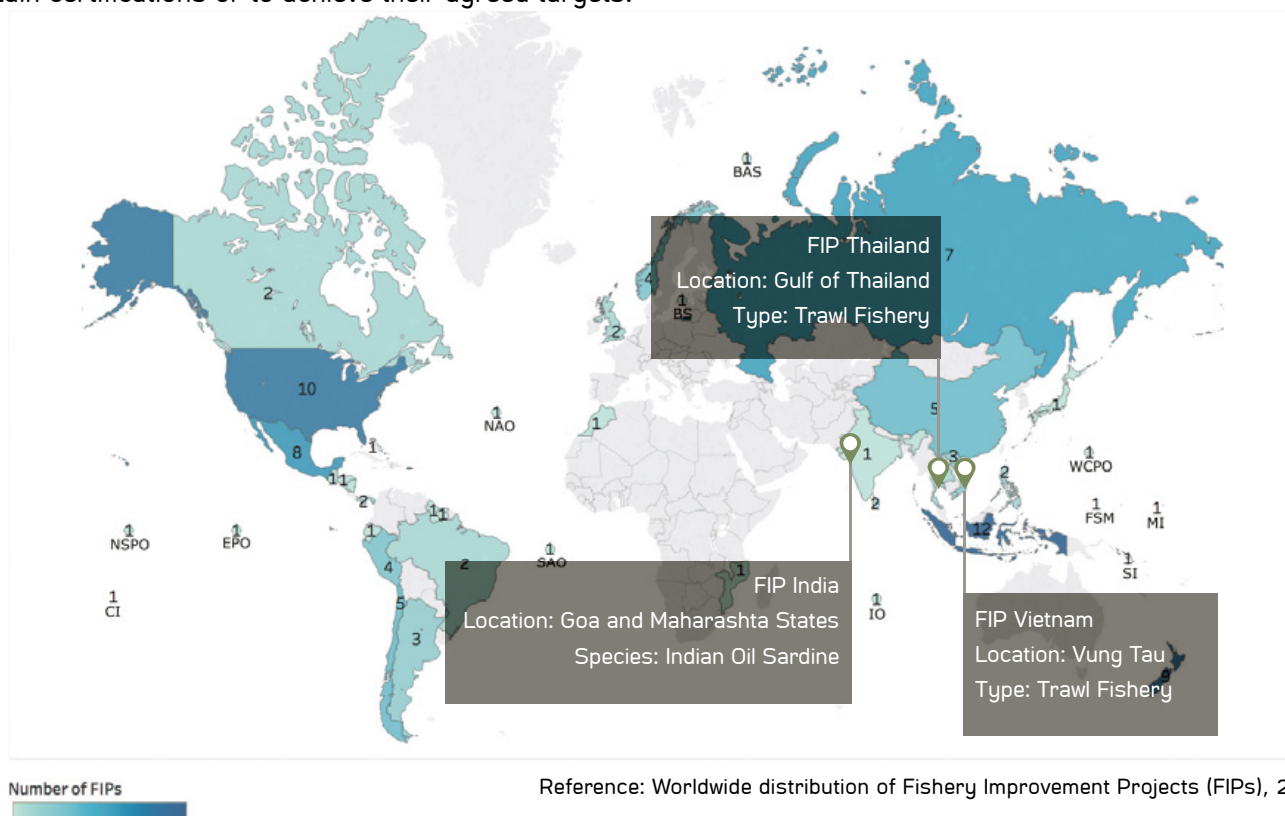
Showcase: Sustainable Development at the Sources of Raw Materials Used for Aquatic Animal Feed and Capacity Building to Advance Fishmeal Supplier Practices towards the Global Standard for Responsible Supply (IFFO RS)²



The Fishery Improvement Projects (FIPs) are initiatives to develop and improve fishery practices through engaging relevant stakeholders in the supply chain, namely the private, public and civil society sectors. The FIPs also drive changes through a variety of tools, including market mechanisms and government policies. The initiatives then lead to solutions that tackle related problems systematically, guided by action plans that are agreed upon by all parties, with clearly defined timeframes, and roles and responsibilities. The action plans are also developed with reference to internationally accepted sustainable fishery standards, such as the Marine Stewardship Council (MSC) Standards or the Global Standard for Responsible Supply (IFFO RS). Overall, the FIPs are implemented based on a four-step process, as shown below.



At present, there are over 100 FIPs across the globe. Most of these projects focus on improving single-species fisheries, and are scattered across multiple regions. Many FIPs have faced different challenges, depending on the characteristics of the projects. For example, due to the composition of the project participants, the nature of the fishery, project management approach and government policy, it has taken over 10 years for some projects to obtain certifications or to achieve their agreed targets.



² Global Standard for the Responsible Supply Version 2.0, or the IFFO RS Version 2.0

CPF recognizes the importance of establishing sustainability at the sources of raw materials used in the Company's production process. This applies especially to fishmeal, which is the key raw material used to produce animal feed, and also the sole linkage connecting our business to the fishery industry and marine resources. Thus, in 2013, we started developing the FIPs in the operating countries, including Thailand and Vietnam, as these two countries have a variety of aquatic animals and mixed trawl fisheries that are unique to Southeast Asia. **Mixed trawl fisheries, furthermore, are more complex and difficult to manage than single-species fisheries.** Additionally, **there was no sustainable fishery standard in the world that was fitting for the regional context.**



In Thailand, CPF rolled out the FIPs through the Thai Feed Mill Association. **We pushed forward collaboration between stakeholders from eight associations³ in the fishery industry, from upstream to downstream activities, under the Thai Sustainable Fisheries Roundtable (TSFR) which is the first ever collaboration of its kind in the Thai history.** It functions as a platform for collaboration between the public and civil society sectors, and independent international organizations driving sustainable fisheries such as the Sustainable

Fisheries Partnership (SFP). The TSFR has implemented projects on trawl fisheries along the coasts of the Gulf of Thailand and the Andaman Sea. In the Gulf of Thailand, we have adopted the Global Standard for Responsible Supply (IFFO RS) Version 2.0, the latest version, for GAP analysis and assessment. We have also maintained continuous collaboration with IFFO RS in developing assessment criteria that can be used to manage mixed trawl fisheries. **This initiative is a pilot and will be the first sustainable fishery standard in the world that is applicable to the Southeast Asian region.** The FIP in the Gulf of Thailand are currently undergoing Fishery Action Plan (FAP) review and approval by IFFO RS experts and management board.



As the characteristics of fisheries in **Vietnam** are similar to those in Thailand, CPF has capitalized upon the success of the FIPs in Thailand and shared experiences and knowledge gathered in FIP implementation. We have pushed for the joint collaboration of feed manufacturers, fishmeal producers, and the public and civil society sectors which culminated in the establishment of the Vung Tau Round Table of Fishmeal Producers and Feed

³ The National Fisheries Association of Thailand, Thai Overseas Fisheries Association, Thai Fishmeal Producers Association, Thai Feed Mill Association, Thai Food Processors' Association, Thai Shrimp Association, Thai Frozen Foods Association, and Thai Tuna Industry Association

Manufacturers (VRFF). The VRFF functions to implement the FIPs and build sustainability in fisheries in Baria-Vung Tau Province. Currently, the VRFF is undergoing the FAP plan development process, in accordance with the IFFO RS Version 2.0. We expect that with the private sector leading these efforts, we may support the government in resolving the issue of Illegal, Unreported and Unregulated Fishing (IUU Fishing) so that the European Union may lift its yellow card on Vietnam fisheries.



Regarding CPF's business activities in India, we have started driving FIP implementation with Omega Fishmeal and Oil Private Limited, our fishmeal supplier operating in the states of Goa and Maharashtra, to resolve the issue of diminishing supply of aquatic animals in the Indian waters, especially the Indian Oil Sardine. We also expect to establish a model for sustainable fishery practices, with the IFFO RS Version 2.0 for single-species fisheries being used as the main reference. On

October 2019, the first Fishery Action Plan (FAP) was **accepted by the IFFO RS as an Improver Programme Accepted FIPs, which is the first project of its kind in Asia** and marks an important beginning in advancing sustainability in India's fisheries. It will deliver confidence that the fishmeal used in the industrial sector is sourced from responsible fisheries, can be traced with transparency and can be processed as quality aquatic animal products while not compromising the environment and being in line with CPF's sustainable sourcing policy, which we are driven to execute and strictly follow.

Furthermore, CPF has plans to expand these initiatives to business activities in **the Philippines and Malaysia**.



“

CPF has placed priority on food safety and responsible sources of raw materials on the basis of sustainable development. We have defined and implemented labor policies and practices in compliance with regulatory requirements and international principles. We have engaged and collaborated with government agencies, private sector, civil society organizations and relevant institutions, aiming to secure stakeholders' satisfaction and promote sustainability across the supply chains.

”

Ms. Luxamee Paiboon

Senior Vice President, Aquaculture Feed Technology-Office

Communities

Commitment: Support community livelihood

Details of the management approach are available at www.cpfworldwide.com under "Sustainability" topic: "Communities".



Supporting Smallholder Farmers... Developing Secured Job and Enhancing Quality of Life

The Contract Farming Project for Smallholder Farmers

At the Mekong Hub Knowledge and Learning Fair organized by the Food and Agriculture Organization (FAO) and supported by the International Fund for Agricultural Development (IFAD), CPF was the private company that was invited to share experience and success in the contract farming project that we have been carrying out for more than 40 years and have helped enhance the quality of life of more than 5,000 farmers. With the representatives from Thailand, Vietnam, Laos, Myanmar, Cambodia, and the Philippines, participants all admired CPF's contract farming project, commending that the project is a good model for agricultural development that follows the effective tripartite management approach⁴. Many countries expressed their interest to implement this model in their countries.



⁴ Tripartite project is a collaborative project between the government, the private sector (CPF) and the people.

In 2019, CPF disseminated knowledge to farmers in the Project in the form of conferences, group discussions, seminars, study visits, workshops, trainings, farm visits and consultations in a variety of topics as follows:

Knowledge transferring to the farmers under the Contract Farming Project

Training Topics	Example of Training Courses
Animal Welfare	Animal welfare principles and practices, laws and regulations on animal welfare, animal housing and farming equipment preparation, control and monitoring of animal housing, calculation on the amount of vaccine, vitamin, and antibiotics
Quality	Good Agricultural Practices, farm standards including QS, Global GAP, Codex, and Halal, disease and prevention including Avian Flu, and African Swine Fever (ASF), identification and traceability of the production process
Efficiency	Managing cost and production efficiency, document record and control, corruption prevention, innovation in animal husbandry, income, tax, savings, advanced payment to farmers
Labor	Good Labor Practices
Society and Environment	Environmental management and living with the community, energy reduction through the use of biogas
Safety	Workplace and farm safety, emergency preparedness e.g. water scarcity, food scarcity, power outages, chemical spills, fire, LPG leakage, and broken equipment, personal health and hygiene

This year, 28 farmers in the Project used the CPF's Contract Farming Complaint Center (02-000-1888) to ask for information and provide some suggestions directly to the executives. This approach of communication has been used in addition to direct communication with local staff i.e. contacting staff who oversees the contract to ask for details before applying for additional bank loans to be used for farm improvement.

Supporting Small Entrepreneurs...Creating Entrepreneurial Opportunities

In 2019, CPF improved its approach to enhancing employment prospects and providing opportunities to small entrepreneurs who aspire to become business owners with low investment cost (Small Entrepreneur Projects) in the form of franchise namely, CP Community Fridge and CP Fresh Shop. Originally providing only fresh pork products, we added more variety of products to the shop including fresh chicken, fresh pork and eggs as well as other ready-to-eat products. This helps to address the increasing needs of consumers.



The Five Star Business, which is one of the Small Entrepreneur Projects, also adapted its business model to address the change in the digital era as well as the consumer behaviors that tend to have more environmental awareness by



- Focusing its business model on the restaurant format
- Collaborating with business partners from both within and outside C.P. Group to develop new distribution channels
- Expanding its customer base by developing new beverage businesses e.g. Star Coffee and Lamoon Chabar
- Developing new products to add more choices e.g. salted fried chicken, and rice sets
- Collaborating with True Corporation Public Company Limited in implementing digital payment using True Money Wallet
- Developing environmentally-friendly packaging
- Developing channels for marketing communication on the social media to access young generations
- Increasing sales through home delivery service

Promoting Quality of Life of the Communities Surrounding our Manufacturing Plants and Farms

To align CPF's activities in promoting quality of life with the lifestyle and specific needs of the communities, all manufacturing plants and farms engaged with communities surrounding the operations by visiting and learning about their needs and identifying community impacts prior to initiating projects/activities. In 2019, we promoted quality of life of communities through more than 600 projects/activities. These included:

- **The Ban Don Wua Integrated Farming for Sufficiency Economy Learning Center at Ban Don Wua Community, Lat Bua Khao District, Sikhio District, Nakhon Ratchasima Province**

The majority of people in Ban Don Wua Community are farmers. They were faced with high production cost from the use of chemical pesticides. Their income was not enough to cover their expenses. CPF together with network partners, District Agricultural Extension Office, and district soil experts provided suggestion on integrated crop rotation, disseminated knowledge to



farmers, and developed the community to become a learning center on the sufficiency economy philosophy. We also provided support in processing of agricultural products and transforming the community into a community-based tourist attraction – the Lat Bua Khao Model. This has helped members of the Learning Center increase income per household and enhanced the quality of life of the community.



“

In order to work with the community, we need to understand their needs and think about how to develop the community and help to solve their problems.

”

Ms. Orawan Chotechuen

Manager of the Support Function, Korat Chicken Breeder Business, CPF Broiler Business

• The Community Biogas Pond in Chainat Province

Recognizing the importance of the environment surrounding CPF’s farms, we supported contract farmers in installing biogas system and utilizing biogas from swine farming. Farmers who could produce more biogas than the demand in their own farm could also sell it to people in the community to use it in substitution of LPG. This helped people in the community to reduce expense used in buying LPG by 250 Baht per household per month while also contributing to the reduction of greenhouse gas emissions. The project received financial support for building biogas pond from the government and other supports from Thai Health Promotion Foundation, Chainat Provincial Livestock Office, Department of Alternative Energy Development and Efficiency of the Ministry of Energy, and Silpakorn University.



Supporting Vulnerable Groups...Strengthening the Society

CPF Funds for the Elderly

2011

Launched the CPF Returning Happiness to the Elderly Project to help provide support for disadvantaged, impoverished, neglected, unaided, or disabled elderly people aged 55 and above who live in the communities surrounding our manufacturing plants and farms

2012

Established the “CPF Funds for the Elderly”

2019

Adjusted the eligible age from 55 to 60 years old
Helped 833 elderly individuals since the launch of the Project

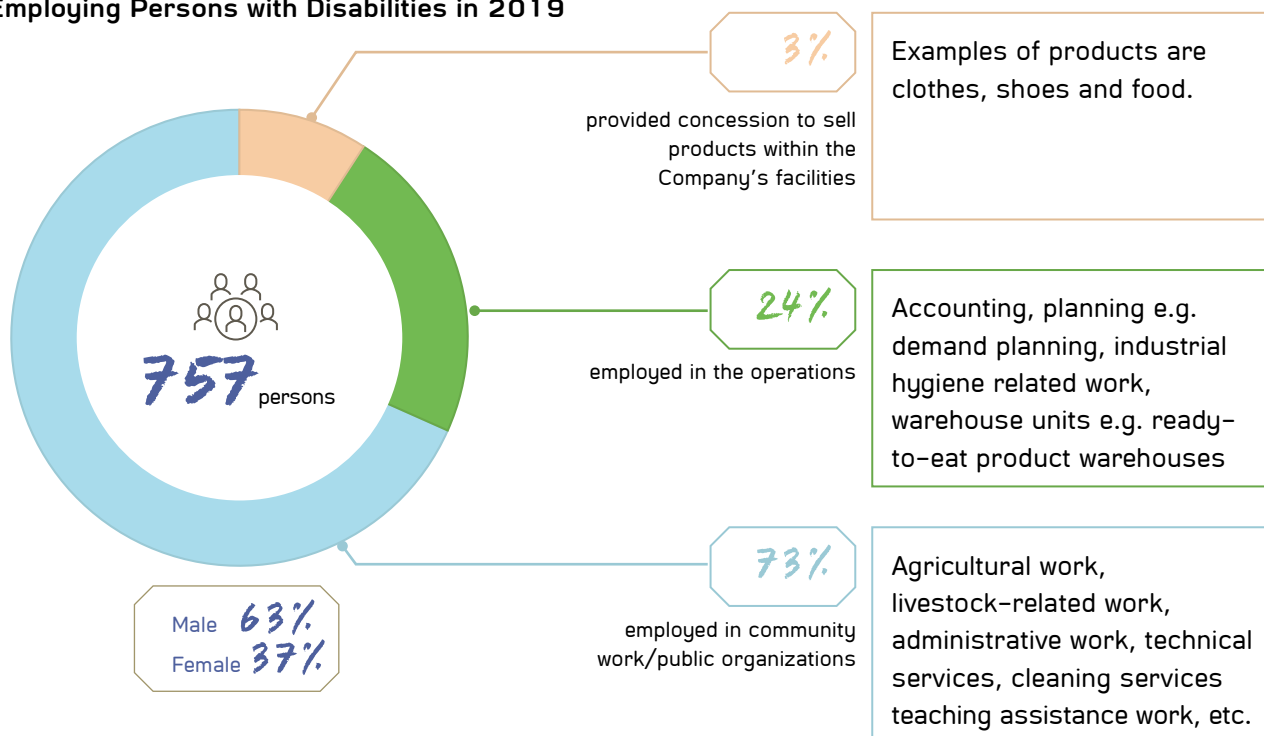
Moreover, the operations in India also initiated the similar project in Chodavaram and Kanimetta Villages to help support the elderly and the physically challenged people since 2018. Currently, there are 65 people in these areas have been supported.

Supporting Employment Prospects of the Person with Disabilities

"Employing persons with disabilities in 2019"



Employing Persons with Disabilities in 2019



Supporting Social and Community Activities

CPF is determined to support activities that benefits communities and societies, by using our expertise to create positive social impact through a variety of supports. We hope that our support will strengthen the communities and contribute to national development. In 2019, our contributions were as follows:

Forms of Contributions (Million Baht)	
Cash	495.91
In-kind	14.93
Time (Volunteer hour)	95.07
Management cost	14.36
Total	620.27

Remarks: The contributions can be divided into three categories: charitable donations 30%, community investments 46% and commercial initiatives 24%.

Showcase: Social and Environmental Impact Valuation for Income-Guaranteed Contract Farming of Fattening Pigs Scheme, Swine Business

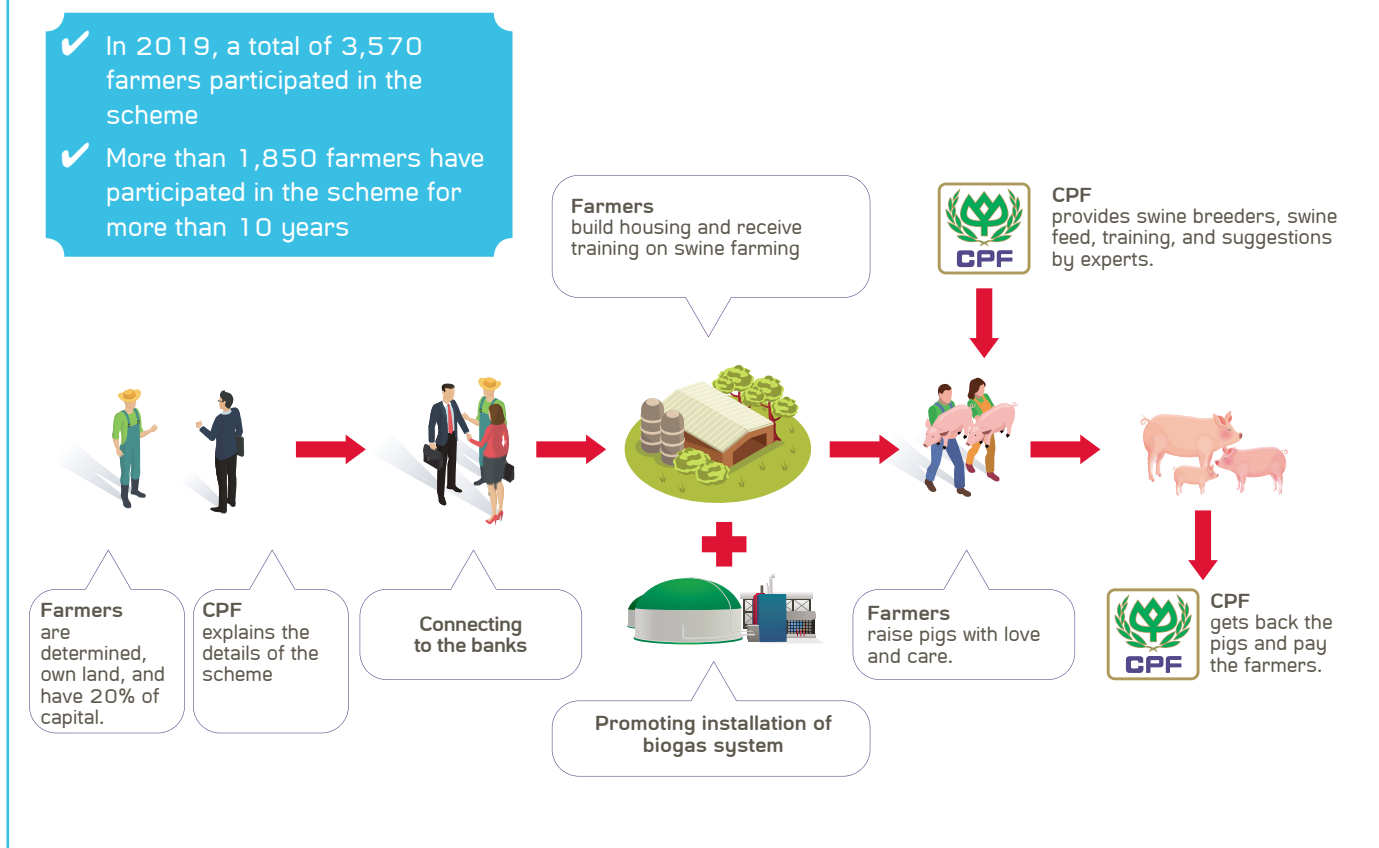


Sixty seven percent of Thai labor during 1973 – 1977⁵ was in agricultural sector, and this percentage was expected to decrease to 44.5 percent during 2011 – 2015⁶. One of the factors was income insecurity in the agricultural sector⁷ with the poor households earning approximately 18,417 Baht per person per year on average⁸. With the commitment to enhancing the quality of life of farmers who are the foundation of the country's economy, in 1975 CPF launched the contract farming of the fattening pigs scheme for smallholder farmers to support the creation of profession with secured and sustainable income. The scheme continues until today, contributing to the sustainability of the country in accordance with

'Three-Benefit Principle' (for the Country, the People and the Company).

One of the largest challenges for smallholder farmers in Thailand is access to finance and explicit knowledge. Understanding this challenge, CPF connects the farmers with the banks and assists in loan application, helping farmers to overcome the first challenge in carrying on with the profession. In addition, we are also planning to launch the "Repaying Debt, Creating Happiness, and Promoting Money Saving" Project to provide knowledge in household accounting and effective financial management to farmers.

The Process for Participating in the Income-Guaranteed Contract Farming of the Fattening Pigs Scheme



⁵ Thai Rice: Changes in the Production Structure and Distribution Channels, Somporn Isvilanonda, 2010.

⁶ Labor in the Agricultural Sector 2011 – 2015, Office of Agricultural Economics, 2016.

⁷ Changes in the Labor Market to Shortage of Labor, Nipon Poapongsakorn and Pattamawadee Suzuki, 1992.

⁸ Poverty in Agricultural Households, Cultivation Year 2013/14, Office of Agricultural Economics, 2019.

Environmentally and socially-friendly swine farms must undergo community engagement and must be situated in areas with adequate water sources to avoid impact to the surrounding communities. The farms should also install a biogas system to treat pig manure and wastewater from farming, thus reducing odor and methane emissions released into the atmosphere. We also set a target for the farms to have zero discharge by reusing treated wastewater as bio-fertilizers for trees. This would allow the farms to live in harmony with the communities.



“

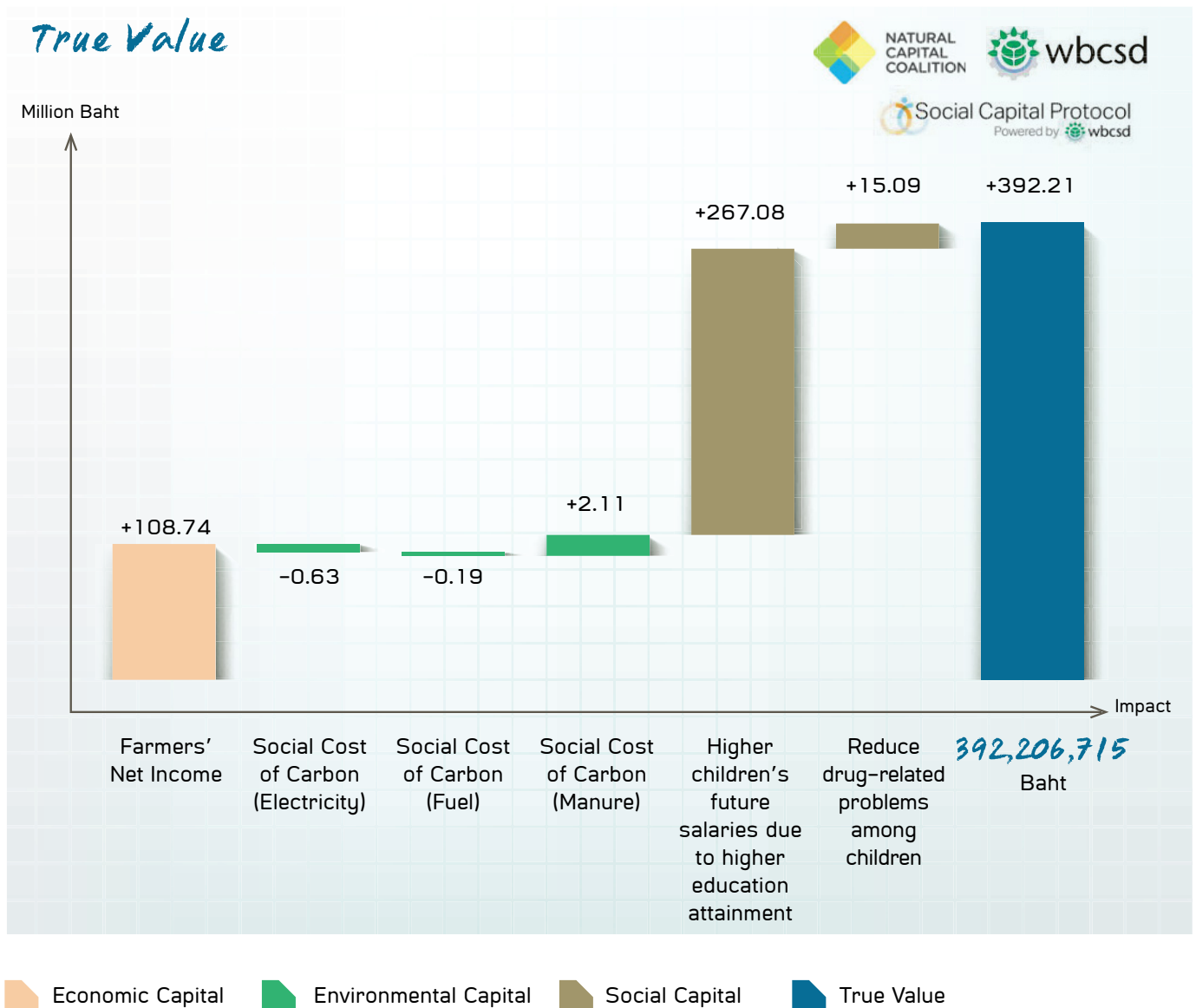
Participating in the scheme leads to creation of profession, generation of secured income with low risks, bringing about the good quality of life of farmers so that they can sustain their lives.

”

Mr. Somkuan Choowatanapakorn
Chairman of Pig Business Group

CPF evaluated social and environmental impacts of the income-guaranteed contract farming of the fattening pigs scheme on 3,570 farmers who raised more than 4.7 million pigs nationwide following the guideline of the **World Business Council for Sustainable Development: WBCSD**. We surveyed the sample group and set assumptions. The results showed the true value accounting for more than 390 million Baht. In addition to the secured income, we also found that

- ✓ Farmers have 2.4 more hours per day with the family.
- ✓ Ratio of farmers being under the poverty line⁹ has reduced from 40 percent to zero¹⁰
- ✓ Greenhouse gas emissions have been reduced by 168,000 tons of CO₂ equivalent per year



Read more on the social and environmental impact valuation method at



⁹ Poverty line is the minimum level of income deemed adequate in a particular country, calculated by finding the total cost of all the essential resources that an average human adult consumes in one year e.g. food, dwellings, healthcare, utensils, etc.

¹⁰ Poverty line in 2018 was 2,710 Baht/person/month on average, National Statistical Office.

Showcase: CPF Combine



Since 2009, the Shrimp Early Mortality Syndrome (EMS) has been infecting the shrimp aquaculture sector in many Asian countries. This has caused damage to more than a million shrimp farmers and has severely affected the shrimp aquaculture sector. About three million tons of output, accounting for 13.3 million USD¹¹, were lost due to the EMS. In order to solve the spread of the EMS, rehabilitate shrimp farmers, and mitigate impacts on the shrimp aquaculture sector, CPF has invested in the research and development of a shrimp farming system that prevents the infection while also helping increase yields and reduce environmental impacts.

CPF is dedicated to the research and development of the “CPF Combine” shrimp farming system which integrates the innovations that we have developed over time. These include:

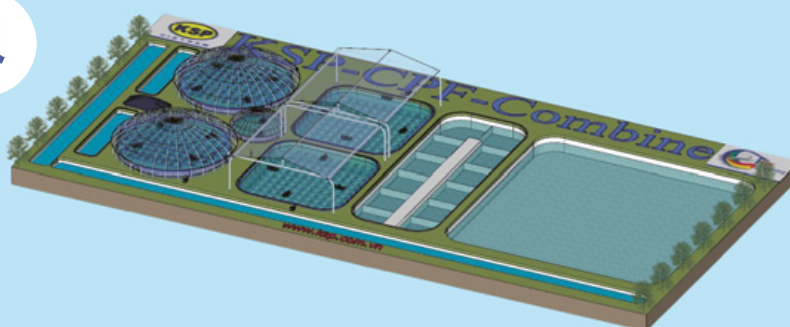
1.



Farm biosecurity system

To prevent infection of disease from outside.

2.



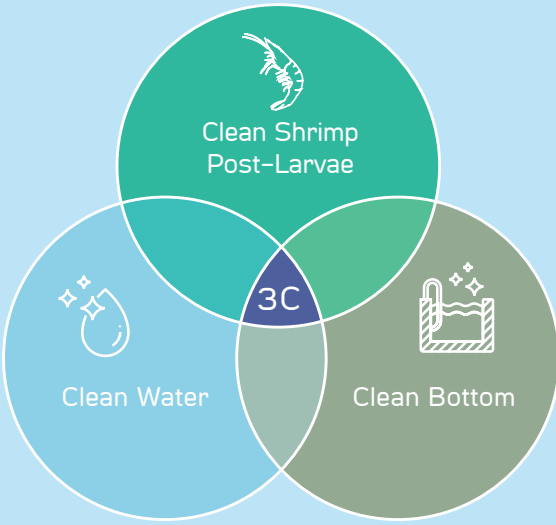
Farm planning with the water management system that proportionately divides the area into the water preparation pond, the culture pond, and the water treatment pond along with the **adjustment in the farming method** by separating the hatchery pond from the culture pond to facilitate pond cleaning.

To facilitate shrimp farming quality control which will qualitatively and quantitatively result in more efficient farming while also reducing water consumption, thus reducing environmental impact.

¹¹ FAO

3. Shrimp farming with the 3C concept and the use of probiotics

The 3C Concept consists of

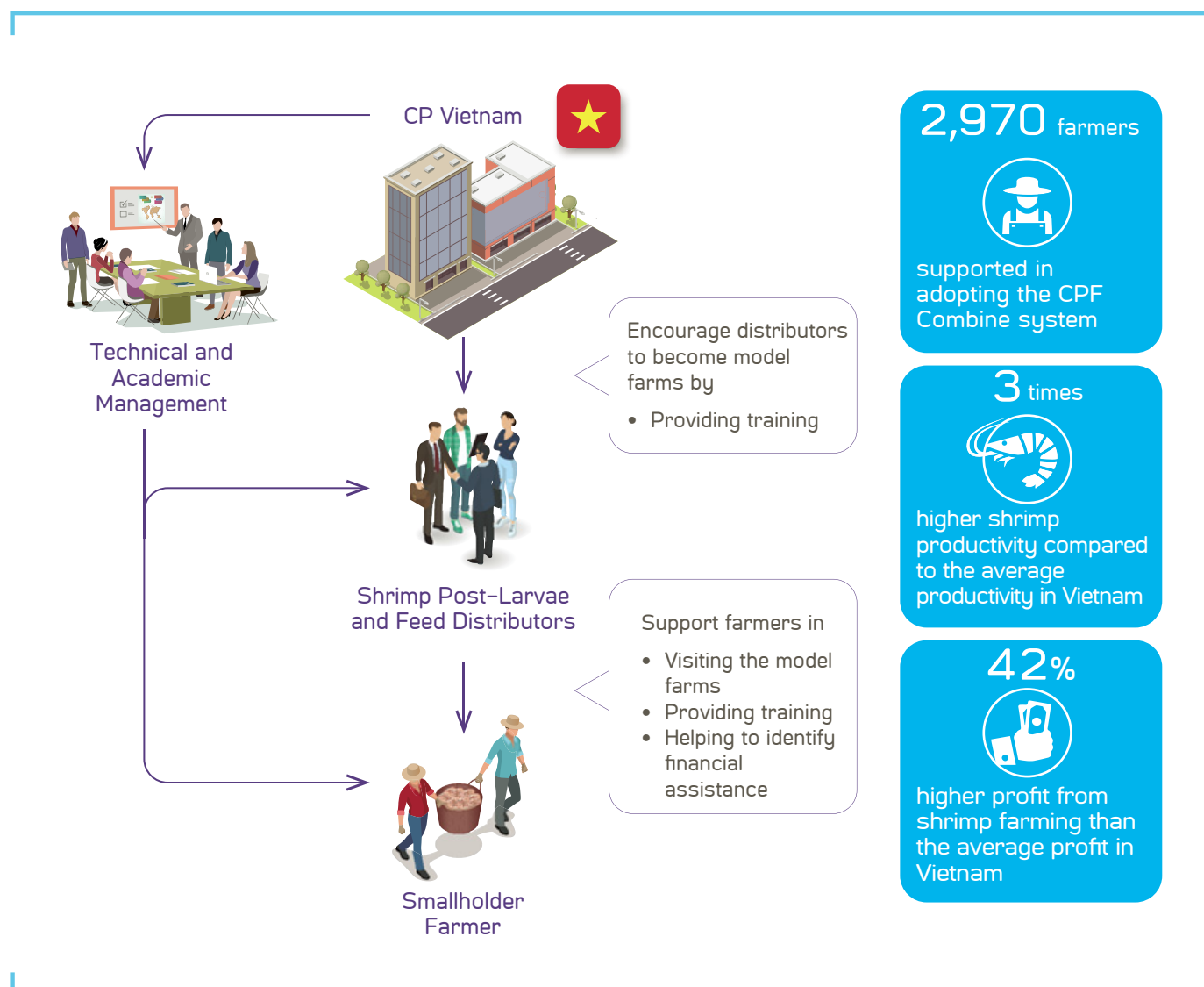


used to prevent infectious diseases resulting in “no use of antibiotics in shrimp farming”.

CPF has introduced the “CPF Combine” shrimp farming system to farmers to reduce risks of and limit damage from diseases. This also allows us to provide shrimps that are of high quality and safe to consumers at affordable prices, leading to security of the shrimp aquaculture sector. The method was first introduced to shrimp farms in Vietnam in 2015 by our shrimp post-larvae and feed distributors who own shrimp farms and have the capacity to demonstrate the practice on their farms as model farms. Other farmers and distributors were encouraged to visit the model farms and adopt the CPF Combine shrimp farming system. However, foreseeing the challenge that farmers would face in getting access to finance, we collaborated with our distributors and banks to provide financial support to farmers in the project. The implementation of the CPF Combine system has been well accepted among farmers and has rapidly expanded. The success in Vietnam has led us to expand the practice to Thailand, India, Malaysia, and the Philippines with more than 5,500 shrimp farmers joining the project. We do not cease to improve for higher effectiveness. At present, farmers who are our partners in Vietnam and Malaysia have already implemented the CPF Combine Version 2 by changing the pond from a plastic-covered earthen pond to a smaller-size tank. This allows for easier control, leading to 50 percent more yield compared to that in the Version 1.



Promotion of the “CPF Combine” Shrimp Farming in Vietnam



“

Sustainable shrimp aquaculture requires good management throughout the value chain. This means the sourcing of shrimp feed from sustainable sources, the capacity building of business partners and farmers for mutual growth, and the appropriate treatment of wastewater from shrimp culture until it is of quality and safe before discharging to the natural water sources

”

DVM Sujint Thammasart

Chief Operating Officer - Aquaculture Business



Balance of Nature

99.99% of plastic packaging for food products were reusable or recyclable or upcyclable or compostable.

Direct and indirect GHG emissions per production unit were reduced by **15%**, compared to the base year 2015.

10,079 Rai (1,613 hectares) of mangrove forests and watershed forests in strategic areas and green areas within the boundary of our operations were conserved, protected, and restored.



CPF disclosed performance data to the Carbon Disclosure Project (CDP)

Climate Change: C level

Water Security: B- level


Forest: B- level



Sustainable Packaging

Commitment: Develop sustainable packaging

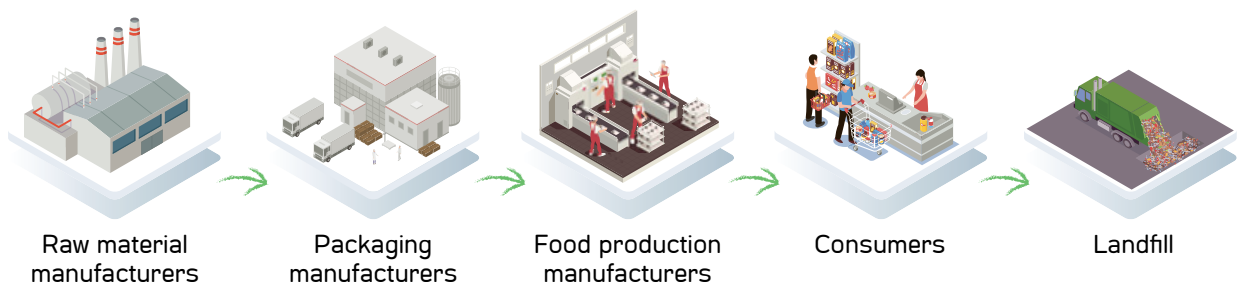
Details of the management approach are available at www.cpfworldwide.com under "Sustainability" topic: "Sustainable Packaging"



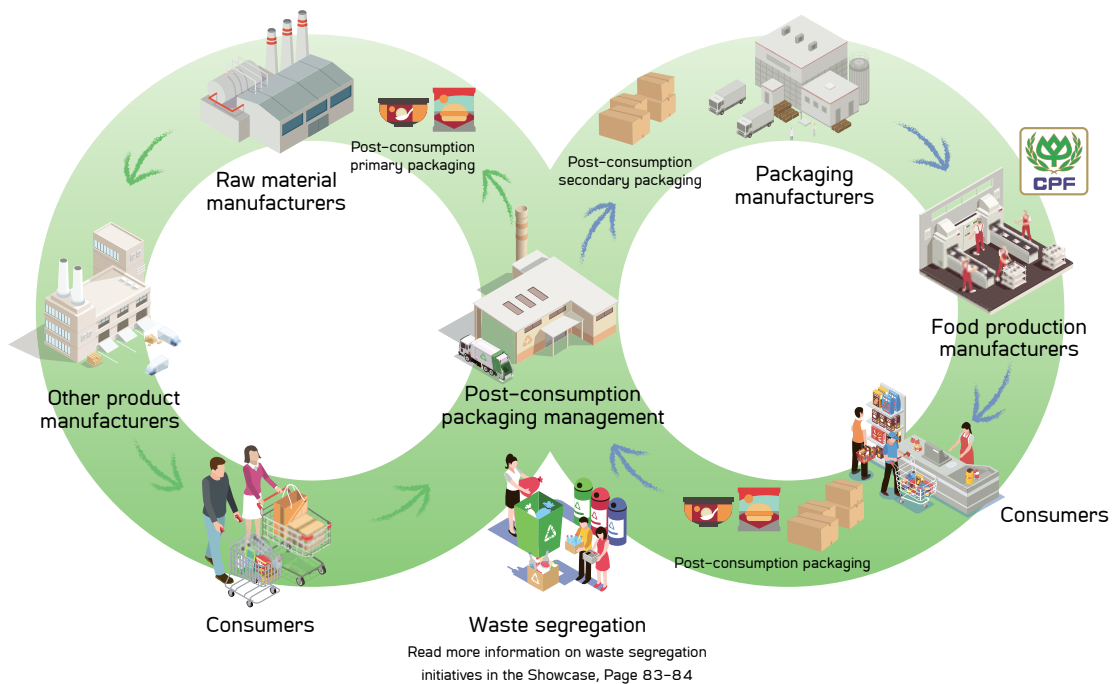
Designing and Developing Sustainable Packaging

To ensure the food quality and safety, plastic packaging is mainly used for our products in food business., While plastic food packaging is one of the most common items found in the ocean¹, CPF is committed to contributing to solving the plastic waste problems and optimizing the use of resources, by developing a sustainable plastic packaging lifecycle. We also set goals and developed the **Sustainable Packaging Policy and Guiding Principles** based on the circular economy principle.

From Linear Economy



Towards Circular Economy



Read more information on waste segregation initiatives in the Showcase, Page 83-84

¹ European Commission, 2016

CPF collaborated with raw material manufacturers and packaging manufacturers in developing packaging in accordance with our food packaging design and development strategy as follows:



Consider Quality and Food Safety



Design packaging with priorities on quality and food safety

Use high barrier plastic bags for food products for patients and the elderly that have been through the sterilization process as the packaging must be able to prevent microorganism contamination from outside while also preserving nutrients when stored at a room temperature.



Change to Plastic Substitutes



Study and develop substitutes for plastic or plastic made from renewable materials, and use them for food packaging

Use trays made from wood pulp from plantations or reforested areas for ready-to-eat products from the Top Food brand in Belgium. The trays help extend food shelf life, are compostable and enable us to reduce the use of plastic by 85 percent. We also plan to use paper trays as packaging for fresh chicken and pork products under the **CP** and **U FARM** brands. They will be available in the market by the first quarter of 2020.



Facilitate Recycling

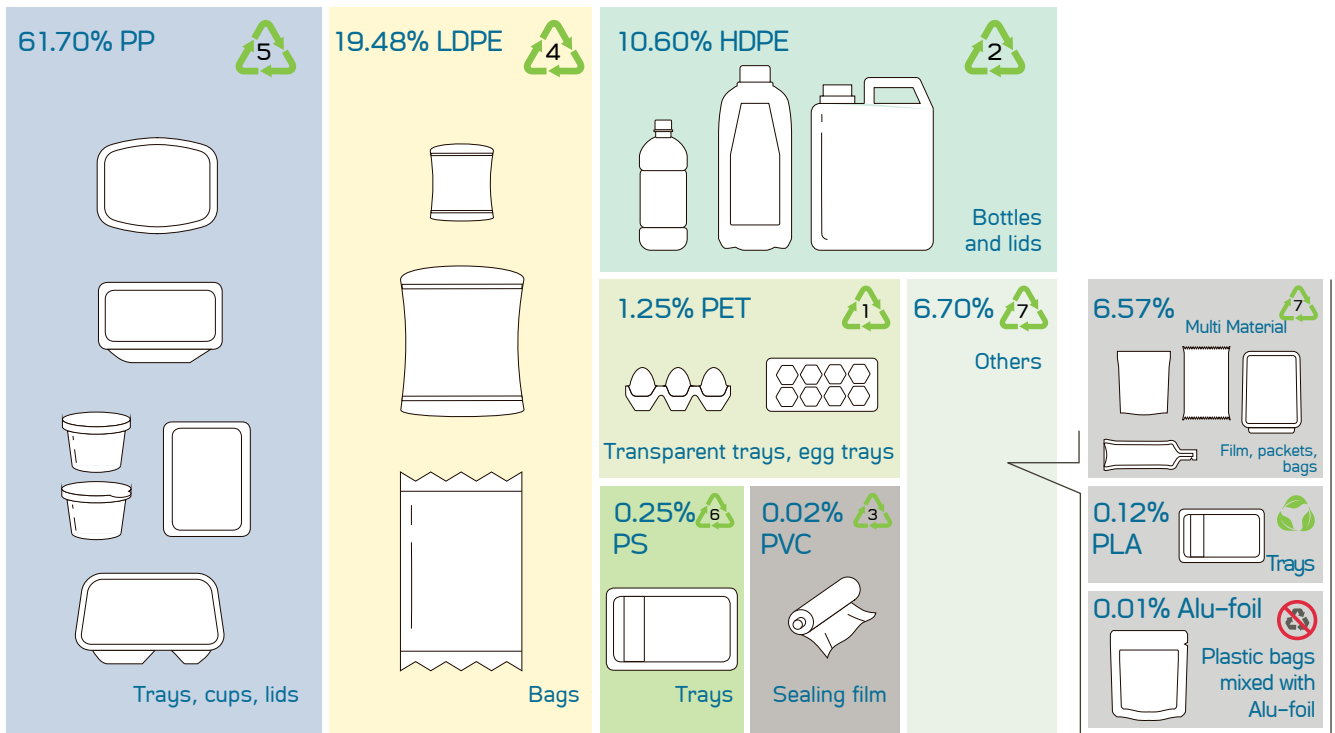


Develop packaging that is recyclable in the case where we cannot find substitute materials that can preserve quality and safety of food products at the same level as plastic packaging

Use plastic bags that are made from mono material which is fully recyclable for ready-to-eat products.



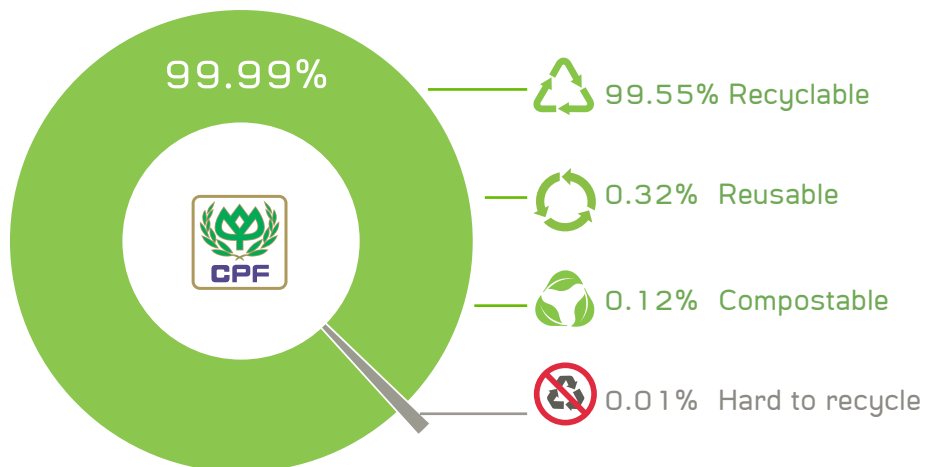
Proportion of plastic packaging for food products by type of plastic in Thailand operations



Recyclable
 Compostable
 Hard to recycle

In 2019, total weight of all plastic packaging for food products 41,284 tons.

Our commitment to the design and development of food plastic packaging resulted in the increase in reusable or recyclable or compostable plastic packaging to more than 99.99 percent in our Thailand operations.



Reducing the Use of Plastic Packaging throughout the Value Chain



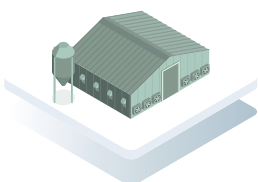
Use Bulk Feed Tanks to transport animal feeds to CPF live-stock farms and contracted farms



Feed Business



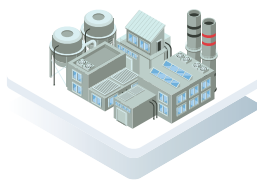
Use Q-Pass Tanks to transport Shrimp post-larvae to CPF shrimp farms and farms owned by our customers



Farm-Processing Business



Replace plastic bags with stainless trays to transport product parts within the production process



Food Business



Change

From plastic buckets to paper boxes



Food Retail Outlets



CPF and Kemin Industries, our business partner, collaborated in developing the packaging and transportation processes of raw materials for live-stock feed by using ISO tanks instead of disposable plastic tanks.



Q-Pass Tank

Use

paper packaging for take-away food and beverages



Design

No straw cold beverage lids, and use cups and straws from bio-plastic that is 100% compostable



The use of plastic packaging was reduced

16,000
tons per year



Greenhouse gas emissions were reduced more than

45,700
tons of CO₂e per year

Raising Awareness and Contributing to Plastic Waste Management

As resources continue to deplete and problems from single-use plastic waste have impacted both the society and the environment, the circular economy principle has been introduced to manage waste. In addition, the recycling rate is at only 13 percent at present². The adequate waste segregation and management is, therefore, necessary to ensure that

waste is recycled and turned into new raw materials. At the same time, creating consumer awareness and understanding of waste segregation and management are equally important to effect behavioral change in order to create a closed-loop system where resources are optimized.

The “Reduce to Conserve the Planet” Project to Reduce Single-use Plastic among Employees

CPF emphasizes the importance to reduce the use of single-use plastic and promotes reuse of packaging, starting with lifestyle changes. We raise employees’ awareness of resource optimization so that they are aware of their roles to conserve the planet, use plastic mindfully and manage waste appropriately in order to reduce environmental impacts.



The “Separating Recyclable Waste by Employees and Communities” Projects

CPF Food Research and Development Center promotes waste segregation among their employees. The Center collaborated with “Won” Project to recycle used plastic. The Center also uses organic waste from food research and development to make compost for use within the organization, helping reduce the use of chemical fertilizers by 30 percent.



In addition, the eastern shrimp hatchery farm in Trat Province also disseminated farm waste management guidelines to the communities around Laem Ngop District and to Panjawittayakan School, Ban Klong Yai School, and Ban Laem Thong Lang School with the aim to promote environmental protection through waste segregation. The initiative was carried out under the “Inviting the Community to Segregate Waste in the 4.0 Era” Project. The farm provided knowledge on waste segregation by type, on how to make compost from organic waste and recyclable waste has been sold (e.g. plastic, glass bottles, and paper) for students’ lunch fund.

² What a Waste 2.0: World Bank, 2018.

The “CP Fresh Mart Collects” Project



CP Fresh Mart collaborated with GEPP, a startup that has expertise in developing waste management systems, to launch the “CP Fresh Mart Collects” Project with the objective to create a model community in waste recycling. This is carried out by promoting waste segregation in the community surrounding CP Fresh Marts. Customers who participated in the Project brought at least 50 pieces of waste to the shop and separated the waste correctly in exchange for 10 eggs. The Project was piloted in three branches including Yenjit branch, Sathorn 11 branch, and Sathorn Condo branch. We also support the government’s policy on the plastic bag ban which started from 1 January 2020.

The “Catch the Trash” Project



CPF supported the Catch the Trash Project through the Sustainable Fisheries Research and Development Institute. The Project launched campaigns to prevent fishing vessels from throwing waste from the vessel into the sea but to bring such waste back to the shores instead. Started in 2018, the Project has involved more than 6,000 vessels. In 2019, the Project investigated the types and amount of waste that was collected from the sea, and disposal methods. The results of the study would be used to improve the efficiency of the project planning process.



“

Plastic waste problem is indeed not caused by the plastic itself but by mismanagement. If post-consumption management of plastic packaging is appropriate, we would be able to recycle it into the production process. In order to have effective and sustainable plastic waste management, all parties should take part in this – by providing correct information, raising awareness or promoting public participation in plastic waste management.

”

Mr. Kitti Wangwiwatsilp

Chairman of the CPF Sustainable Packaging Working Group

Environmental Impact

Commitment: Reduce environmental impacts throughout the value chain

Details of the management approach are available at www.cpfworldwide.com under "Sustainability" topic: "Environmental Impact"



Climate Change and Energy Management

CPF is committed to reducing environmental impacts resulted from climate change throughout our value chain by promoting renewable energy and increasing energy efficiency.

Promoting Renewable Energy



Biomass

Our livestock and aquaculture feed businesses use waste materials e.g. scrap wood, sawdust and corn cob as fuels for steam boilers to replace coal. In addition, we aim to be Coal Free Operations by 2022.



Biogas

All of our swine farms, 96% of contracted swine farms, seven layer complexes across Thailand and the Nong Chok ready-to-eat food production plant have transformed wastewater and manure through the water treatment system into biogas to generate electricity used on the farms. The practice has been expanded to our operations in Vietnam, Laos, Cambodia, Malaysia, and the Philippines. Moreover, our broiler food processing plants use biogas from the water treatment system as renewable energy to replace fuel oil and liquid natural gas in steam boilers.



Solar Power

Twenty four of feed mills, food processing plants, ready-to-eat production plants, and distribution centers have installed solar rooftops to generate electricity for production process. The total electricity generation capacity is 15 Megawatt. The solar rooftops are expected to be fully operated by 2020.

ASEAN Energy Award 2019

The Saraburi ready-to-eat food production plant won the Renewable Energy Award for steam generated from biogas from the wastewater treatment project.

As a result of our efforts to promote renewable energy usage throughout our production process, in 2019, GHG emissions per production unit reduced by 8% compared to the year 2018

2019 Performance (Thailand Operations)



Renewable energy ratio
26%
of total energy consumption



1,857,073
Gigajoules (GJ) from biomass
1,017,426
GJ from biogas
4,203
GJ from biofuel
439
GJ from solar power



Reduced GHG emissions by
425,000
tons CO₂e
per year



Reduced production cost
250
million baht
per year

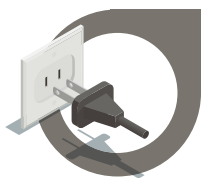
Increasing Energy Efficiency

CPF recognizes its responsibility for energy management. In 2019, we reduced energy consumption through the increasing energy efficiency in the production process project in aquaculture feed business. The project resulted in 3,000 GJ per year in energy reduction which accounts for six million baht of cost reduction per year. Nevertheless, energy consumption per production unit rose by 2% compared to the year 2018 due to the increase in production of cooked chicken products using steam such as steaming and roasting. Such products are healthy products responding to the rise of the current consumer needs.

Target 2025
(Thailand):

15%

of energy consumption per production unit to be reduced compared to the base year 2015.



Performance
in 2019:

5%

of energy consumption per production unit was reduced compared to the base year 2015.



Energy consumption
per production unit
was increased by

0.3%

or increased 2 Megajoules (MJ)/ton of product compared to the year 2018.



Energy consumption
per production unit
from non-renewable
energy was reduced by

1%

or reduced 3 MJ/ton of product compared to the year 2018.



Details are available at
www.cpfworldwide.com under
"Sustainability" topic: "Climate
Change and Energy Management"

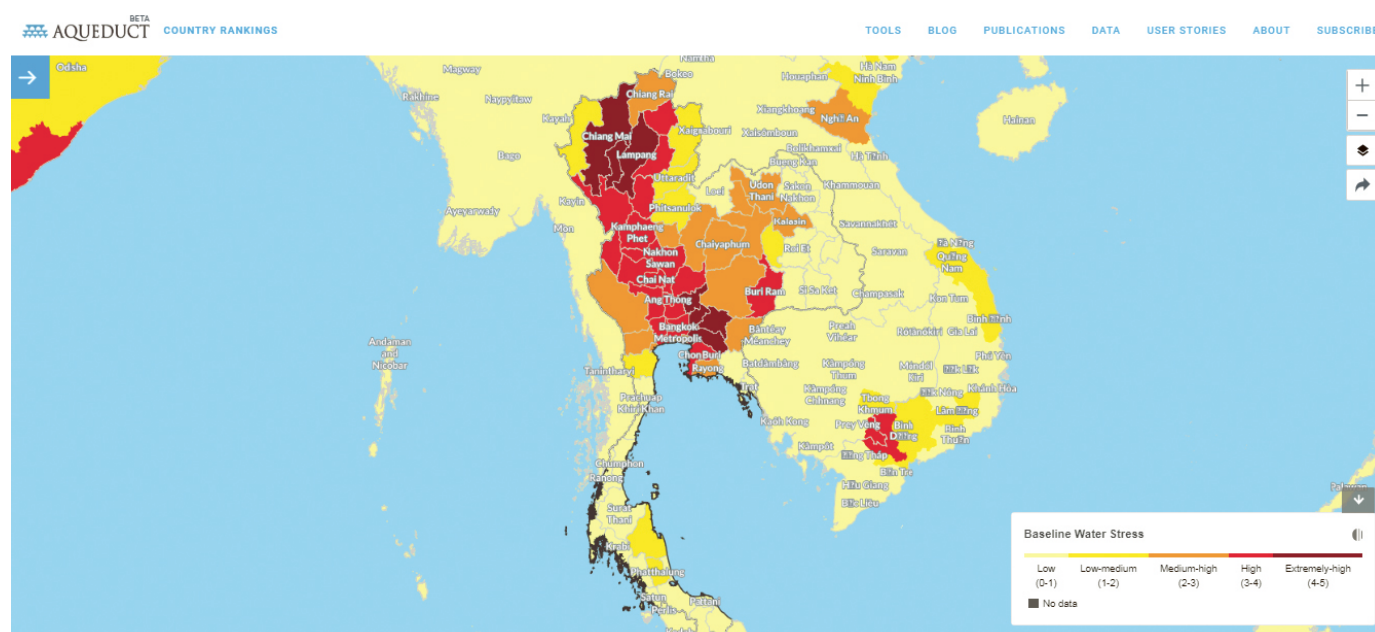
Water Stewardship

Water is essential to continuity in the integrated agro-industrial and food business. In addition, CPF recognizes that drought has become more severe and more frequent recently. We, therefore, put emphasis on selecting operations based on risk management of basic utilities together with enhancing and developing effective water consumption.

Water Scarcity Risk Assessment and Management

In 2019, CPF assessed water scarcity risks by the Aqueduct Water Risk Atlas 3.0 developed by the World Resources Institute (WRI). We found that 53% of our operations in Thailand are located in water stress areas³ where water withdrawal accounts for 28% of our total water withdrawal. For our business partners whose operational processes depend on high water demand, 14% of their operations are located in water stress areas.

Water Risk Map in Thailand⁴



³ Areas where the total annual water withdrawal to the total available annual renewable water supply equals to 40% and above according to the requirement of GRI.

⁴ Aqueduct Country Ranking

Information for Water Scarcity Risk Assessment at the CPF Operational Level



Management Approach of Water Scarcity Risk Assessment at the CPF Operational Level



Additionally, CPF engaged with the surrounding communities to listen to their concerns regarding water consumption. Staff members were allocated to visit the communities to provide knowledge and to support suppliers in setting up a water scarcity risk response plan. All of these efforts not only reduce the operational risks of both CPF and our suppliers, but also reduce impacts that may occur to the surrounding communities when water is scarce, which could happen at present or in the future.

Water Consumption throughout the Production Process based on the Circular Economy Principle

Water Treatment Technology



Bang Sakao and Roi Phet shrimp farms have applied the bio-floc system. The bio-floc is a group of microbes capable of treating nitrogen solution produced from shrimp manure. The system reduces the need to change water in shrimp ponds, leading to 70% reduction of water consumption, compared to the conventional shrimp farming. Moreover, more than 90% of recycled water from the water treatment process is filtered by the Ultra Filtration (UF) technology to refill shrimp ponds.

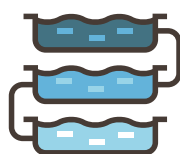
The Nong Chok ready-to-eat food production plant uses the UF and Reverse Osmosis (RO) to filter water from the water treatment process and reuses such water in evaporators in the cooling system. This process saved 216,000 cubic meters (m³) of fresh water per year and reduced the operation cost by 1.7 million Baht per year.

Water Recycle






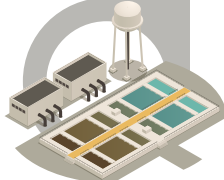
Our feed, livestock farming and food businesses recycle treated water in our non-production activities for purposes such as watering plants, washing road floors and washing animal housing. This has reduced the amount of water withdrawal from external water sources by 30 million m³, or 21% of total water withdrawal.

Sharing Water to Communities



Our swine farming business shares bio-fertilizers from treated water from biogas generating process to surrounding communities through the "Sharing Bio-Fertilizer Water" Project according to the circular economy principle. The shared bio-fertilizer accounts for 447,000 m³, covering agricultural areas of 3,650 rai (564 hectares) of 100 farmers. The Project benefits communities by reducing cultivation cost, relieving drought and building stability, together with sustainably building relationship between CPF and communities.

Our commitment in water management throughout our value chain together with our approaches we use led to the reduction of water withdrawal by 5% in 2019, compared to the year 2018. Such approaches include reshaping the structure and production plan in the aquaculture business by reducing aquaculture farms to optimize efficiency in terms of productivity and resource consumption. We have also been attempting to control aquaculture diseases by optimizing the water preparation system efficiency in order to facilitate in the use of recycled water in our aquaculture business.

<p>Target 2025 (Thailand):</p> <p>30%</p>  <p>of water withdrawal per production unit to be reduced compared to the base year 2015.</p>	<p>Performance in 2019:</p> <p>36%</p>  <p>of water withdrawal per production unit was reduced compared to the base year 2015.</p>
<p>The amount of water withdrawal reduced by</p> <p>9 million m³</p>  <p>or reduced by 6% compared to the year 2018</p>	<p>The amount of recycled water was</p> <p>30 million m³</p>  <p>or equal to 21% of total water withdrawal</p>



Details are available at www.cpfworldwide.com under "Sustainability" topic: "Water Stewardship"



Roiphret Farm, Trat Province

Collaborating with Communities to Manage Water Resources

The problem of continuously natural resources depletion has direct and indirect effects to all sectors especially the problem of insufficient amount of fresh water. Based upon the belief that every people has the rights to access clean, safe and hygienic water sources as water is one of the factors for living. Thus, CPF integrated the preventive measures of water resources management together with the communities in order to strengthen relationship with the communities and other stakeholders.

“Water for Life Project” in India

India has facing extremely high water scarcity risk⁵. It was estimated that more than 40 percent of the population, approximately 600 million people, might not have access to potable water in 2030⁶. Recognizing this risk, our aquaculture business in India initiated the “Water for Life Project”



Aquaculture Business in India

Conducted a survey on the needs of communities surrounding the operations.



Water sources for consumption are far away. Surface water and groundwater have high levels of salt and hardness, and might be contaminated.

Problem:



Impact:

Communities

17 villages in 4 districts are facing extreme water stress.

Schools

21 schools did not have clean potable water for students.



Solution:

4 Reverse Osmosis (RO) water plants have been built in the 4 districts.

21 RO water filters have been installed in the 21 schools.



Result:

17,000 community members in 4,250 households have access to clean water.

2,180 students have access to clean potable water.

⁵ Aqueduct: World Resource Institute (WRI), 2019

⁶ Composite Water Management Index: The National Institution for Transforming India (NITI Aayog), 2018



“Before this, after playing with friends at school, we felt tired because the school had no clean potable water. After having the RO water filter, my friends and I can drink clean water after we play!”

Ravi
Grade 4 student in a public school
in Attanthangal Village, Tamil Nadu State




“Water in the village was salty and low quality. I had to walk more than 6 kilometers to get clean potable water. It was very tiring to have to do that every day. After CPF India built the RO water plant in the village where I live, it helped me and my family access clean water from nearby. I feel thankful for CPF India for taking care of people in the village.”

Valarmathy
Villager at Annavaram Village,
Rajahmundry City, Andhra Pradesh State




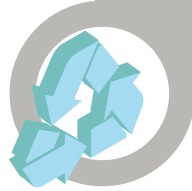


Waste Management

CPF has applied the circular economy principle in waste management in order to reduce waste in production process while optimizing the use of resources. We aim to reduce and add value to waste using the following approaches;

 <p>Producing compost or soil amendment</p>	<p>using animal manure, chicken cage flooring materials, sludge from water treatment process, egg shells, organic waste, etc.</p>
 <p>Feeding animals</p>	<p>using chicken carcasses, offal, feather, etc.</p>
 <p>Recovering waste to energy</p>	<p>using animal manure to produce biogas, using used vegetable oil to produce biodiesel</p>

In 2019, at the Nong Chok, the Padriew, and the Saraburi ready-to-eat food production plants, sludge from the water treatment process was used as soil amendment leading to the reduction of 2,000 tons of waste per year and the reduction of 900,000 baht of production cost per year. Moreover, the result of biomass energy promotion, such as using fire wood and scrap wood as steam broiler fuels in the feed business where the ash from the process can be used to produce fertilizers or soil amendment, led to the reduction of waste disposal to landfill and incineration. Such reduction also resulted from total generated waste apart from organic waste in the broiler business being incinerated to recover the heat energy instead of being dumped to landfill. Consequently, waste disposal to landfill and incineration reduced by 23% in 2019, compared to the year 2018.

<p>Target 2025 (Thailand):</p> <p>35%</p>  <p>of waste disposal to landfill and incineration per production unit to be reduced compared to the base year 2015.</p>	<p>Performance in 2019:</p> <p>41%</p>  <p>of waste disposal to landfill and incineration per production unit was reduced compared to the base year 2015.</p>
<p>The amount of waste disposal to landfill and incineration was</p> <p>19,900 tons</p>  <p>(or equal to 2% of total waste)</p>	<p>The amount of waste recovery was</p> <p>898,600 tons</p>  <p>(or equal to 98% of total waste)</p>



Sustainable Products

CPF continuously focuses on developing green and sustainable products. This is to deliver product value through our food products and to play a part in the stimulation of the growth of the green product market. Our green products are the products with the following labels:



Carbon Footprint Label



Carbon Footprint Reduction Label

From the Thailand Greenhouse Gas Management Organization (Public Organization) (TGO)



Water Footprint Label
in accordance with ISO 14046

From the Federation of Thai Industries

Target 2020
(Thailand):

30%

of revenue in Thailand operations to be from the green products (CPF Green Revenue).



Performance
in 2019:

25% (43,290 million Baht)

of revenue in Thailand operations was from the green products.



The number of products certified with Carbon Footprint Label, Carbon Footprint Reduction Label, and Water Footprint Label from livestock feed products, fresh chicken products, tender chicken breast products, fresh duck products, and frozen cooked duck products are

770 products



CPF is the first company in Thailand whose duck products are certified with Carbon Footprint Label, and Carbon Footprint Reduction Label.



Biodiversity

Commitment: Protect and restore biodiversity

Details of the management approach are available at www.cpfworldwide.com under "Sustainability" topic: "Biodiversity"

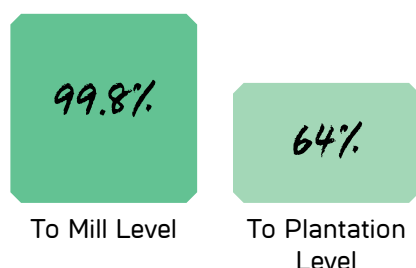


Responsible Sourcing of Agricultural Raw Materials

CPF supports legal key agricultural raw material plantations with title deed and sources that are traceable. For marine raw materials, we purchase only from sources with clear origins and do not source species that are vulnerable⁷. Ultimately, we conduct our sourcing activities to ensure sustainability of natural resources which are the foundation of our agro-industrial and food conglomerate.

Progress in sourcing our five key raw materials for Thailand operations, namely corn, fishmeal, soybean meal, palm oil and cassava are from responsible and traceable sources by 2020.

2019 Traceability Performance in Thailand



In line with our "no forest encroachment, no burning, we buy"

corn purchasing principle, we source **100%** of our **corn** from legal crop plantations with title deed for animal feed business in Thailand operations.



100% of **fishmeal** for animal feed business in Thailand operations is made from by-products of processing plants that are:

- ✓ Certified by the IFFO RS or IFFO RS IP,
- ✓ or Not by-products from vulnerable species as defined in the IUCN (World Conservation Union) Red List,
- ✓ And traceable to the sources.



Read more details on our efforts to promote sustainable fishmeal sourcing in "Showcase: Sustainable Development at the Sources of Raw Materials Used for Aquatic Animal Feed and Capacity Building to Advance Fishmeal Supplier Practices towards the IFFO RS" and the CPF Fishmeal Sourcing Restrictions here.



⁷ CPF does not use by-products of vulnerable species, as defined in the International Union for Conservation of Nature (IUCN) Red List

100% of *soybean* meal used in the animal feed business in Thailand operations can be traced back to its sources of production⁸



84% of *palm oil* used in the food business in Thailand operations comes from sources certified by the Roundtable for Sustainable Palm Oil (RSPO).



100% of palm oil used in the animal feed business in Thailand operations can be traced back to its sources of production and small collectors⁹

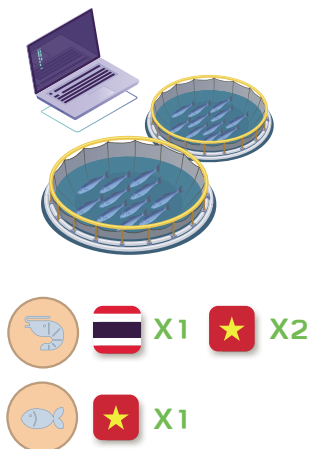


100% of *cassava* used in the animal feed business in Thailand operations can be traced back to sources of production and small collectors¹⁰

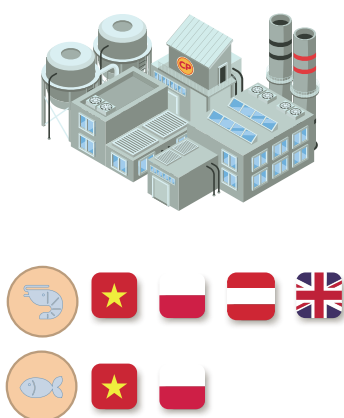
Standards for Farms, Suppliers and Sustainable Seafood Products

Additionally, CPF considers the application of internationally recognized seafood production standards in our farms, suppliers and products which have been produced with responsibility towards society and the environment, to deliver to customers and consumers. The **Aquaculture Stewardship Council (ASC Certification)** is one such standard that we use to develop our seafood supply chain towards sustainability and traceability, so that we can trace back to production, procurement, and aquaculture farms of certified products.

Farms



Suppliers



Products



⁸ The source of production refers to soybean meal producers.

⁹ The source of production refers to palm oil producers.

¹⁰ The source of production refers to cassava producers or processors.

Promoting Sustainable Agriculture

With the target to source responsible and traceable key agricultural raw materials, CPF has also promoted and shared knowledge about environmentally-friendly agriculture to farmers. This helps to protect biodiversity by reducing negative impacts from our supply chain at the farmers' plantations.

Exchanging Knowledge of Soil Analysis, Fertilizer Mixing and Eliminating Fall Armyworms with Thai Farmers

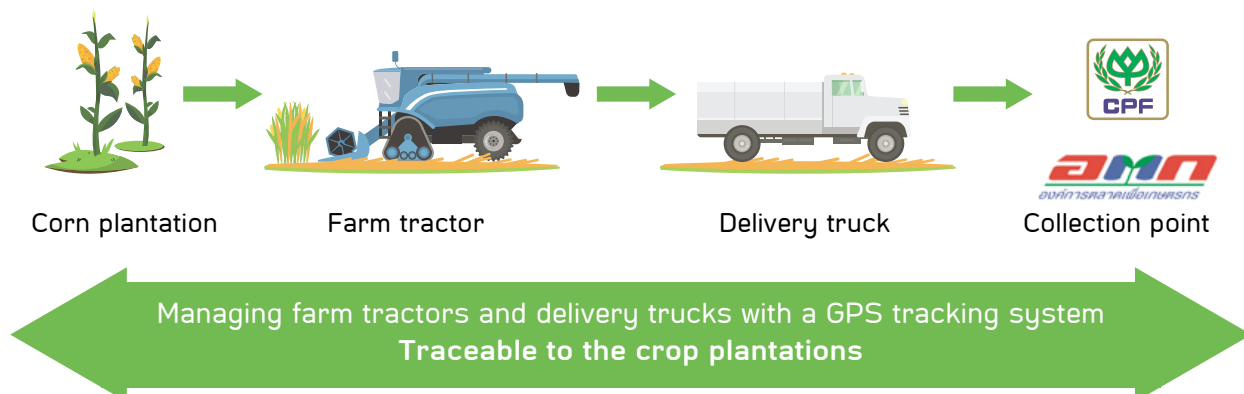
Following the promotion of knowledge of sustainable and environmentally-friendly agriculture under the **"Self-Sufficient Farmers, Sustainable Corn"** Project, in 2019, for the fifth consecutive year, CPF has conducted site visits to train farmers in cultivation methods to deliver good and quality yields that meet the standards of the Thai Agricultural Standard TAS4402-2010. We sent our experts to analyze soil in the farming areas for the farmers, free of charge. We also organized a training session for farmers which covered soil analysis, use of inspection tools and recommendations for making tailor-made fertilizer blends and fertilizer formula, so that farmers can apply this knowledge in their work. We also exchanged knowledge of fall armyworm elimination methods to combat fall armyworm outbreaks in plantations, which could result in crop damage throughout the cultivation. The fall armyworm outbreak in Thailand started at around the end of 2018 and has created severe impacts on the national agricultural produce.



Harvesting and Logistics Management through the "CPF Logistics" System

In order to connect to the corn traceability system which allows CPF to track the status of the produce from plantations to animal feed manufacturing plants and to aspires to bring new technologies to facilitate smallholder farmers in accessing farm tractor and delivery truck services, we have developed the "CPF Logistics" system that functions as a platform for users to book farm tractors and delivery trucks when needed. At the same time, the system ensures farm tractor and delivery truck owners that they have customers, allowing these owners to plan their services with more efficiency.

Piloting a System to Manage Harvesting and Logistics



Showcase: Promoting Sustainable Agriculture among Animal Feed Corn Farmers



The demand for corn for animal feed production in Thailand has resulted in some inappropriate farming practices e.g. using excessive/inappropriate fertilizers or using pesticides thus leading to water contamination, or post-harvest burning of corn husks to reduce short-term cost leading to the current haze problems. Recognizing these problems, CPF has been promoting sustainable agricultural practices among animal feed corn farmers. Since 2015, we have been applying the Good Agricultural Practices (GAP) standard to encourage elimination of post-harvest burning of corn husks in order to mitigate the current haze problems. We have also applied the corn purchasing principle of “no forest encroachment, no burning, we buy” since 2016.

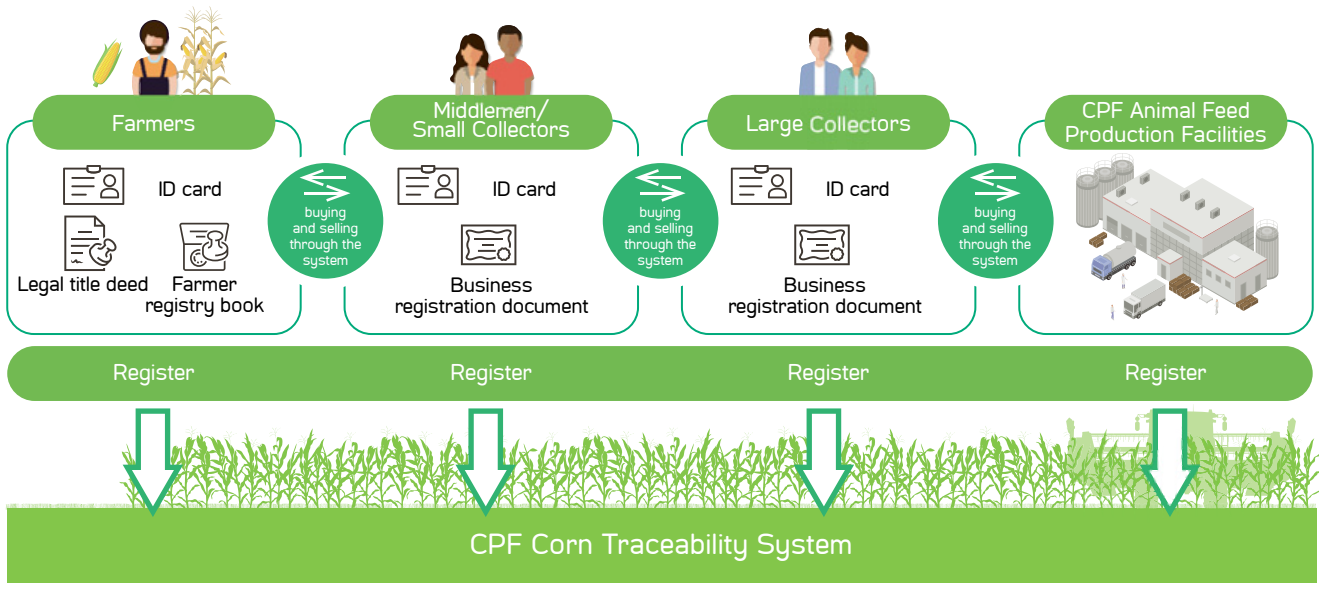
Since 2015, CPF has continuously promoted farming knowledge and skills based on the Thai Agricultural Standard-TAS 4402-2010 - Good Agricultural Practices for Maize which can be applied to soil analysis, proper fertilizer use, and correct use of chemicals and communicated to farmers through the “Self-Sufficient Farmers, Sustainable Corn Project.” The Project aimed to share the knowledge in sustainable corn plantation to smallholder farmers covering an area of 225,000 rai (36,000 hectares) by 2019. We also supported our corn business partners in sourcing corn grown on land with legal title deed with no forest encroachment and can be 100% traced by GPS. These are the criteria that we use to allow corn business partners to register on our Corn Traceability system before selling the produce to us.



Details of the management approach are available at www.cpfworldwide.com under “Sustainability” topic: “Biodiversity”



Corn for Animal Feed Traceability System



2019 Performance

CPF promoted sustainable agriculture to **9,449** smallholder farmers

As of 2019, a cumulative area of **239,000** rai, covered

100% of corn for animal feed sourced through the Corn Traceability system



We aim to find quality production sources of agricultural produce along with the development of efficient agricultural systems and focus on value promotion throughout our supply chain. We source our raw materials with regard to environmentally friendly production through traceability processes. As a good corporate citizenship, we want to be a part to create a well-being society based on appropriate development of social, economic, and environmental dimensions.



Mr. Paisarn Kruawongvanich

Deputy Chief Executive Officer of Bangkok Produce Merchandising PLC. (BKP)*

*Supplier of animal feed raw material to CPF

Conserving, Protecting, and Restoring Land and Marine Biodiversity



The CPF Grow-Share-Protect Mangrove Forestation Project

Restoring mangrove forests, reviving marine animals

Our efforts to conserve and restore mangrove forests since 2014 in five provinces covering the area of 2,388 rai (382 hectares) have resulted in the abundance of mangrove ecosystems that serve as the nurseries for marine lives. This has brought back marine animals to the area and thus allowed the surrounding communities to utilize the restored natural resources. From the story by fishermen in the Bang Ya Praek community in Samutsakhon Province, they saw oriental angel's wings which have not been seen for more than a decade while also witnessing the increase of other marine lives including cockles, mullets, fiddler crabs and sesarma crabs.



“

This area is used to be called 'Cockle Sandbar', but in the past ten years, we could hardly find cockles around here. After the mangrove forest area has been expanded, some marine animals which previously disappeared including cockles can now be found in the area. For one fishing trip, I can now get 5-10 kilos of cockles, and about 10 kilos of mullets (from 4-5 kilos in the past). Sometimes, I even get 40 Indo-Pacific horseshoe crabs in a day. Before 2014, push-net vessels and trawlers had to go further in the sea to catch shrimp, shellfish, crabs and fish, but now they can do that in the new mangrove forest area which is closer. Our income has obviously increased between 2018 and this year.

”

Mr. Chalernsak Chinchamnan

Profession: Nearshore fisherman at Bang Ya Praek Community, Samutsakhon Province

Income: Before 2018, average 1,000-2,000 Baht per month. At present, average 3,000-4,000 Baht per month.



Sesarma Crabs



Oriental Angel's Wings



“

I have been in this profession since I was 20 years old. Mostly I find Sesarma crabs. Previously I could only catch 3-4 kilos but during these past 2-3 years, I think I got more than that. Some days I could get 10 kilos. About 2-3 days ago I also caught 4 kilos of oriental angel's wings and I sold them at 200-250 Baht per kg. They make sun-dried oriental angel's wings which can be sold at 1,500 Baht per kg. It's quite strange as they already disappeared for many years. But I would mostly just catch Sesarma crabs as I am better at it. I think the reason the number of crabs increased could be linked to the increase in forest areas. Crabs eat leaves from Avicennia trees and live around them. If we increase the forest area, I will have a place to continue my profession for a long time. If there is no forest, I don't know what I would do because I have been doing this for so long.

”

Mr. Tone Inkrub

Profession: Nearshore fisherman at Bang Ya Praek Community, Samutsakhon Province

Income: Before 2018, average 200-300 Baht per day. At present, average 400-500 Baht per day.

Restoring Mangrove Forest towards Becoming Community-Led Ecotourism Destination

In addition, the two communities in the project namely, the Pak Nam Prasae Community in Rayong Province and the Bang Ya Praek Community in Samutsakhon Province, since 2018, have further developed the restored mangrove forest into a destination for community-led ecotourism, helping generate income for the communities with the value of 1,130,000 Baht and 330,000 Baht, respectively. Moreover, the Pak Nam Prasae Community in Rayong Province has also developed integrated tourism that aligns with the local culture and community way of life, focusing on ecotourism that creates minimal impacts to the ecosystem by banning the use of plastic containers during the tours and replacing them with containers made from Betel nut leaves which are considered waste in the community. The Community further developed a community enterprise selling containers made from Betel nut leaves, thus generating extra income for the community.





The CPF Rak Ni-Ves, Pasak Watershed, Khao Phraya Doen Tong Project

Conserving Forest, Conserving Habitat for Wildlife

Since 2016, CPF in collaboration with the Royal Forest Department and communities surrounding the Khao Phraya Doen Tong, where is a watershed forest of Pasak River, has conserved, restored, and reforested the area around Khao Phraya Doen Tong in Phatthana Nikhom Sub District, Phatthana Nikhom District, Lopburi Province covering the area of 5,971 rai (955 hectares). The Project has transformed the arid land into greenery with many species of plants, revitalizing the nature. Restoring forest resources has not only revived the forest area, but has also resulted in increasing diversity of wild animals as they also contribute to the forest restoration directly and indirectly. The diversity of wild animals can be used as one of the indicators reflecting the success of the ecosystem development. In 2018, CPF collaborated with the Faculty of Forestry, Kasetsart University to study the biodiversity in the project area. The study results will be used as baseline data for wildlife biodiversity at Khao Phraya Doen Tong. This year, in order to confirm the number of species found through the discovery of footprints and feces from such a baseline, camera traps have been used to observe and monitor the animals at Khao Phraya Doen Tong. The photos taken have helped confirm that foxes, which are the protected wildlife, are present at the restoration area. In addition, we also found pine buntings which are native to the northern part of Siberia, migrating to the project area during winter. This was the first discovery in Thailand and Southeast Asia. We plan to monitor the population of wildlife every year by camera trap and to survey the biodiversity of wildlife in order to compare with its baseline in 2018.



Photo of a fox taken by a camera trap



Photo of a pine bunting that was first found in the project area at Khao Phraya Doen Tong

Number of Species of Wildlife according to the IUCN Red List Found in Project Area at Khao Phraya Doen Tong from the Baseline Survey in 2018

0	0	0	0	148
Critically endangered	Endangered	Vulnerable	Near Threatened	Least Concern
CR	EN	VU	NT	LC

Conserving Forests, Creating Happiness

Moreover, to create the continuation and sustainability of forest and natural resources conservation, we launched the “Creation of Happiness for Communities at Khao Phraya Doen Tong Project” to engage communities in forest conservation and promote living in harmony with the forest. The Project brought 40 villagers in total to learn about reforestation innovation at Khao Phraya Doen Tong to create awareness on conservation for abundance of forest, aiming for them to spread the awareness to the generations that follow. Participants were from five villages namely, Moo 3 and 4 of Ban Huay Bong in Phatthana Nikhom Sub District, Moo 4, 9, and 11 in Khok Salung Sub District, and the Thai Berng which are the local people dwelling around Pasak Watershed in Phatthana Nikhom District. We also promoted organic vegetable farming among these communities in order to help enhance the well-being of people in the communities.



2,388 rai (382 hectares)
of mangrove forests were
conserved, protected,
and restored



1,460,000 Baht
generated from community-
led ecotourism as income for the
community

5,971 rai (955 hectares)
of forest areas at Khao Phraya
Doen Tong were conserved,
protected, and restored



39,690 tons of CO₂e per year
sequestered from forest conversation,
protection and restoration

1,720 rai (275 hectares)
of Green areas in CPF's
factories and farms

25 operations receiving
“LESS” certification¹¹ from TGO¹²

¹¹ Low Emission Support Scheme: LESS

¹² Thailand Greenhouse Gas Management Organization (Public Organization) (TGO)

About this Report



Choroen Pokphand Foods Public Company Limited, also known as CPF, has continuously prepared our sustainability report since 2011, to communicate of CPF's activities to stakeholders our commitment to conducting business towards sustainability, as well as economic, social and environmental impacts.

Reporting Period:

Accounting Period of 2019, from 1 January to 31 December 2019

Reporting Framework:

This report has been prepared in accordance with the GRI Standards: Core option and additional disclosure guideline for Food Processing Sector Supplement (FPSS). In addition, this report includes a Communication on Progress (COP) at the Advanced level in compliance with United Nations Global Compact (UN Global Compact), as well as climate-related performance of the business using the Recommendation of the Task Force on Climate-Related Financial Disclosures (TCFD). We also take into consideration the Sustainable Development Goals (SDGs) when operating our business.

Reporting Frequency:

Annually

Third Party Assurance:

This report has been prepared in accordance with the GRI Standards: Core option, which is also subject to independent third-party assurance by Lloyd Register's Quality Assurance Ltd., (LRQA) according to our policy. The assurance also covers environmental, and occupational health and safety performance. The financial performance is reviewed by KPMG Poomchai Audit Ltd., and details are shown in the Auditor's Report in the 2019 Annual Report.

Reporting Scope:

The sustainability report 2019 covers performance of CPF and subsidiaries in Thailand as displayed in page 106.

Contact Point:

For additional information or inquiries on this report, please contact us at:

Office of Corporate Social Responsibility and Sustainable Development

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Website: www.cpfworldwide.com

Companies within the Scope of this Sustainability Report 2019

Business/Company	Environmental Performance				Social Performance	
	GHG Emissions	Energy	Water	Waste	Occupational Health and Safety	Human Resources
1. Charoen Pokphand Foods PCL.	●	●	●	●	●	●
2. CPF Thailand PCL.	●	●	●	●	●	●
3. International Pet Food Co., Ltd.	●	●	●	●	●	●
4. CPF Food and Beverage Co., Ltd.	●	●	●	●	●	●
5. CPF Restaurant and Food Chain Co., Ltd.	●	●	●	●	●	●
6. Bangkok Produce Merchandising PCL.	-	-	-	-	-	●
7. Chester's Food Co., Ltd.	●	●	●	●	●	●
8. CPF Trading Co., Ltd	●	●	●	●	●	●
9. CP Merchandising Co., Ltd.	-	-	-	-	-	●
10. CPF Training Center Co., Ltd.	-	-	-	-	-	●
11. CPF IT Center Co., Ltd.	-	-	-	-	-	●
12. CPF Food Research & Development Center Co., Ltd.	-	-	-	-	-	●
13. CP HiLai Harbour Co. Ltd.	-	-	-	-	-	●

Remarks:

- Economic performance and its reporting boundary can be found in CPF's Annual Report. This report only presents, on page 10, parts of the summarized information.
- Environmental, and Occupational Health and Safety performance covers all production plants, as well as some of the retail and food outlet businesses including Five Star, Chester's and CP Fresh Mart but excluding headquarters, offices, CP Kitchen and CP Food World.

The report and additional documents as follows:

- In year 2016 - 2019, Performances of
 - Human Resources
 - Occupational Health and Safety
 - Environment
- GRI Content Index
- Communication on Progress - UN Global Compact
- Assurance Statement

The documents are available at:
www.cpfworldwide.com under "Sustainability"
 Topic: "Sustainability Report"





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Heart
into **Food**



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To make this report environmentally friendly, this report is printed with soy ink and on responsible sourced paper.



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