PUT OUR HEART INTO FOOD
CPF is dedicated to creating innovation on quality products with safe standards to ensure food security for consumers globally on the basis of mutual sustainability.
Charoen Pokphand Foods Public Company Limited or "CPF" has developed an integrated agro-industrial and food business, including livestock and aquaculture i.e., swine, broilers, layers, ducks, shrimps, and fish. The businesses are categorized into 3 categories, namely Feed, Farm and Processing, and Food Businesses. In addition, we operate Food Retail Outlets. Its 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 supply chain, and are friendly to the communities and environment. Moreover, the Company develops a win-win partnership with its business partners for sustainable mutual growth.
Our Business

CPF has developed an integrated agro-industrial and food business, which can be divided into 3 categories:

1. **Feed Business**
   Includes animal feed production and distribution.

2. **Farm and Process Business**
   Includes animal breeding, commercial animal farming and basic meat processing.

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 corporate governance.

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

**Thailand Operations:**
conducting integrated agro-industrial and food businesses to distribute products in Thailand, and export meat, processed meat and ready-to-eat products to 40 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 (includes Taiwan), Vietnam, United Kingdom, India, United States, Cambodia, Russia, Turkey, Philippines, Malaysia, Laos, Belgium, Sri Lanka, Poland, Brazil and Canada.

CPF operates in 17 countries; includes associates and joint ventures, exports to more than 40 countries across 5 continents.
2020 Highlights

CPF creates sustainable value for stakeholders.

### Economic Aspect

<table>
<thead>
<tr>
<th>Sales revenue</th>
<th>Dividend paid to shareholders</th>
<th>Income tax paid</th>
</tr>
</thead>
<tbody>
<tr>
<td>589,713 million THB</td>
<td>8,461 million THB</td>
<td>9,038 million THB</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Research and development expenses</th>
<th>Products promoting nutrition, health and wellness</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,243 million THB</td>
<td>35%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>An average number of hours employee training and development (Thailand)</th>
<th>Employee compensation and benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>39 hours per person per year</td>
<td>61,654 million THB</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Employee engagement (Thailand)</th>
<th>Social support activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>71%</td>
<td>602.3 million THB</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Direct and indirect greenhouse gas emissions intensity was reduced for 9% compared to base year 2015</th>
<th>Use of renewable energy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water withdrawal for production was reduced due to water reuse and recycle for 60 million cubic meters</td>
<td>26%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Trees planted in our operations removed over 5,960 tons CO₂</th>
<th>True value of social and environmental impact from CPF Grow-Share-Protect Mangrove Forestation Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.4 million THB</td>
<td>1,418,000 tons CO₂e</td>
</tr>
</tbody>
</table>

### Social Aspect

<table>
<thead>
<tr>
<th>Lost time injury frequency rate of employees</th>
<th>From products being granted carbon footprint reduction labels by</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.39 cases per 200,000 man hours</td>
<td>1,418,000 tons CO₂e</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The procurement budget of the Thailand operations was spent on local supplier 92%</th>
<th>The True value of social and environmental impact from CPF Grow-Share-Protect Mangrove Forestation Project was 7.4 million THB</th>
</tr>
</thead>
</table>

### Environmental Aspect

<table>
<thead>
<tr>
<th>Direct and indirect greenhouse gas emissions intensity was reduced for 9% compared to base year 2015</th>
<th>Use of renewable energy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water withdrawal for production was reduced due to water reuse and recycle for 60 million cubic meters</td>
<td>26%</td>
</tr>
</tbody>
</table>

### Awards and Recognition

**Member of Dow Jones Sustainability Indices**

- Continuously listed as a member of the Dow Jones Sustainability Index in the Food Products (FOA) Industry since 2015, and received the SAM Silver Class distinction, as reported in the Sustainability Yearbook 2021 by S&P Dow Jones Indices.

**Sustainability Award**

- Silver Class 2021
- Received the ASEAN Asset Class PLCs Award 2020 for adhering to good corporate governance from ASEAN CG Scorecard supported by ASEAN Capital Markets Forum (ACMF) and Asian Development Bank (ADB).

**C.P. Vietnam**

- Received a certificate for being one of the Top 100 Sustainable Businesses in Vietnam for the third consecutive year. In 2020, with its outstanding sustainable performance, C.P. Vietnam was recognised as one among Top 10 sustainable companies in the manufacturing by the Vietnam Business Council for Sustainable Development (VBCSD).

**C.P. Vietnam**

- Received the “Asia’s Best CEO” Award, “Asia’s Best CFO” Award, “Asia’s Best CSR” Award, “Best Investor Relations Company” Award and “Best Investor Relations Professional” Award in the 10th Asian Excellence Award 2020 by Corporate Governance Asia Magazine.
Message from the Executives

2020 was the year in which the world faced a wide array of challenges such as wild fires that had raged the Amazon rainforest, and North America; major bushfires in Australia; the highest number of cyclones ever reported since 2005; and the outbreak of coronavirus disease or COVID-19 which has caused a huge impact on the World population, society and environment and led to the new normal society, global unemployment and economic downturn. These crises are litmus tests for corporate sustainability strategies assessing whether companies are able to cope with the situations and carry on businesses continuously and sustainably.

CPF provided food to people living in 100 slum communities in Bangkok and other provinces. Additionally, CPF conducted similar activities in the countries in which CPF has invested or in which CPF trade offices are located such as Vietnam, Cambodia, Laos, Philippines, Turkey, the United States of America, and Russia. At the same time, CPF has also responded to the government’s policy in driving the Thai economy, implementing the policy of hiring new graduates to fill thousands of positions. This reduces unemployment and creates important mechanisms for the future development of the country.

CPF has therefore raised disease prevention measures to the highest level to avoid interruptions in production and work processes, including paying close attention to employee hygiene to ensure work safety. Since social assistance is deemed urgent, CPF in collaboration with the Ministry of Public Health delivered food to 200 hospitals across the country to provide support for medical personnel and 20,000 families, including millions of village health volunteers (VHV) to keep their morale high while caring for patients. Moreover, CPF also provided food to 30,000 people who had been monitored after returning from abroad. In collaboration with the Ministry of Agriculture and Cooperatives, CPF provided food to people living in 100 slum communities in Bangkok and other provinces. Additionally, CPF conducted similar activities in the countries in which CPF has invested or in which CPF trade offices are located such as Vietnam, Cambodia, Laos, Philippines, Turkey, the United States of America, and Russia. At the same time, CPF has also responded to the government’s policy in driving the Thai economy, implementing the policy of hiring new graduates to fill thousands of positions. This reduces unemployment and creates important mechanisms for the future development of the country.
Due to lockdown measures during the outbreak of COVID-19, people had to stay home which resulted in an increase in plastic waste from food delivery. CPF has joined Thailand Responsible Business Network (TRBN)’s “Send Plastic Home” project and initiated a drop point for plastic waste collection and recycling. In addition to reducing packaging in the production processes according to the Sustainable Packaging Policy, CPF has promoted reduction of single-use plastic as well by creating campaigns to provide knowledge to employees on how to clean and separate plastic waste based on the principles of 4Rs: Reduce; Reuse; Recycle; and Rethink. Although the rapid spread of COVID-19 has resulted in reduction of greenhouse gas emissions, it is just temporary climate change remains an urgent global agenda. Thus, CPF is committed to taking part in tackling climate change by adopting Circular Economy for resources management to ensure maximum efficiency and benefits. This includes the use of alternative forms of energy such as biogas, solar power and biomass from agricultural waste, and most efficient power and water consumption. CPF also sets energy management plans and water management plans to be implemented in areas that are at risk of water shortages and seeks new approaches to reducing excess food and food waste in the business processes. In addition, CPF has placed importance on protection and restoration of mangrove forests and watershed forests, all of which are the country’s significant resource bases that contribute to food security for all.

Recognizing that the right innovations can truly enhance sustainability, in 2020, CPF therefore launched "Cheeva Pork", a healthy innovation under the U-Farm brand. We have developed pigs by selecting breeds and using special grain-based feed to obtain high quality pork containing 2.5 times higher volumes of good fat and omega 3 compared to conventional pork. Following correct farming methods in accordance with animal welfare principles, healthy pigs are raised without antibiotic (RWA), as approved by the NSF, a leading international food safety organisation. Consumers then can be confident in safety and nutritional values. Cheeva Pork was also awarded "The Ultimate Food Innovation" at the world food fair THAIFEX-Anuga Asia 2020.

With regard to implementations of projects in cooperation domestically and internationally with external stakeholders, government sectors, sustainability networks and civil society sectors, this year marked another CPF milestone as one among members of the SeaBOS (Seafood Business for Ocean Stewardship) group, which comprises 10 largest seafood companies in the world who share a common goal of producing sustainable seafood and protecting the oceans. The group member companies jointly set the following common goals: 1) no illegal fishing nor use of forced labour in the group member companies’ operations by October 2021; and 2) to report progresses of activities in accordance with the common goals of eliminating illegal fishing and use of forced labour in the seafood supply chain in October 2022 and 2025.

As a result of our commitment in 2020 to driving the businesses according to sustainable development principles based on good corporate governance and the basic level of respect for human rights, CPF has been continuously listed as the member of the Dow Jones Sustainability Index: Emerging Markets for six consecutive years and as the member of the FTSE4Good Emerging Index for four consecutive years. CPF was also listed in the Thailand Sustainability Investment (THSI) 2020 by the Stock Exchange of Thailand and was number 248 in the world and number 1 in Thailand in Best Employer 2020 by "Forbes" based on CPF’s outstanding performance on employee care during the outbreak of COVID-19 and participation in food security for Thai and foreign societies.

CPF has placed emphasis on reviewing sustainability strategy to ensure its consistency with the changing world situation, and is committed to supporting the United Nations Sustainable Development Goals (UN SDGs), while preparing for unforeseen challenges, climate change, health concerns and food safety issues. Therefore, CPF has adopted various production technologies and digital management systems to improve management speed, to develop products to meet consumers' nutritional requirements according to the global standards, and to produce foods to achieve food security, with essential nutrients and affordable prices. This is also in parallel with balancing economic, social and environmental developments on the basis of our “Three-Benefits” principle (benefits to the country, the people, and the Company) that we have adhered to as the business philosophy. All of this helps reinforce CPF’s commitment to upholding sustainability leadership as the leading integrated agro-industrial and food company.

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 organisations, the public sector and all other related parties for their parts in continuingly inspiring, developing and supporting our journey in sustainable growth and in our commitment to increasing economic value, creating social value and restoring balance in nature. We pledge that we shall conduct our businesses on good governance principles, with consideration towards social and environmental balance. We shall remain a sustainable organisation and continue to stand with our country and citizens, while fulfilling our role as the “Kitchen of the World”.

"Cheeva Pork"
CPF has integrated Sustainable Development Goals (SDGs) into our sustainability practices based on the three pillars of our sustainability strategies: Food Security, Self-Sufficient Society, and Balance of Nature. We directly support 13 out of 17 SDGs, which CPF has added two more goals to those set last year, namely Goal 1: to eradicate poverty and Goal 9: innovation and good infrastructure, all of which are in line with CPF’s capacity and potential in making strides in implementing the sustainable development without leaving anyone behind.

The integration of SDGs into our sustainability strategies 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 material 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.

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 2020 Sustainability Performance to Support the United Nations’ Sustainable Development Goals (SDGs)

#### PEOPLE: Improving Quality of Life
- Employment prospect and quality of life of 51,234 smallholder farmers, small entrepreneurs, and vulnerable groups were improved.
- 1,433,075 children, youths, and consumers had access to food, and food-related knowledge or skills.
- 35% of our new products were healthier and more nutritious.
- 100% of executives and employees had completed trainings associated to knowledge and understanding to ensure business sustainability.
- 48:52 represented a proportion of male employees to female employees. 35:43 represented a proportion of average training hours of male employees to female employees.

#### PLANET: Protecting our Planet
- 36% of water withdrawal per production unit was reduced, compared to the base year 2015. 42% of water was reused or recycled.
- 99.9% of plastic packaging was reusable or recyclable or upcycable or compostable.
- 586,000 tons of CO₂ was reduced and removed.
- 2,388 rai (382 hectares) of mangrove forests were conserved and restored.
- 7,691 rai (1,230 hectares) of terrestrial forests were conserved and restored including green area in our operation.

#### PROSPERITY: Creating Prosperity
- 2.85 million gigajoules of energy were produced from renewable energy sources.
- Human Rights Due Diligence was conducted throughout the organization and the supply chain.
- 2,243 million THB was spent on research and development.
- 755 disabled people were employed.
- 96% of waste was recovered.

#### 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 labour, and condemn slave labour and human trafficking. In addition, we accept corporate governance principle and no anti-corruption in our business.

#### 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. This year marked another CPF milestone as a leader and one among members of the SeaBOS (Seafood Business for Ocean Stewardship) group.

### Materiality Assessment 2020

#### Importance to Stakeholders

#### Importance to CPF

#### Response to Material Issues

For issues of high interest to stakeholders, high-ranking executives shall give priority, efficiently respond to the issues and closely manage the issues.

For issues of moderate interest to stakeholders, there shall be determination of duties and responsibilities of units in order to be responsive and to closely manage such issues.

For issues of low interest to stakeholders, responsiveness and management shall be made according to routine procedures and disclosure of information as necessary.

Details regarding materiality, assessment and stakeholder engagement are available at www.cpfworldwide.com; Topic: “Sustainability”, Subjects: “Materiality Assessment” and “Stakeholder Engagement”.
### Materiality Boundary

#### Topics

<table>
<thead>
<tr>
<th>Sustainability Governance</th>
<th>Governance, Risk Management and Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Innovation</td>
<td>Innovation Management</td>
</tr>
<tr>
<td>Animal Welfare</td>
<td>Animal Welfare</td>
</tr>
<tr>
<td>Food &amp; Knowledge Accessibility for Sustainable Consumption</td>
<td>Food Quality and Safety</td>
</tr>
<tr>
<td>People</td>
<td>Human Resources Management</td>
</tr>
<tr>
<td>Partners</td>
<td>Responsible Sourcing</td>
</tr>
<tr>
<td>Communities</td>
<td>Community Development and Support</td>
</tr>
<tr>
<td>Sustainable Packaging</td>
<td>Packaging Management</td>
</tr>
<tr>
<td>Climate Change Management</td>
<td>Climate Change Management</td>
</tr>
<tr>
<td>Energy Management</td>
<td>Energy Management</td>
</tr>
<tr>
<td>Environmental Impact</td>
<td>Water Management</td>
</tr>
<tr>
<td>Waste Management</td>
<td>Food Loss and Food Waste Management</td>
</tr>
<tr>
<td>Biodiversity</td>
<td>Biodiversity and Ecosystems</td>
</tr>
</tbody>
</table>

#### Response to Materiality Issues

- 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 labour, migrant labour 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.
- 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.
- 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.
- Support sustainable fisheries and good agricultural practices through our Sustainable Sourcing Policy which should be traceable throughout the value chain and protect biodiversity through the CPF Grow-Share-Protect Mangrove Forestation Project and the CPF Rak Ni-Vas, Pasak Watershed, Khao Phraya Doan Thong project.
**Response, Restoration and Adaptation throughout CPF Value Chain during the COVID-19 Situation**

To ensure smooth food production without interruption and prevent food shortages which may lead to chaos in society, CPF therefore:

- Providing knowledge on additional measures and more stringent practices in an attempt to prevent COVID-19 spread among smallholders and farmers under the contract farming project, and also providing knowledge on ASF for swine farmers.
- Adjusting goods receiving plans to ensure that suppliers’ transport of goods can be completed within the period of time set by the government as well as introducing guidelines for action during the COVID-19 pandemic.
- Initiating “Faster Payment” project by shortening the credit terms to 30 days for 6,000 suppliers to enhance capital turnovers, improve liquidity and maintain employment of workers of the supplier group.

Employees (Workplace Areas)

- We place high importance on our people and raise employee safety to the highest level to prevent them from being at risk of infection by:
  - Introducing guidelines for domestic and overseas employees;
  - Issuing a no layoff announcement to build confidence;
  - Monitoring employees returning from vulnerable countries or employees who may need to be quarantined;
  - Inviting specialty doctors to provide knowledge and serve as consultants;
  - Facilitating office employees and production line workers on their work and social distancing.

For more information, please refer to Chapter: Self-Sufficient Society.

CPF was among the first companies from the business sector to take part in an effort to help people, communities and societies suffering from the COVID-19 outbreak by:

- Initiating “CPF’s Food From the Heart against COVID-19” project
- Announcing no increase of product prices in order to build confidence on food security;
- Easing consumer burden during the crisis;
- Distributing hot and ready-to-eat foods using CPF Food Trucks;
- Donating foods as well as essential supplies to sufferers.

For more information, please refer to Chapter: Food Security, and Self-Sufficient Society.
## Our Commitments and Progress

### Food Security

<table>
<thead>
<tr>
<th>Category</th>
<th>Commitment</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Innovation</td>
<td>30% of new products shall be the products which are aimed for high nutrition, good health and well-being by 2020</td>
<td>21%</td>
<td>69%</td>
<td>90%</td>
<td><strong>100%</strong></td>
<td>Achieved since 2019</td>
</tr>
<tr>
<td>Animal Welfare</td>
<td>100% of animals are raised in line with the Five Freedoms, and prudent use of antibiotics</td>
<td><strong>43%</strong></td>
<td>15%*</td>
<td>On track</td>
<td>On track</td>
<td>On track</td>
</tr>
<tr>
<td></td>
<td>100% of sow’s crates are group gestation pens by 2025 for Thailand operations and by 2028 for Overseas operations</td>
<td>24% On process</td>
<td>33% 7%</td>
<td>41% 28%</td>
<td>43% 15%*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Transitioning layer chicken farms towards a cage-free system with an increase in production capacity of 5 million eggs per year</td>
<td>61% of the 300,000 individuals target</td>
<td>74% of the 300,000 individuals target</td>
<td>79% of the 300,000 individuals target</td>
<td>97%** of the 300,000 individuals target</td>
<td>100%</td>
</tr>
<tr>
<td>Access to Food &amp; Knowledge for Sustainable Consumption</td>
<td>1,300,000 individuals including children, youths and consumers can access food and knowledge or skills related to food, nutrition-related knowledge and sustainable consumption by 2020</td>
<td>61% of the 300,000 individuals target</td>
<td>74% of the 300,000 individuals target</td>
<td>79% of the 300,000 individuals target</td>
<td>97%** of the 300,000 individuals target</td>
<td>100%</td>
</tr>
</tbody>
</table>

### Self-Sufficient Society

<table>
<thead>
<tr>
<th>Category</th>
<th>Commitment</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>People</td>
<td>100% of executives and employees to have completed trainings associated to knowledge and understanding to ensure business sustainability by 2020</td>
<td><strong>94%</strong></td>
<td>The target has beginning this year.</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partners</td>
<td>100% of critical suppliers in animal feed raw materials, food ingredients and packaging groups to be audited on their sustainability by 2020</td>
<td>27%</td>
<td>53%</td>
<td>86%</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Communities</td>
<td>Employment prospect and quality of life of 50,000 smallholder farmers, small entrepreneurs, and vulnerable groups to be improved by 2020</td>
<td><strong>94%</strong></td>
<td>The target has beginning this year.</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Balance of Nature

<table>
<thead>
<tr>
<th>Category</th>
<th>Commitment</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainable Packaging</td>
<td>100% of plastic packaging for food products to be reusable or recyclable or upgradable or compostable by 2025 for Thailand operations and by 2030 for overseas operations</td>
<td>CPIF publicly committed the target.</td>
<td>99.99%</td>
<td>In the process of data collection</td>
<td>99.9%</td>
<td>In the process of data collection</td>
</tr>
<tr>
<td>Environmental Impact</td>
<td>15% and 25% of GHG emissions (scope 1 and 2) per production unit to be reduced compared to the base year 2015 by 2020 and 2025 respectively</td>
<td>7% of the 2020 target</td>
<td>47% of the 2020 target</td>
<td>50% of the 2020 target</td>
<td>99% of the 2020 target</td>
<td>62%*** of the 2020 target</td>
</tr>
<tr>
<td>Biodiversity</td>
<td>9,000 rai of mangrove and watershed forests in the country’s strategic areas, including green areas in our operations to be conserved, protected and restored by 2020</td>
<td>23%</td>
<td>60%</td>
<td><strong>100%</strong></td>
<td>100%</td>
<td>100% Achieved since 2018</td>
</tr>
</tbody>
</table>

* Due to the change of data collection, ** The target was adjusted from 300,000 individuals to 1,300,000 individuals. *** CPIF has set the 2025 target in 2019 **** Due to coefficient used for calculating greenhouse gas emissions from electricity consumption determined by the Energy Policy and Planning Office (EPPO) in 2020 was higher than the coefficient used in 2019, and CPIF had increased the ready-to-eat foods in product portfolio which have higher energy consumption per unit of production than feed and farm and processing businesses.
“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.”
Commitment:
Sustainably develop the organization on the foundation of good corporate governance.

What We Do
To create a sustainable business growth, create a positive impact of the business and reduce a negative impact, CPF commits to create a foundation of corporate governance under a systematic and comprehensive governance structure. Such structure shall cover three dimensions, namely economy, society and environment, at every level from corporate policy level to internal operations level. We also place high importance on accurate and transparent communications to both internal and external stakeholders, as well as to enable participation in pursuing the same goal throughout the organization.

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

Management Undertaken by Working Groups or Internal Units

Economic
• Conducting business by focusing on co-creating value with stakeholders
• Placing importance on food quality and safety standards
• Focusing on producing good quality products to deliver highly nutritious foods to consumers
• Developing new products that fulfill consumer requirements
• Creating innovations on production and operations to increase efficiency
• Applying digitalization to improve operations
• Continuously seeking opportunities to reduce production costs
• Implementing good corporate governance, risk management and internal controls

Society
• Human rights and labour practices stewardship throughout the supply chain
• Human resources management
• Developing talent
• Employment care and rapport building
• Promotion of occupational health and safety in the workplace
• Supplier development for mutual sustainable growth
• Promoting people’s well-being
• Promoting food access, nutrition knowledge and sustainable consumption

Environment
• Establishing approaches to climate change management
• Responsible procurement of agricultural raw materials
• Promoting sustainable agriculture and fisheries
• Efficient resources management based on the concept of the circular economy
• Renewable energy use
• Sustainable packaging development
• Sustainable product development
• Food loss and food waste reduction
• Reforestation both inside and outside the business establishments
• Digital product traceability

• Human rights and labour practices stewardship throughout the supply chain
• Human resources management
• Developing talent
• Employment care and rapport building
• Promotion of occupational health and safety in the workplace
• Supplier development for mutual sustainable growth
• Promoting people’s well-being
• Promoting food access, nutrition knowledge and sustainable consumption
• Food preparedness and management during crisis
• Implementation of animal welfare and responsible and prudent use of antibiotics
• Personal information protection

CPF Sustainability Governance Structure

Corporate Governance Committee
Renumeration and Nominating Committee
Corporate Social Responsibility and Sustainable Development Office
Technology and Cyber Security Committee

Board of Directors
Audit Committee
Internal Audit Office
Risk Management Office
Company Secretary Office
Corporate Compliance Office

Executive Committee
Management Committee
Human Resources Office
Agro-industrial Technology and Innovation Office
Corporate Communication and Public Relation Office

Chief Executive Officer
CPF Food Research and Development Center
Investor Relations and Capital Market Office
Corporate Communication and Public Relation Office
Corporate Social Responsibility and Sustainable Development Office

Company Secretary Office
Audit Committee
Internal Audit Office
Risk Management Office
Company Secretary Office
Corporate Compliance Office

Sustainability Strategy
Sustainability Foundation
Food Security
Self-Sufficient Society
Balance of Nature
Commitment: Respect human rights and implement good labour practices

Human Rights and Labour Practices

What We Do
Respect and Support for Human Rights

- In 2020, CPF’s employees received a wide variety of human rights trainings covering such topics as Human Rights, Labour law, Occupational Health and Safety, and Basic Governance. The trainings were provided to the entire CPF business establishments across the country in both the remote format for new normal life and the online format as follows:

<table>
<thead>
<tr>
<th>Human Rights Training</th>
<th>Thai Employees</th>
<th>Foreign Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total trainings (hours)</td>
<td>289</td>
<td>48</td>
</tr>
<tr>
<td>Number of employees (persons)</td>
<td>93,369</td>
<td>13,886</td>
</tr>
<tr>
<td>Percentage of employees attending the trainings compared to the total number of employees (%)</td>
<td>87</td>
<td>13</td>
</tr>
</tbody>
</table>

100% of employees were trained on human rights.

Furthermore, over 190 CPF business establishments in Thailand have been certified with the Thai Labour Standards, while 100% of our export establishments have been certified. CPF is gradually applying for additional certifications for domestic establishments in order to enhance the Thai industry and maintain human rights which CPF has always recognized and valued (for more information, please refer to the Annual Report 2020; Part 2: Corporate Governance).

- CPF places high importance on employee communication and complaint channels. The Welfare Committee of the Workplace is considered another communication channel between employees and CPF. It promotes awareness of equality and respect of human rights for all employees of every level and nationality, and enables employees to participate in expressing opinions, suggestions
and complaints through their elected representatives. In addition, CPF has increased the number of committee members from the minimum required by law. The maximum number of representatives shall not exceed 17 persons for each establishment, depending on its size, and shall include diverse and vulnerable groups in terms of gender, race, religion and disability. If the election results do not cover such vulnerable groups, CPF shall make a comprehensive selection of a subcommittee to represent workers in such groups. The subcommittee is responsible for presenting problems and suggestions to the Welfare Committee prior to meetings with the executives who represent the Company.

During the outbreak of COVID-19, CPF improved its policy on employee care to ensure maximum confidence and safety, as follows:

- There is no employee termination policy;
- Providing food to employees who are in monitored detention;
- Offering electronic coupons for employees/spouses/children who have been affected by the pandemic in order to buy food and beverages from the shops of CPF’s subsidiaries;
- Granting education loans for children with the amounts not exceeding 100,000 Baht for a period of 24 months without interest; and
- Providing medical treatment to employees who have contracted COVID-19.

- For foreign employees, CPF has added measures for its employee care during the outbreak of COVID-19 as follows:
  - Collaborating with local public health agencies to provide foreign employees staying in the company dormitory knowledge and understanding on how to protect themselves from COVID-19, for example, physical distancing, disposable face mask wearing, sanitizing gel using, and conducting surveillance on outsiders entering a dormitory;
  - Conducting foreign employee dormitory surveys to tighten and verify safety measures, increasing frequencies of employee bus services between dormitories and the Company’s business establishments to keep appropriate physical distance between individuals inside the bus, and cleaning and disinfecting the interior of the buses after every round, including arranging dormitory big cleanings every week; and
  - Complying with guidelines on the management of foreign workers in accordance with the Cabinet resolution stipulating work permit extension after employment ends in case a worker cannot leave the Kingdom due to COVID-19 situation, for instance, health check-up and renewals of work permit and visa.

CPF also promotes the right to access quality and safe food of all foreign workers even they are not our employees. Under the “CPF’s food from the heart against COVID-19” project, we have provided food to the Labour Protection Network Foundation (LPN) which facilitated the Foundation in distributing food to foreign workers in detention following the COVID-19 control measures.

As Part of Preventive Measures against the Spread of COVID-19

- CPF provided food to the Labour Protection Network Foundation.
Employee Diversity Management

In 2020, CPF received one complaint through the Labour Voices Hotline by LPN from an employee who was concerned about employee rights and welfare. After acknowledging the matter, CPF immediately investigated the possible causes and found that it was a misunderstanding. CPF then provided clarification on the issue and ensured that the employee would be treated properly and fairly.

In Thailand operations, we have also provided employees of all levels and nationalities with opportunities and supports to participate in expressing opinions, suggestions and complaints through a wide range of channels, including through employee representatives being elected to be members of the Welfare Committee and Subcommittee of the workplace. In 2020, 74% of all our employees in Thailand operations had already benefited from the improvement as suggested by the Company representatives.

Human Rights Due Diligence

In 2020, CPF conducted an annual review on human rights due diligence covering all groups, including diverse groups and vulnerable groups such as ethnic or religious minority groups, disabled group, and children. The process was applied to all the business units in Thailand and included 7 salient human rights, namely working conditions, health and safety of employees, communities’ health and safety, data privacy, use of illegal labour (i.e. child labour, forced labour 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. In addition, CPF and its subsidiaries place high importance on the protection of personal information of all employees, customers, business partners and business alliances. We are committed to protecting personal information from being misused and keeping such information safe in accordance with international standards. We have also introduced the personal information protection to our Code of Conduct and Personal Information Protection Policy which have already been adopted by CPF and its Subsidiaries in Thailand. A project steering committee and a personal information protection task force were established to ensure that CPF and all subsidiaries perform accordingly and achieve the objectives mentioned above.

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Layer farms in Thailand operations use a cage-free housing system with an increase in production capacity of 7* million eggs per year.

Recall of products that may affect public health has been 0 (zero).

New products in Thailand were the products which are aimed for high nutrition, good health and well-being for 35%.

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

Sow’s crates are group gestation pens for 43% in Thailand operations and for 15%* in overseas operations.

Children, youths and consumers in Thailand can access food and knowledge or skills related to food, nutrition-related knowledge and sustainable consumption for 1,433,075 individuals.

*Higher than expected capacity at 5 million eggs per year

*Due to adjusted data collection methods
What We Do

Healthier Products

Food business is one among businesses that have to adapt to consumer behaviours which keep changing according to the environment and society. In particular, the COVID-19 pandemic has raised consumers’ awareness of health and food safety. In order to meet social challenges of the new normal, CPF has introduced the concept of Food for Tomorrow and applied innovation and advanced technology to its production processes of 3 product groups.

1. Innovation and Wellness

   Food and Beverages innovation, research and development have been conducted throughout the production chain from animal feed to the disease prevention farm, food and beverage, including the concept of “Food as a Medicine” with added natural nutrients that help maintain health and strengthen the immune system, namely:

   • Cheeva Pork: a high quality pork containing high volumes of good fat and Omega 3 (for more information, please refer to the topic “Animal Welfare”):
     - Chicken Rib: the innovation adding value to co-product using a special cut:
       • chicken back special cutting innovation, the first and only one in Thailand;
       • easy to eat, chicken rib delight with a single bone like half cut middle wings;
       • meaty, soft and juicy like chicken hip;
       • any menu is easy, whether boiled, stir-fried, curry and pan-fried;
   • chicken raised in biosecurity high tech farming;
   • chicken fed with probiotics without antibiotics;
   • free from growth promoting hormones
   • grain fed chicken;
   • available in fresh meat, ready-to-cook and ready-to-eat foods;
   • delicious chicken rib that makes you forget the wing.
• **PLANT-TEC Innovation**: with dedication to research and development, CPF Food Research and Development Center invented a technique to create meat-like taste and texture. By collaborating with experts overseas, CPF select a wide range of raw materials. Through the production process and modern technology, plant-based meat products are produced and are available in a variety of forms such as nugget, burger and plant-based ground meat.

• **INNO We-ness**: healthy Drinks can provide nutritional values at normal room temperature for 1 year.

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2. **Ready-To-Eat Food** To respond to a hectic lifestyle in the urban society and the new normal, CPF offers ready-to-eat food that is convenient for home-dining, easy to warm, great tasting, safe and sterile. With world-class manufacturing standards, CPF’s ready-to-eat food is perfect for both main-course and snack recipes. The product line offers healthy menus made from 100% real vegetables with no sugar and monosodium glutamate added. CP Veg It Up includes pumpkin soup and corn soup with the UHT Aseptic\(^1\), a 100% sterile system, applied to maintain nutritional values as if freshly cooked food.

**Made From Fresh Pumpkin**
- 100% real vegetables
- No sugar added
- No MSG added
- No artificial color added
- No preservatives added

**Made From Sweet Corn**
- 100% sterile through UHT Aseptic system
- Store at room temperature for up to 6 months
- Packaged in paper cups to reduce plastic packaging
- In line with 2:1:1\(^2\) eating style to reduce belly fat and promote a healthier life

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3. **Fresh Destination Meat** Since meat protein is a main ingredient in the diet of the world population, selections of fresh meat products for cooking and processed products for consumption in the era of the new normal, therefore, must be more meticulous in regards to production standards, cleanliness and safety. CPF has continuously focused on quality, and thus, we have added e-commerce distribution channels and home delivery to deliver “fresh, clean, safe, and traceable” food to consumers. In addition, to respond to consumer behaviour, we provide fresh food at the Butcher Corner where customers can select products and the quantity as preferred. Moreover, there is a wide variety of fresh food, especially pork, duck, chicken, egg and seafood which are safe and meet CPF standards, as well as fresh vegetables and fruits from farmers from all regions, and various kinds of seasonings. With the concept of “all products in one place”, it is definitely in line with the vision of being a “Sustainable Kitchen of the World”.

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DEEP

**Deep Sleep and Fresh Awakening**
By 200 mg of L-theanin and chamomile extracts that relax your brainwaves, resulting in longer deep sleep.

**IMU**

**Turning Allergy to Agility**
with 3,800 mg of natural and concentrated beta-glucan that helps strengthen the immune system and triggers white blood cells.

**FRESH**

**Boosting Brain and Restoring Freshness**
a supplemental nutrition drink boosting brain power by catechin extracts (from green tea) which keep brain active. It also contains 5 types of vitamins (B1, 3, 6, 12 and H1) to help nourish neurotransmitters and the brain.

**FRESH**

**Fresh foods at the Butcher Corner**

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\(^1\) **UHT Aseptic**: a food packaging system that pre-sterilize the packaging before filling it with UHT (Ultra High Temperature) treated food at a temperature of over 133 degree Celsius for no less than 1 second. This system ensures the commercial sterilisation level at which microorganisms cannot grow again during storage and transportation at normal temperature while at the same time being packaged in sterile packaging. The content filling must be done under aseptic conditions of the aseptic filling system, according to the Food Network Solution, www.foodnetworksolution.com, Dairy Farming Promotion Organization of Thailand, www.dfp.go.th, and Department of Packaging and Materials Technology, Office of Industrial Economics, www.packaging.oie.go.th.

\(^2\) **2:1:1**: represents the right amount of food by dividing a dish into 4 equal parts and dividing types of food into 2 parts vegetables, 1 part rice or flour and 1 part meat, the Health Promotion Foundation.
Fresh foods at the Butcher Corner by Freezer Innovation

- Distributes cool temperature in all directions to keep meat juicy and preventing it from sticking to the tray or becoming frozen;
- Reduces CO₂ in the atmosphere with R-290, the first in Thailand;
- Allows 50% more energy saving;
- Allows 40% longer service life;
- Reduces space loss with a bottom stock compartment; and is equipped with an Auto-on-off timer.

In addition, CPF has supported consumers to stay healthy by developing products that contribute to good nutrition, better health and well-being with lower sodium and saturated fat. The details of the products in 2020 are as follows:

<table>
<thead>
<tr>
<th>Product Type</th>
<th>Quantity (Product)</th>
<th>Product Samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower sodium (less than 600 mg per one serving*)</td>
<td>11</td>
<td>Japanese Beef Rice Bowl, Spaghetti Carbonara, Corn Soup</td>
</tr>
<tr>
<td>Lower saturated fat (3 grams or less per one serving*)</td>
<td>23</td>
<td>Rice and Spicy Ground Chicken, Rice Mixed with Spicy Sausage and Basil, Rice with Chicken Green Curry</td>
</tr>
<tr>
<td>Lower sodium and saturated fat</td>
<td>7</td>
<td>Riceberry Rice and Fried Cabbage and Chicken with Fish Sauce, Rice and Stir-Fried Fish, Rice with Spicy Pork and Basil</td>
</tr>
</tbody>
</table>

Did you know?
How to Eat Meat Safely during Lockdown

Food safety experts agree that “complying with good personal hygiene principles in terms of food safety” can prevent both food poisoning and COVID-19. The World Health Organization has summarised 5 important steps including 1) keeping clean, which refers to hand washing both before and after preparing food with raw meat, 2) separating raw and cooked foods and keeping fresh meat away from ready-to-eat products and other foods during selecting and buying foods, including cooking equipment, 3) cooking thoroughly and making sure that food must be heated until its center’s temperature is higher than specified, 4) keeping food at safe temperature, buying meat from refrigerated shelves (at 5°C or lower) and storing it in cooler bags during travel, and 5) using safe water and raw materials, buying fresh meat and processed meat products from trusted sources with GMP standards, making sure meat odor and color are normal and checking manufacture and expiration dates on the labels if any.

Nurturing Corporate Culture for Innovation

CPF is committed to fostering corporate culture for innovation, which focuses on developing and promoting innovations throughout the corporate systematically, to create maximum efficiencies for both the employees and the Company as well as to adapt to business changes and consumer requirements.

We introduced guidelines for innovation management BRITISH STANDARD BS 7000-1 in order to set project plans and create more opportunities for innovation creation within the organisation.

We achieved ISO 56002 which has served as guidance and recommendation on continual improvement while maintaining the corporate framework on innovation management systematically. The objectives of the standard include equipping the corporate with guidelines and processes that maximize organisational benefits from the corporate innovation projects, for instance, CEO Awards and human resource development for creating the corporate’s innovators, etc.

We organized trainings to enhance awareness and introduced CEN/TS 16555 at work. We conducted internal assessment in accordance with the standard.

A new corporate innovation committee will be appointed to enable management agility in strategic innovations in the same direction across the corporate.

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* Asst. Prof. Chitsiri Rachtanapun, Lecturer, Department of Food Science and Technology, Faculty of Agro-Industry, Kasetsart University, Prachachat Business Newspaper.

1 BS 7000-1 is the British standard deployed for management of innovation that supports new innovation creation within the organisation, launched by the BSI.

2 CEN/TS 16555 is the European standard applied for innovation management and supporting creative thinking, launched by the European Committee for Standardization (CEN), which later on has developed to be the international standard: ISO 56002.

3 ISO 56002 is the innovation management standard being accepted internationally.
Collaborating for Innovation

CPF recognises the importance of collaboration with external parties, locally and internationally, to create innovations and at the same time, to be able to bring commercial and social benefits through various forms of partnership:

- **Government Sector** Some examples are:
  - Healthy drink products, IMU, DEEP and FRESH, in collaboration with Thailand Institute of Scientific and Technological Research to test on efficiency and quantities of nutrients affecting the human body at the laboratory level, at the cellular level and at the clinical level.
  - We organize trainings for our employees to raise awareness of innovation management standards and promote improvement of our internal innovations in order to have them registered as petty patents and patents. The trainings include workshops on innovation management system ISO 56002: 2019, and on enhancing innovations for further development or advancing work for better results. We have also implemented the projects to promote creation of new innovations in a various forms, namely:
    - **Innovation promotion project** according to the 3i framework: Improvement, Invention, and Innovation, One Day Satisfaction Project and a scoring system for individual employees (iScore), which is implemented to repay and reward those who create innovations for the organisation;
    - **Plant-based protein products** in collaboration with Chulalongkorn University to develop on meat-like flavor molecular
    - **In collaboration with Mae Fah Luang University to develop fiber substitutes from mushroom’s protein fibers.**

- **Private Sector** One example is, developing an alternative plant protein production process in collaboration with DuPont, ADM and many others.

Promoting Creation of Innovation in the Organisation

We organize trainings for our employees to raise awareness of innovation management standards and promote improvement of our internal innovations in order to have them registered as petty patents and patents. The trainings include workshops on innovation management system ISO 56002: 2019, and on enhancing innovations for further development or advancing work for better results. We have also implemented the projects to promote creation of new innovations in various forms, namely:

- **Innovation promotion project** according to the 3i framework: Improvement, Invention, and Innovation, One Day Satisfaction Project and a scoring system for individual employees (iScore), which is implemented to repay and reward those who create innovations for the organisation;

  - **Improvement** To improve innovations in order to acquire good conditions that are constant and sustainable for mitigating problems and reducing resource consumption.
  - **Invention** To create new inventions or new methods by using internal knowledge/external networks.
  - **Innovation** To be innovative in order to extend results, increase benefits for customers, and generate more incomes and new businesses.

  **Total innovations**

- **8,626 innovations**
- **92 innovations**
- **34 innovations**
- **Total 8,752 innovations**

In addition, the CPF Food Production Plant in Nong Chok, Bangkok, is the first food Plant that participates in activities regarding systematic corporate innovation management in accordance with ISO 56002, which are organised by the Office of Industrial Economics of Thailand and the Management System Certification Institute.

In 2020, the CPF Animal Feed Mill in Bangna, Bangkok, was certified with ISO 56002. As a result, we are the first organisation in Thailand that received international standard certification on innovation management from the Management System Certification Institute.

**An Example of Product Design Patent:**

bowl-shaped packaging for classic steamed egg which showcases beautiful and unique form. Its durability is improved in order to carefully contain steamed egg during transporting and be microwave-friendly.

CPF has created innovators according to the TRIZ guideline

- **1,047 innovators against our target to create 1,000 innovators by 2020**
What We Do

Raising Animals According to Animal Welfare Principles

- **Issues We Care About** CPF has always been committed to be a business operation based on humane treatment to animals in line with the “Five Freedoms Principles” both at company-owned and contracted farms under the Contract Farming Project. In addition to promulgating a global Animal Welfare Policy, establishing the Animal Welfare Committees, setting long-term goals for animal welfare, and preparing guidelines and standards for animal welfare practices covering all types of animal husbandry businesses and in all countries in which we have businesses, we have also focused on the following issues:
  
  - **Biological Disease Prevention System** CPF has placed high importance on the management of on-farm disease prevention systems, both at company-owned and contracted farms under the Contract Farming Project. This ensures that all animal farms are safe from animal epidemics and COVID-19. We have set disease prevention measures as follows:
    - Environment: animal housing structures are strong and are sprayed with disinfectants all around. The temperature in the closed housing system is properly controlled, and animal farming areas are clearly separated from living areas;
    - Individuals: a person entering the farm must carry out personal disinfection and fill in a form providing information before entering and leaving every time;
    - Animals: animals must be raised according to the five freedoms principles, including getting vaccinated and obtaining water and food from sources where raw materials are traceable, while the farm must be equipped with protection measures against disease carriers being brought in; and
    - Objects: all luggage, objects and vehicles must be disinfected before entering the farm area.
  
  - **Remote Monitoring** In addition to a real-time CCTV monitoring system used for monitoring animals’ initial symptoms of illness and farm equipment, in 2019, CPF developed an innovative Smart Farm, a computerized remote control system that can analyse data such as ammonia measurement and heat in chickens. In 2020, CPF began to use Birdoo Smart Eyes, an automatic control system, in broiler farms to help monitor basic data such as chicken weight, and drinking and eating behaviours, all of which can be displayed through mobile applications. The data can be analysed in order to give instructions and predict outcomes in a timely manner to keep up with changes in consumer markets. CPF is the first corporate in Thailand that has adopted this technology to track animal welfare in real-time, resulting in increased productivity.
  
  - **Prevention of Biological Diseases** CPF has placed high importance on the management of on-farm disease prevention systems, both at company-owned and contracted farms under the Contract Farming Project. This ensures that all animal farms are safe from animal epidemics and COVID-19. We have set disease prevention measures as follows:
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    - Objects: all luggage, objects and vehicles must be disinfected before entering the farm area.
Swine Farming Following the 3Ts Alliance (No Testicle Castration, No Teeth Clipping and No Tail Docking)

CPF is committed to reducing, avoiding and stopping physical alterations in forms of castration, teeth clipping, and tail docking. Additionally, we have participated in the 3Ts-Alliance (Teeth, Tails and Testicles) implemented by World Animal Protection since 2019 to help reduce the pain of pigs in the global pig industry. In 2020, we discontinued the following actions:

- **CPF swine businesses in Malaysia and Taiwan have 100% discontinued piglet teeth clipping since 2019.**
- **In 2020, Malaysia also discontinued more than 98% of piglet tail docking.**
- **Furthermore, in Thailand operations, piglet ear notching has discontinued more than 67% of the total number of piglets.**

Audit: Due to the outbreak of COVID-19, in 2020, CPF had been audited in a form of remote audit by customers, third party and the Company itself. This contributes to the welfare of animals in reducing injury, diseases, and risk of contamination during the audit. In the next 2 years, we aim to create an online auditing system for the audit formats of all the company’s farms and farmers’ farms in the contract farming project to promote good welfare for farm animals.

Providing Training and Knowledge on Animal Epidemic: Apart from our efficient disease prevention system, all relevant personnel and farmers in the contract farming project will receive knowledge on prevention of animal epidemics, which covers all kinds of animals in CPF’s operations, especially ASF (African Swine Fever) for which CPF has exchanged bodies of knowledge with pig businesses in all countries, including farmers outside the project. As a result, Thailand is one among the countries in Asia that have not been affected by ASF. For additional information, please see Chapter: Community. Moreover, we also provide knowledge on prevention of COVID-19 to all persons involved in animal farming to ensure that all animals from our farms are clean and safe.

ASF and Covid-19 surveillance measures for new normal animal farms

(Attribute to Situational updates of ASF in Asia and the Pacific by OIE retrieved on December 31, 2020: https://rr-asia.oie.int/en/projects/asf/situational-updates-of-asf/)

CPF Swine Business’ Prevention Measures against ASF

1. Thailand Operations
   - No Testicles: 989,237 piglets
   - No Tail Docking: 3,327,899 piglets

2. Overseas Operations
   - Laos, Cambodia, Malaysia and Philippines
   - No Teeth Clipping: 8,404 piglets
   - No Tail Docking: 494,387 piglets
Promoting Animal Welfare in the Value Chain

To ensure consumer confidence in our humane treatment to animal farming, CPF has assessed performances on animal welfare in CPF's core products throughout the global value chain by considering a variety of factors including the housing system, growth, climate and expression of different natural behaviors as follows:

- **Innovation in Animal Welfare**
  - CPF has placed emphasis on research and development to promote animal welfare throughout our global supply chain. In 2020, we created a wide range of innovations, namely:
    - **Organic broiler farm prototype**: CPF introduced the first EU-Organic certified organic broiler farm of Thailand at Tha Maprang sub-district, Kaeng Khoi district, Saraburi Province. In the free range system, broilers can roam freely on grass lawns outside the housing and have freedom to express their natural behaviors. Broilers are raised under slow growth conditions with stocking density less than or equivalent to 33 Kg/m², %.
    - **Raised in a cage-free housing system**, %
      - Broilers: In a cage-free housing system with environmental enrichment, %
      - Layers: From sows raised in group gestation pens, %
      - Shrimp: From non-ablated shrimp breeders, ton
      - Data on broiler chicken were collected in Thailand, Cambodia, India, Malaysia, Philippines, Poland, Taiwan and Turkey. Data on layer chicken were collected in Thailand. Data on swine were collected in Thailand, Cambodia, Laos, Malaysia, Philippines, Vietnam and Taiwan. Data on shrimp were collected in Thailand, Vietnam and India.

<table>
<thead>
<tr>
<th>Welfare Outcome Measures (WOMs)</th>
<th>Performance</th>
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<tr>
<td>Broiler Chicken</td>
<td>Transport Livability, %</td>
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<tr>
<td>Layer Chicken</td>
<td>Transport Livability, %</td>
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<td>Swine</td>
<td>Enrichment in Wean to Finish Pigs, %</td>
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<td>Shrimp</td>
<td>Best Aquaculture Practices (BAP), %</td>
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<table>
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<tr>
<th>Performance in Animal Welfare</th>
<th>Production Capacity *; **</th>
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<tr>
<td>Broiler Chicken</td>
<td>With stocking density less than or equivalent to 33 Kg/m², %</td>
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<tr>
<td>Meat Duck</td>
<td>With Environmental Enrichment, %</td>
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<tr>
<td>Layer Chicken</td>
<td>Raised in a cage-free housing system, million eggs</td>
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<tr>
<td>Swine</td>
<td>From sows raised in group gestation pens, %</td>
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<tr>
<td>Shrimp</td>
<td>From non-ablated shrimp breeders, ton</td>
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</table>

* Production capacity throughout the value chain of Thailand operations. ** Percentages of production throughout the global value chain of broiler chicken with stocking density less than or equivalent to 30Kg/m², % of meat ducks with environmental enrichment, % of layer chicken raised in a cage-free housing system, % of swine raised in group gestation pens and of non-ablated shrimp are 36%, 39%, 1%, 25% and 20%, respectively.

- **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, CPF has livestock WOMs in both Thailand and overseas operations as follows:
Biotechnological innovation to eliminate CPF introduced “Cheeva Pork”; a fresh pork free from shared-class antibiotics which are Raising cage-free and free range layer chickens free from human-only antibiotics; CPF has raised shrimps without using antibiotic Automatic sliding bridge To move pigs to a transport vehicle, it is necessary to move them one by one in order to weigh them before allowing them to walk up a sloped walkway to board the transport vehicle. This method causes pigs trauma and stress since each of them has to walk alone and climb up a high walkway; pigs then may stop walking or turn around. CPF has developed an automatic sliding bridge system that allows pigs to more quickly board the transport vehicle and reduces their stress caused by walking and accumulated heat during transport, all of which result in positive effects on animal welfare and pork quality. The automatic sliding bridge also reduces the amount of time employees spent on work as well. Biotechnological innovation to eliminate eyestalk ablation in shrimp breeders CPF has developed specific biomolecules to improve ovaries of shrimp breeders so that shrimps can lay eggs faster. Therefore, it is unnecessary to remove eyestalks of shrimp breeders to accelerate egg laying. This innovation creates sustainability and adds value to Thailand’s shrimp production industry as well as maintains the welfare of animals.

- Reducing fighting behaviour of piglets mixed after weaning When piglets from several sows are mixed in the housing, they often express their natural fighting behaviour since they have never met each other before. Such behaviour causes psychological and physical stress on piglets. To set social order, CPF has developed the innovation that helps break the ice among piglets by spraying an odorous substance on piglets to make them all smell the same so that they accept each other more rapidly as a herd. Some examples of such a substance are herbal extract powder or odorous disinfectant that can be safely sprayed on piglets.
- Moving pigs by using a walkway system within the farm Since moving pigs for transport can often traumatize them, resulting in accumulated stress in pigs, CPF has therefore developed the walkway that is suitable for pigs walking in a group and their inquisitive behaviours. The walkway system which has replaced the traditional transport method can reduce trauma and stress in pigs while being moved. It improves work efficiency and saves resources and transport time as well.
- Automatic sliding bridge To move pigs to a transport vehicle, it is necessary to move them one by one in order to weigh them before allowing them to walk up a sloped walkway to board the transport vehicle. This method causes pigs trauma and stress since each of them has to walk alone and climb up a high walkway; pigs then may stop walking or turn around. CPF has developed an automatic sliding bridge system that allows pigs to more quickly board the transport vehicle and reduces their stress caused by walking and accumulated heat during transport, all of which result in positive effects on animal welfare and pork quality. The automatic sliding bridge also reduces the amount of time employees spent on work as well.
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- Responsible and Prudent Use of Antibiotics CPF is determined to produce safe and quality food by adhering to sustainability principles through the responsible and prudent use of antibiotics, the practice of which is used in our own farms and those under the contract farming project. The practice is free from human-only antibiotics; free from shared-class antibiotics which are medically important to humans as a growth promoter; and free from hormones as a growth promoter.

In 2020, CPF showed progress on responsible and prudent use of antibiotics as evidenced by the following achievements.

- Responsible and Prudent Use of Antibiotics
  - CPF has used antibiotics mainly for treatment by choosing to use antibiotics for animals only first under supervision of a veterinarian;
  - CPF introduced “Cheeva Pork”: a fresh pork product being certified by NSF as 100% raised without antibiotics (RWA); and
  - CPF has raised shrimps without using antibiotic since 2002 and raised layer chickens without using antibiotics in production period since 2015. Also, CPF was certified raised without antibiotics in broiler and pig farming in 2018 and 2020, respectively which reflects the Company’s ongoing commitment.


**Did you know?!**
**Chicken consumption does not cause precocious puberty**

The main markets of the Thai broiler production industry include the European Union and Japan, which have strict standards on food safety and regulations prohibiting the use of growth promoters to increase growth rates. The Thai broiler industry therefore must strictly adhere to export standards.

As a result, in June 1986, Thailand introduced the law to regulate the use of hormones in broiler production. Thus, there is no reason to worry that children eating chicken can get hormone residues in chicken and result in children physical growth faster than usual.

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**Cheeva Pork, High Volumes of Good Fat and Omega 3**

- Certified as pork raised without antibiotics (RWA) by NSF, the United States of America, the raising method of which helps reduce chances of antibiotic-resistant infection transmitted from animals to humans.
- Selected special pig breed that provides more delicious and gentler pork than normal pork.
- Raised in a closed-system farm with strict disease prevention and a housing equipped with evaporative coolers, resulting in happy, strong and healthy pigs.
- Raised in group gestation pens which enable sows to move freely and interact naturally with other pigs according to animal welfare principles.
- 0% growth promoter, 0% hormone, 0% leanness-enhancing agent.
- Raised with super feed which is rich in omega from natural seaweed, flax seed and deep sea fish oil.
- Higher omega 3.
- Omega 3 helps lower blood triglyceride levels, reduce risk of heart disease, nourish eyesight and vision, enhance development, reduce brain degeneration and strengthen immune system.
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- Higher omega 3.
- Omega 3 helps lower blood triglyceride levels, reduce risk of heart disease, nourish eyesight and vision, enhance development, reduce brain degeneration and strengthen immune system.
- Certified ultimate food innovation award at the world food exhibition: THAIFEX-Anuga Asia 2020.

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**Did you know?!**
**Leanness-enhancing Agent: Beta-Agonist**

is a dangerous substance strictly prohibited to be used in the animal husbandry process according to the Notification of the Ministry of Agriculture and Cooperatives B.E. 2545 (2002) and the Notification of the Ministry of Public Health B.E. 2546 (2003). This is consistent with the regulations of the European Union (EU) and other countries such as Russia and China, which protect their population in terms of food safety. If consumers (especially those with underlying diseases) are exposed to it, they can suffer from health risks and hazards, such as irregular heartbeats, insomnia, nausea and vomiting as well as risks to pregnant women.

Beta-Agonist is resistant to heat both in boiling water at 100°C and in oil at 260°C. Boiling, baking, frying or microwave cooking cannot alter its concentration. It is considered a medicine that helps to dilate bronchioles of patients who have asthma and bronchitis. When adding it to pig feed as a red meat accelerator, it will stimulate the use of energy from fat, reduce fat accumulation, and increase protein accumulation in muscle fibres, all of which help increase redness in meat. Presently, using red meat accelerators in the pig farming industry in Thailand is illegal and carries a high penalty.
Commitment: Improve access to food, food-related knowledge or skills, nutrition-related knowledge and sustainable consumption

Access to Food & Knowledge for Sustainable Consumption

1,300,000 individuals including children, youths and consumers in Thailand can access food and knowledge or skills related to food, nutrition-related knowledge and sustainable consumption in 2020

What We Do
Enhancing Food Quality and Safety throughout the Chain

- International Food Quality and Safety Standard Certifications in 2020

Feed Business
- Livestock feed mills: GMP, HACCP, ISO 9001 and AI Compartment\(^1\) (only farms for export)
- Aquaculture feed mills: GMP, HACCP and BAP (only shrimp feed mills)
- Pre-Mixed production plants: FAMI QS\(^2\)

Farm and Processing Business
- Layer, broiler, duck and swine farms: GAP
- Broiler and duck farms for export: Genesis GAP/Lloyd’s Register Poultry Scheme
- Shrimp farms: GAP/CoC (Department of Fisheries) and BAP (only farms for export)
- Basic meat processing plants: GMP
- Basic chicken and duck meat processing plants for export: HACCP, ISO 9001, Genesis GAP/Lloyd’s Register Poultry Scheme and BRC Global Standard for Food Safety
- Food production plants\(^3\): GMP
- Food processing plants from chicken, eggs, duck, pork and shrimp for export: HACCP and ISO 9001
- Food processing plants from chicken, eggs, duck and shrimp for export: BRC Global Standard for Food Safety

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

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

Strategic Goal
No recall of products that may affect public health

Performance
0 product recall (ZERO)

1,433,075 individuals

\(^1\) AI Compartment is an Avian Influenza Compartment standard used in poultry, established by the Department of Livestock Development

\(^2\) FAMI QS is referred to Feed Additives and Pre-Mixtures Quality System.

\(^3\) Food Processing plants cover semi-cooked and cooked meat products manufacturing plants, and processed products or ready-to-eat products manufacturing plants.
In 2021, CPF is expected to apply the CPF digital traceability system in its value chain to 100% of its products in pig, meat duck, ready-to-eat food, sauce, egg-processed products and bakery businesses in Thailand.

Quality and safe food comes from our stringent production control that meets international food quality and safety standards. Our ultimate goal is to have no recall of products due to quality and safety issues. In 2020, we continued to achieve this goal as the number of recall of products that might affect the public health was zero. However, in May 2020, we withdrew approximately 3,000 bottles of drinking water under the “CP Freshmart” brand, which were produced by our business partner. The reason for the recall was that our said business partner who was our contract manufacturer had printed the Thailand Industrial Standard mark (TIS Mark) on the product without notifying us and without being permitted by the Thai Industrial Standards Institute (TISI). In fact, drinking water being certified only by the Food and Drug Administration (FDA), the Ministry of Public Health, is sufficient. It is not required to display the TIS Mark. Nonetheless, all withdrawn drinking water did not affect the public health. Additionally, CPF has recognised that our business partners are a key chain in offering quality products on the basis of business operations with social and environmental responsibility. Therefore, CPF has imposed the Sustainable Sourcing Policy and Code of Conduct for Business Partners to ensure that our business partners comply with our policies, including producing and having products certified according to the standards, regulations and procedures stipulated by laws and prescribed in product purchase agreements (please find more information in Chapter: Business Partner).

In 2020, CPF digital traceability system was applied to fresh egg products throughout the value chain.

CPF recognizes the importance of food quality and safety; we have therefore identified strategies and operating guidelines on food quality and safety in alignment with the CPF Quality Policy. Aiming to foster positive culture and attitude in terms of food quality and safety amongst employees, we have raised employees’ awareness accordingly and continuously. In 2020, we initiated the project entitled “Food Safety Culture” with our broiler chicken export business and plan to further implement the project in all business lines.

Product Withdrawal and Recall Process

- Product Withdrawal
  - Controlled Recovering Level
  - Trade Recall Level
  - Retail Recall Level
  - Public Recall Level

- Receipt of Information / Complaints Regarding Problems with Products

- Considering and Examining Information Regarding Problems with Products

- Product Recall
  - Controlled Recovering Level
  - Trade Recall Level
  - Retail Recall Level
  - Public Recall Level

- Operations Regarding Product Withdrawal / Recall
  - For domestic operation, it shall be done within 24 hours.
  - For international operation, it shall be done within 1 month.

- Specifying List of Contact Persons
  In case of a product withdrawal/recall, in order to consider, examine and notify relevant persons for acknowledgement.
Promoting Access to Food and Knowledge about Nutrition for Sustainable Consumption

- Expanding Opportunities and Creating Learning Processes in Access to Food

“Raising Layers for Students’ Lunch Project” which CPF has focused on promoting learning processes and building skills in food production and/or consumption of nutritious and safe food to provide children and youth with access to food as well as to jointly alleviate malnutrition.

CPF and CP Foundation for Rural Life have been operating the Raising Layers for Students’ Lunch Project since 1989. We have thoroughly delivered opportunities to children and youth to access quality protein. They include Thai and foreign children from schools in cities and borderlands. We have planned to support 20-25 schools per year. This year was the 31st year, and 880 schools participated in the project. During the COVID-19 outbreak, we applied technology to further develop the project in order to ensure social distancing and to prevent the spread of the COVID-19. A Chatbot system was created to report information of schools across the country through LINE and Google Sheets applications including information regarding the number of chickens, animal feed, egg production, reports on animal raising and cost and income from distribution of egg. Such information was provided to schools to allow them to continue implementing the project by themselves.

Follow-up the Raising Layers for Students’ Lunch Project

- Promoting Better Consumer Health and Well-Being

- Noncommunicable diseases (NCDs) kill 41 million people each year, equivalent to 71% of all deaths globally, whereas three fourths of deaths occur in low- and middle-income countries. One of the causes of death is having unhealthy diets, resulting in high blood pressure, obesity, high blood glucose levels and high levels of fat in blood. Moreover, 4.1 million deaths have been attributed to excess sodium intake. Therefore, commitment has been made to a one-third reduction in deaths from noncommunicable diseases by 2030.

For Thailand, the economic loss of 200 billion Thai Baht due to deaths from noncommunicable diseases in 2009 triggered CPF to recognize the importance of health and wellbeing of the world’s population. In 2020, we continued to promote access to healthy foods to more than 1,000,000 consumers, and conducted research and development of more than 19 healthy products, including Cheeva Pork, Ready-to-eat White Egg, and Riceberry Rice with Fried Cabbage and Chicken with Fish Source, etc.

Samples of Healthy Foods

- IMU Healthy Drink

1 According to the data on non-communicable diseases by WHO retrieved on December 31st, 2020: https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases
2 According to the data on NCDs by Thai Health Promotion Foundation retrieved on December 31st, 2020: https://www.thaihealth.or.th
3 The “Healthier Choice” nutritional logo is a simple and easily noticeable logo facilitating consumers in their buying decisions on healthier products, issued by the Nutrition Promotion Foundation under the patronage of Her Royal Highness Princess Mah Chakri Sirindhorn.
The outbreak of COVID-19 since the end of 2019 has led to more than 82 million infected cases worldwide as of December 31st, 2020, and it continues to spread in the present. In Thailand, people who are at risk of the virus transmission are required to undergo quarantine to reduce the risk of spreading the virus to others. Meanwhile, another group of people, though not required to undergo quarantine, have also suffered from the pandemic as they have been unable to work as normal, resulting in more hardship. Recognising that one of the key factors that supports the world to overcome this crisis is building food security, CPF has therefore committed to carrying out the mission of “CPF’s Food from the Heart against COVID-19” to provide food to people affected by the COVID-19 crisis, with details as follows.

- 20,000 of monitored person (by the Ministry of Public Health)
- 200 hospitals as well as 20,000 healthcare workers and families
- Reducing cost of living for people living in more than 100 slum communities in Bangkok and other provinces by giving food to 44,000 affected individuals, distributing 6 million food products with special prices and giving food to 1 million village health volunteers (VHV)

In addition, CPF’s overseas operations in the countries in which CPF has invested or has offices, which include Vietnam, Cambodia, Laos, Philippines, Turkey, the United States of America and Russia, have also participated in providing food to support healthcare workers and those in need.
100% of executives and employees had completed trainings associated to knowledge and understanding to ensure business sustainability.

100% of critical suppliers in Thailand operations were assessed with the Supplier Sustainability Self-Assessment.

100% of critical suppliers in animal feed raw materials, food ingredients and packaging groups in Thailand operations were audited on their sustainability.

Employment prospect and quality of life of smallholder farmers, small entrepreneurs, and vulnerable groups in Thailand were improved.
**Commitment:**

Be a learning organisation and develop human capital

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**People**

**Strategic Goal Performance**

100% of executives and employees to have completed trainings associated to knowledge and understanding to ensure business sustainability

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

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**What We Do**

**Talent Management**

Employees are key resources in driving businesses towards goals and in leading the organisation to sustainability. We therefore adhere to our vision and human resource development (see additional information in the Annual Report 2020; Part 2: Management and Corporate Governance) in order to attract industry talents to join the organisation, retain talents and further motivate them to create good outcomes.

**Talent Recruitment**

- We have carried out highly effective and proactive recruitment through labour networks of both the public and the private sectors. We have also built relationships with universities, alumni associations of leading domestic and international universities and have implemented a referral program, all of which are very successful. Moreover, we increase our social media channels and organise a wide variety of business contests.
- We also help reduce the unemployment rate due to the economic downturn by additionally hiring 8,000 employees in Thailand operations.

**Talents Attraction and Retention**

- CPF has organised the Chance for Change project to transfer employees to the right jobs by providing employees with opportunities to apply for transferring to different jobs within the organisation. We consider employees’ years of service, basic qualifications, and knowledge and skills suitable for the job vacancies in order to manage our talents so that they exercise their capabilities and full potential on the right jobs, and to attract and retain the right talents. The project has been on-going since April 2020 with 190 open positions and 40 employees interested in the project, accounting for approximately 21% of all open positions.
- We look after our employees by providing remuneration and benefits that are competitive with leading industries. We also place emphasis on performance management by adopting an annual performance targeting system at the individual level which includes performance indicators covering work goals such as financial goals, customer goals, and personnel goals, as well as the corporate sustainability development goals. In addition, we focus on encouraging our employees to be a quality person according to CPF’s core values and promote behavioral characteristics that are consistent with CPF WAY in employees at all levels to ensure efficient performance appraisal and reward systems.
We have set up our human resource development in collaboration with CP Leadership Institute, we have improved content and guideline of Social responsibility; and "Forbes" magazine partnered with Statista to conduct the opinion survey on 160,000 permanent and temporary employees in 58 countries around the world to identify the world's best employers of 2020, whereas four Thai companies were selected. CPF is number 248 in the list, considered number 1 in Thailand. For more information, please visit https://www.forbes.com/lists/worlds-best-employers/.

Employee Development

With the goal to become a learning organisation and to develop human capital, we focus on developing employees at all levels to ensure their knowledge, competence and expertise. We also promote sustainable employee development including up-skilling, re-skilling, and new-skilling to prepare employees for business challenges. The principles of interactive learning have been applied by emphasising hands-on job experience in order to drive businesses to compete in the global arena and enable employees to grow sustainably with the organisation.

- To realize the corporate goals, we have organized a scholarship program for employees and their children. The program creates opportunities for human development through provisions of undergraduate education or higher in both domestic and international institutions and in fields that benefit our current and future business operations. We started selecting program participants in 2020 with a total of 42 applicants, 18 of whom passed the selection process according to the company criteria. An estimated budget throughout the sponsored study programs is 25 million baht.
- In collaboration with CP Leadership Institute, we have implemented the Leadership Development Program to develop employees’ leadership potentials and to have them be prepared for business changes and become significant forces in leading CPF’s business expansions or starting new business lines, all of which create our business opportunities. The participants are given opportunities to develop their business skills, ownerships and leaderships, while the Company has provided supports and resources as appropriate according to formats that the participants have taken for their studies, designs and developments. In addition to guidance given by high-rank executives in the Group, who shall act as mentors for employees throughout the project period, opportunities for participants from both of Thailand and overseas operations to exchange experiences can be created as well. In 2020, there were approximate 820 leaders participating in the project.
- We have continuously enhanced employee skills and leadership potentials through the CONNEXT-ED project. As a result, we received the ministry of Education’s outstanding contribution award in 2020. In the project, we have transferred knowledge and skills mastered by our employees to Thailand’s educational development.

Examples of Measures against the Spread of COVID-19 in our Operating Areas

1. Under the COVID-19 situation, we issued a notification to reassure our employees that there would be no layoffs.
2. We are the first Thai company that raises employee safety to the highest level during the outbreak of COVID-19 with strict preventive measures in terms of hygiene. We take into account employee safety mainly when entering areas of operations. Such measures have been used as a guideline for both Thailand and overseas operations so that we are able to continue delivering food security during the crisis.
3. During the COVID-19 situation, we have taken care and facilitated employees through various policies and projects such as the work from home policy, a hot line providing employees 24-hour consultation, a food delivery program for detained employees, coupons to help reduce employees’ medical expenses in addition to eligible health care benefits, and distribution of anti-COVID-19 survival bags. For production line employees, we have put in place strict safety measures against COVID-19. Therefore, we did not have reported cases of COVID-19 infection in 2020.
4. Rated by "Forbes" magazine as the World’s Best Employer 2020, we are also number one Thai company that provides human resource services to address employees’ needs according to the survey in following topics:
   - Employees’ requests to invite friends and relatives to join the company;
   - The company’s public image;
   - The company’s roles in the country and the world’s economic systems;
   - Employee skill development programs;
   - Gender equality;
   - Social responsibility; and
   - Satisfaction towards the company’s handling of the COVID-19 outbreak.

CPF Code of Conduct

CPF Code of Conduct is a framework based on the leadership and competence development framework. This shall enable employees’ exemplary leadership, cultivate the values for all to uphold and follow, develop leadership skill in employees at all levels to ensure their full potential, and enhance knowledge and skills required by each business line to achieve corporate strategic goals. We have also established the Learning Center in Thailand and abroad to accommodate and support the development of vocational personnel in our businesses and strengthen their skills.

- In 2020, we have improved content and guideline of “CPF Code of Conduct” to be up-to-date and in line with current situation. Moreover, trainings on basic knowledge regarding corporate sustainability were organised for employees in Thailand and overseas operations in 3 languages, namely Thai, English and Vietnamese. Employees were able to attend the trainings through electronic media (e-learning) anytime and anywhere as a foundation laid for all employees, resulting in employee awareness and understanding on sustainable business operations.
- In 2020, there were approximate 820 leaders participating in the project.
- We have continuously enhanced employee skills and leadership potentials through the CONNEXT-ED project. As a result, we received the ministry of Education’s outstanding contribution award in 2020. In the project, we have transferred knowledge and skills mastered by our employees to Thailand’s educational development.
• Employee benefits programs which include a welfare drawdown program due to COVID-19, foods for fellows with discounts extended to CPF employees by CP Freshmart, and “CPF Provides” which has our employees test new products or offers benefits from Charoen Pokphand Group to our employees.

• Monitoring and promoting self-care practices and work practices that are appropriate for the situation and risks during the outbreak of COVID-19 via emails, and CPF Connect application. We also coordinate with all supervisors to ensure that employees at all levels acknowledge the practices, conduct themselves and perform accordingly.

• Activities which create engagement and pride among employees who have been part of the Good Corporate Citizen and deliver food security in critical condition together with the organisation through the CPF Food from the Heart against COVID-19 Project to doctors, nurses and healthcare workers, low-income communities, and village health volunteers with CPF Food Trucks.

Employees in Vietnam were volunteers in the “CPF Food from the Heart against COVID-19” project.

Building Employee Engagement

2020 marked a challenging year which required CPF to create understanding and communicate with employees regularly for engaging with our employees, all of which were crucial for our human resources management and well-being provision for employees throughout the organisation. Thus, we improved our communication to be fast and up-to-date, and that effective communication takes place through a wide range of channels to reach all employees in order to ensure their benefits and benefits to the organisation. Our efforts included:

• The outbreak of COVID-19 has prompted all to practice social distancing; nonetheless, the businesses can be operated continuously. Thus, we have moved most of our trainings online. This creates familiarity on digital learning among our employees.

• Meanwhile, we have promoted learning to students who are interested in or wish to learn about work directly related to CPF’s businesses in both Thailand and overseas operations, such as animal farming and breeding, to create specialised personnel in specific work related to the businesses and expand the human resource base as required by the Company.

• CPF@Heart campaign which combines CPF Love & Share project and CPF We Care project, which are platforms for employees to voice their opinions and their feelings and for employees to participate in transforming CPF to be a happy home for everyone. The campaign also aims to encourage employees to take up the role of brand ambassadors in publicly promoting the advantages of using our products and services.

• Employee benefits programs which include a welfare drawdown program due to COVID-19, foods for fellows with discounts extended to CPF employees by CP Freshmart, and “CPF Provides” which has our employees test new products or offers benefits from Charoen Pokphand Group to our employees.

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Employees in Vietnam were volunteers in the “CPF Food from the Heart against COVID-19” project.
In addition, prior to performing high risk work, installing and maintaining the machines and equipments that are high risks and important to the operations, as well as completing tasks that require permit to work, it is necessary to:

- Conduct the Job Hazard Analysis and determine measures to control hazards which may occur, which must be carried out by personnel who have received trainings and are knowledgeable and skilled in line with the requirement stipulated in CPF SHE&En Standards;

- Monitor and observe risks during the work process; and

- Promulgate the policy and procedure enabling employees and contractors to stop other people’s work, or to refuse to work and report risks and hazards that may occur (Near Miss Report) when encountering an incident or an unsafe working condition.

In addition, CPF has set up safety regulations for employee shuttle and dormitory as well.

Building a Safety Culture

It is of great challenge for CPF to expect every employee to be aware and to have a good attitude towards safety which would ultimately lead to safety behavior and culture. However, given CPF’s high number of employees with diverse knowledge, education, social background, ethnicity and environment, it is crucial 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 Standards through the following initiatives:

- Building strong leadership among executives to help them understand their roles and serves as role models for safety issues;

- Motivating employees by giving rewards to stimulate their participation;

- Providing business unit executives, operational employees and contractors with opportunities to exchange related information, news, knowledge, good practices and activities such as safety talks and lesson-learned sharing sessions, from which the information will be collected and shared with the SHE&En Management Committee for annual reviews of strategies, goals and practices; and

- Organising Safety Week Exhibition, promoting safe behaviour through the “Think before You Act” Project, the “Helping Friends” Project and the “Behavior-Based Safety Observation”, as well as monitoring progress, providing suggestions and creating positive motivation, etc.
CPF has established criteria for requirements identification and created the Occupational Health and Safety Training Matrix for employees and contractors, suitable with their job positions or high risk activities or for the types of work that must be performed in order to enhance knowledge, competence and understanding on potential hazards and accidents, and to provide methods for preventing and controlling workplace hazards to ensure safety performance. Examples of the training courses include courses in the new employee orientation on safety, occupational health, environment; building safety, occupational health, environment and energy culture at the supervisor level, the operating level, and the executive level; and 5 workplace hazards.

**Occupational Health**

CPF has conducted health risk assessment and established preventive and control measures on workplace hazards that may affect health, using an engineering control system or other management systems to reduce employees’ exposure to hazards during work, namely:

- Providing appropriate and sufficient personal protective equipment to employees;
- Preparing medical surveillance as well as health monitoring programs, which are suitable for gender, age and risks of each type of work;
- Providing occupational health counseling programs conducted by medical personnel;
- Providing medical services and effective first aid by taking into account appropriateness in terms of work areas and nature of work according to its risk, including considering relevant legal requirements and ensuring that employees’ health care is conducted under expert guidance;
- Promoting employee good health and well-being by enabling employees to access information or health and work environment management programs through bulletin boards, HR communication e-mails, the organisation’s Facebook page and CPF Connect application;
- Introducing surveillances of infectious diseases and pandemics, as well as guidelines and measures to prevent diseases such as COVID-19 and seasonal influenza; and
- Providing financial support for medical expenses for both outpatient and inpatient treatments for employees, and their spouses and children.

**Enhancing Employee Potential on Occupational Health and Safety**

CPF has established criteria for requirements identification and created the Occupational Health and Safety Training Matrix for employees and contractors, suitable with their job positions or high risk activities or for the types of work that must be performed in order to enhance knowledge, competence and understanding on potential hazards and accidents, and to provide methods for preventing and controlling workplace hazards to ensure safety performance. Examples of the training courses include courses in the new employee orientation on safety, occupational health, and environment; building safety, occupational health, environment and energy culture at the supervisor level, the operating level, and the executive level; and 5 workplace hazards.

**Incident Fact Finding Process for Work-Related Risks**

CPF has a reporting process for incident fact finding in case of an incident and a near-miss incident, including working conditions that are unsafe or non-compliance with regulations or potential of non-compliance. In addition, CPF has a reporting process and conducts fact finding, analysing, correcting, preventing and following up on remediation to prevent recurrences, if there is a severe incident regarding occupational health and safety that affects at least a matter that causes 1) business interruption; 2) continuous and significant property damage; 3) death, disability or impact on many people; and 4) impact on the environment and community in a wide area, CPF has set the following procedures:

**In case of severe incidence,**

1. **Reporting highest executive of the business unit and request for approval of corrective action plan / budget**
2. **Preparing reports on the incident and corrective and preventive guidelines**
3. **Taking corrective action and following up**
   - By BU Head / SHE&En Leader / SHE&En Officer
   - By SHE&En Leader
   - By Unit Representative
   - By Unit
4. **Presenting the incident report in CPF SHE&En MC (Lesson Learn)**
5. **Reporting in CPF SHE&En KPIs System**
6. **Performance report to the relevant executives**
7. **Setting up a meeting to summarise causes / corrective and preventive measures / measures to prevent recurrences**
8. **Investigating the incident in the area where it took place within 24 hours**
9. **The Incident Fact Finding Committee**
10. **Immediately report to the relevant management**
11. **Within 7 days after the incident occurred**

**Sustainability Report 2020**

Charoen Pokphand Foods Public Company Limited

Sustainability Strategy Sustainability Foundation  Food Security Self-Sufficient Society  Balance of Nature
Employee Health Promotion

CPF realises the importance of health and well-being of employees who are important forces in business operations. Therefore, CPF have implemented projects to promote employee health and well-being as follows:

- CPF promotes good health through exercise and physical activities by providing workplace fitness areas such as gyms, sports ground, and sports equipment. Moreover, we organize sporting events such as running for health and football tournaments.
- CPF encourages employees at farms in Vietnam and Laos to grow organic vegetables and consume them in order to promote good health via clean and safe food.
- CPF promotes good health through exercise and physical activities by providing workplace fitness areas such as gyms, sports ground, and sports equipment. Moreover, we organize sporting events such as running for health and football tournaments.

Performance in 2020 (Thailand)

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

- Major causes of work-related injuries - Employees and Contractors:
  1. Being cut or stabbed by sharp object;
  2. Crashed or collided with object;
  3. Falling or slipping;
  4. Being pinched or pulled by object; and
  5. Being injured by falling object

In 2020

- Number of employee or contractor having work-related illness

Although CPF has put efforts in preventing workplace accidents, in 2020, there were incidents we did not want to happen. One employee and one contractor had fatal electrical accident and a fatal fall respectively. Moreover, there were five employees encountered electric shock accidents, collided with objects, slipped, and being caught and pulled by machinery, causing loss of organs or being unable to perform original works. To prevent recurrences in the future, we urgently conducted incident fact finding and determined solutions and measures, including:

- checking for safety of equipment and operating areas every time prior to the start of the work;
- changing devices that can prevent hazards from being caught and pulled by machinery as well as the electric shock;
- strictly enforcing the rules on personal protective equipment according to risks of each type of work;
- developing systems and equipment for checking and monitoring while working at height; and
- increasing frequencies of trainings for employees and contractors regarding electrical work, work at height and other hazards, etc.
What We Do

Sustainability Management in the Supply Chain

We are committed to managing sustainability in our supply chain in accordance with the CPF Supply Chain ESG Management Approach, our Sustainable Sourcing Policy and Supplier Guiding Principles under the development guidelines for sustainable growth with partners in Thailand and Vietnam operations. In 2021, we aim to extend the sustainability management to our businesses in other countries as well.

- We communicated and delivered our Sustainable Sourcing Policy and Supplier Guiding Principle to all suppliers in Thailand and Vietnam operations and we also acknowledged the policies of our critical suppliers in both countries. We plan to extend our Policy to suppliers in other countries in 2021.

Commitment:
Partnership for mutual growth

Strategic Goal (Thailand)

100% of critical suppliers in animal feed raw materials, food ingredients and packaging to be audited on their sustainability by 2020

Performance

Details of the management approach are available at www.cpfworldwide.com under the “Sustainability” topic: “Partners”
To manage and mitigate risks relating to food safety and occupational health in the workplace. However, there was no significant implication to the business operations. We have already informed our suppliers about the issues found for their adjustments and improvements as appropriate.

## Enhancing Business Partner Capacity

### Annual CPF Capacity Building for Partnership

We have been continuously welcoming opinions and sharing experiences on sustainable operational development to develop partners to ensure partnership for mutual growth.

### CPF Capacity Building for Partnership Conference 2020 with Suppliers

The event was held as an online conference to reduce pandemic risks possibly caused by travelling and large group gathering. This also reduced greenhouse gas emissions from travelling and normal corporate event organization by 1,180 kgCO₂e which is equivalent to carbon dioxide absorbed per year by 131 trees⁴. We were honored by representatives of the Department of Labour Protection and Welfare, the Ministry of Labour of Thailand who participated in sharing knowledge on business partner development and answering questions raised by participants to enhance their competitiveness in the global market.

### Supplier Sustainability Self-Assessment

- All suppliers of Thailand and Vietnam operations have been assessed for environmental, social and governance (ESG) risks.
- We have extended our support to suppliers in fuels and chemicals group helping them take their own ESG risk assessments covering 5 groups from the total of 13 supplier groups in Thailand operations. The assessments were conducted online to ensure ease and speed of operation and processing and data confidentiality of suppliers in accordance with the Personal Data Protection Act.
- At the same time, Vietnamese operations included the self-assessment as part of the selection of all new partners in 2020, which has now become a model for Vietnam’s industrial business in using the ESG risk assessment as part of the selection of business partners. Our Vietnamese operations also expanded the self-assessment to all suppliers in 2020 and expanded supplier audits to suppliers in indirect raw materials group, namely fuels, chemicals and machine parts.

### Auditing Critical Suppliers in Direct and Indirect Raw Material Groups

- To manage and mitigate risks relating to food quality and safety, labour, human rights, and occupational safety, health and environment, all of which may affect the continuity of business operations within the supply chain, audits in accordance with the Sustainable Sourcing Policy have been conducted based on legal operations and contexts of the business establishments, for instance, labour law, international labour standards, Labour Protection Act, Safety, Occupational Health, and Environment at Work Act, and Occupational Safety and Health Management System Standard.
- All suppliers with high risks have been completely audited in accordance with the Sustainable Sourcing Policy since 2015 onwards.
- We have implemented the 2020 target plans to completely audit all critical suppliers in direct raw material groups (animal feed raw materials) and indirect raw materials groups (food ingredients and packaging) in Thailand and Vietnam operations. We found that the suppliers had slight misunderstanding about labour practices, and safety and occupational health in the workplace.

### Supplier Groups and Raw Materials

- We have adjusted our goods receipt plans to enable our suppliers to transport goods during the times stipulated in the order. We have also supported and promoted recommended practices suitable for the situation to ensure continuity of mutual business operations.

### In addition, we have initiated the “Faster Payment” project by reducing credit terms to 30 days for more than 6,000 small entrepreneurs. The program enables capital turnover, increases liquidity in suppliers’ businesses, benefits suppliers’ businesses, maintains works for employees of such small entrepreneurs, and stimulates turnover in the economy, all of which have supported us to get through the COVID-19 crisis together.

- In 2020, Thailand operations which is the Head Quarter had procured the largest proportion of products and services from domestic business partners; resulting in domestic economic circulation and business continuity even amid of the COVID-19 crisis.

- Apart from promoting sustainable operations through the Sustainable Sourcing Policy, as the outbreak of COVID-19 in 2020 has suddenly and continuously affected the global economy and industry, including a lockdown order in an attempt to control the spread of the disease, we have adjusted our goods receipt plans to enable our suppliers to transport goods during the times stipulated in the order. We have also supported and promoted recommended practices suitable for the situation to ensure continuity of mutual business operations.

- In 2020 and expanded supplier audits to suppliers in indirect raw materials group, namely fuels, chemicals and machine parts.

- Since 2013, we have been conducting risk assessments within the supply chain and identifying critical supplier groups in accordance with CPF Supply Chain ESG Management Approach. The assessment includes quantities of goods purchased and raw materials that may have risks relating to sustainability and sustainable business continuity, including raw materials that affect food quality and safety. The assessment can identify critical supplier groups and high risk suppliers, and then, their audit plans and later their supplier development plans can then be developed.

92% of products and services procurement budget of Thailand operations were spent on local suppliers.
Since we have mutually developed our company with CPF, our safety system, fire escape and employee rooms have been improved resulting in better operational efficiency and safety. Presently, consumers are more concerned about society and environment; we therefore focus on operating according to the labour and environmental standards and also pay more attention to the development of our business partners. This is because our survival and that of our partners are intrinsically linked. Our company has raised operational standards and employee care, and we gain more trust from customers.

said a representative of suppliers from the packaging group that has been growing towards sustainability together with CPF since 2017.

CPF’s project helps suppliers to achieve stability. We have been exchanging knowledge among each other and use it for improvements. Due to the COVID-19 crisis and economic crises, we have seen that the supply chain is very important: therefore, we have adopted risk reduction guidelines for production processes from suppliers and labour practices to improve and develop our company, which are considered changes at the industrial level in Thailand and are useful for building business competitiveness in international trade. We have focused on sustainable supply chain management by considering improvement at the management level and integrating the knowledge into our corporate business strategies to build people’s confidence in working and doing business with us.

said a representative of suppliers from the packaging group that has been growing towards sustainability together with CPF since 2017.

• Apart from the above-mentioned, we have been offering the “Collaborative Project on Supplier Development Leading to Thai Labour Standards.” Under the project, trainings are organized in order to develop suppliers on labour treatment, respect for workers’ human rights, and improvement of the quality of life of workers in accordance with the Sustainable Sourcing Policy and in line with international labour laws and principles. The trainings were conducted via the first online conference system to meet the training target of 300 suppliers by 2021. There were over 120 suppliers in 2019 and 80 suppliers in 2020 participating in the trainings.

• In addition, our Vietnam operations also cooperate with the government sector to annually organise trainings to develop suppliers’ capabilities. However, due to the outbreak of COVID-19, the trainings have been adjusted to direct consultations with suppliers to provide them with knowledge on labour treatment in accordance with the law, safety enhancement, and workplace hygiene as appropriate in the suppliers’ contexts, all of which help enhance labour protection according to international human rights principles and continuously help improve the quality of life of workers throughout our value chain.

Annual CPF Supply Chain Sustainability Focus Group

• We have continuously held the Focus Group Annual Meetings to share guidelines, knowledge and understanding about sustainable operations and exchange opinions among each other based on the suppliers’ audit results. In 2020, representatives of suppliers in Thailand operations joined the meetings to ask questions and exchange practices in accordance with laws and international practice guidelines. In addition, we also met with the suppliers after the audits to share knowledge and experience in improvements of operating processes according to the development approach in line with the Sustainable Sourcing policy and the suppliers’ contexts in Vietnam operations.

Meeting with Suppliers in Vietnam Operations to exchange opinions after audit results
Strategic Goal (Thailand) Performance
Commitment:
Support community livelihood
Employment prospect and quality of life of 50,000 smallholder farmers, small entrepreneurs, and vulnerable groups to be improved by 2020.

What We Do
Supporting Smallholder Farmers...
Developing Secure Jobs and Enhancing Quality of Life

The Contract Farming Project for Smallholder Farmers
- Due to the outbreak of COVID-19, CPF has introduced preventive measures and provided knowledge to all farmers in the contract farming project to raise awareness and give priority to cooperation in preventing the spread of disease. Regarding transfer of knowledge which the Company performs annually, apart from animal welfare, quality, efficiency, labour, social and environment, and safety, the Company also provides knowledge and conducts rehearsals on the ASF contingency plan for farmers in the project. These enhance their skills and raise the level of disease prevention in addition to the biosecurity system. The internationally accepted biosecurity system is a closed housing system, which allows tracing of sources of raw materials, controlling of transport vehicles entering-existing the farm, and provision of disinfection before entering the farm, all of which create consumer confidence in safety and enable sustainable livestock. Moreover, in collaboration with network partners such as the Department of Livestock Development and the Swine Raisers Association of Thailand, we have provided knowledge regarding the prevention of ASF to smallholder farmers who are not involved in the Company’s contract farming project and pig raisers in 50 provinces across the country as well as farmers in the area within a 5-kilometer radius of the Company’s farms and of the farms in collaboration with network partners such as the Department of Livestock Development and the Swine Raisers Association of Thailand, we have provided knowledge regarding the prevention of ASF to smallholder farmers who are not involved in the Company’s contract farming project and pig raisers in 50 provinces across the country as well as farmers in the area within a 5-kilometer radius of the Company’s farms and of the farms.
in the project. As a result, we are the only private organization in Thailand that has received honorary plaques for "Knowledge and Guidelines for ASF Surveillance Provider" at the individual level from the Swine Raisers Association of Thailand. The honorary plaques were given to 3 persons to acknowledge their contribution in continuously preventing effects of ASF in Thailand thus far.

- In addition to creating employment opportunities, generating incomes and enhancing Thai farmers livelihood, CPF also encourages overseas operations to adopt this model to improve well-being of farmers in every country in which we have businesses, according to the Company’s Three-Benefit Principle (for the Country, the People and the Company). These include promotion of fattening pigs raising in Vietnam and promotion of fish farming in Philippines.

Careers in Agriculture Promotion Project for Smallholder Farmers

- For over four decades since 1977, CPF has been committed to supporting smallholder farmers’ occupational and income security to reinforce national economic and food securities. CPF Foundation for Rural Life, which is supported by Charoen Pokphand Group and staff as well as various network partners is the main driver in promoting integration for an increase of management potential with intention of creating goodness in 3 aspects: “good people, good citizens, and good careers” according to the royal initiative of His Majesty King Bhumibol Adulyadej The Great. In 2020, the Company and the CP Foundation supported more than 5,000 families of smallholder farmers to ensure stable careers and sufficient income.

- In addition, CPF’s overseas operations such as those in Philippines have also provided knowledge to smallholder farmers and local people to efficiently grow feedstock crops that meet international standards in order to promote sustainable agriculture, create stable careers and incomes, which shall improve well-being and help reduce import of raw materials of Philippines as well.

Supporting Small Entrepreneurs...Creating Entrepreneurial Opportunities

- In 2020, “Five Stars Business”, one among our entrepreneurial projects, launched a new business model to meet requirements of urban living consumers who have demand for more convenience. Through business integration, “Five Stars and Star Coffee” has been launched as a sit-in restaurant to enable customers to sit, dine and drink coffee at the same time. The restaurant also provides a delivery service for customers who may prefer to eat at home. Five Star’s menus, be they main dishes or snacks, cater to the customers for all meal times. In addition, Five Star business also adds a new business model that addresses the demand of Thai ready-to-eat food under the brand “Iron Pan” which aims to enhance all stages in the preparation process from the selection of quality ingredients, to the cooking methods and the recipes, offering original tastes that are authentic, piquant and palatable to Thai people at great prices. At the same time, CP Fresh Shop has been using the same cool refrigerator system as CP Freshmart to deliver fresh food to consumers.
CPF’s overseas operations have also contributed to creating employment opportunities for small entrepreneurs. For instance, “Five Stars” and “CP Pork Shop” have been operating in Vietnam since 2012 and 2017, respectively, and “CP Fresh Shop” in Turkey, shall launch a franchise business in 2021, all of which promote employments in communities and help people to access safe and quality food at appropriate prices.

In addition, our operations in Vietnam, Philippines and Malaysia have also promoted CPF Combine (for additional information, please see Chapter: Environmental Impact), which is the body of knowledge and technology applied for raising shrimp, provided to farmers and small entrepreneurs interested in generating careers and incomes for farmers and communities. The initiative also promotes consumption of quality and safe shrimp for the community.

CPF’s overseas operations have also contributed to creating employment opportunities for small entrepreneurs. For instance, “Five Stars” and “CP Pork Shop” have been operating in Vietnam since 2012 and 2017, respectively, and “CP Fresh Shop” in Turkey, shall launch a franchise business in 2021, all of which promote employments in communities and help people to access safe and quality food at appropriate prices.

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

All CPF’s manufacturing plants and farms have created community engagement with communities around them by conducting surveys on community needs prior to initiating projects or activities in order to ensure that the projects or the activities carried out promote quality life for the community and are in line with lifestyles and specific needs of the communities. In 2020, CPF promoted community well-being through the implementations of more than 350 projects or activities including:

- Happy Creation Strategic Project on Planting Organic Vegetables
- Community Drinking Water Project
- Promotion of CPF Combine Model in Vietnam, Philippines and Malaysia

Happy Creation Strategic Project on Planting Organic Vegetables

CPF has further supported the communities surrounding Phraya Doen Thong Mountain area, Phatthana Nikhom District, Lopburi Province, to produce safe food for self-consumption, to build food security at the community level and to support the community to achieve sustainable self-reliance in accordance with the Sufficiency Economy Philosophy of His Majesty King Bhumibol Adulyadej The Great. This project is a continuation from the CPF Rak Ni-Ves, Pasak Watershed, Phraya Doen Thong Mountain Project, which builds the integration of different communities around the area promoting the vegetable growing method that does not involve chemical substances according to the natural way of farming. The vegetables grown are for household consumption and being sold at community vegetable markets. CPF has also provided revolving funds and established community seed banks serving as revolving funds. Presently, more than 45 vegetable varieties have been collected from members, creating seed exchange and sharing activities for vegetable planting and propagating. These activities, thus, promote food security, support employment and income generation, and enable community sustainable self-reliance. The operations in Laos have adopted the project to be a model for promoting organic vegetables planting in the areas surrounding the Company’s farms and the farms of farmers in the contract farming project. The vegetables grown can be consumed within families and generate household incomes along with creating good health for consumers.

Community Drinking Water Project

The community area around the shrimp hatchery farm in Laem-Ngob district, Trat Province had various problems with the condition of water for consumption, resulting in poor quality and insufficient quantity of water for drinking water production. Apart from this, transportation was also a barrier due to the remote distance. According to our survey, the communities in the area surrounding the farm at Ban Thammachat Lang use RO (Reverse Osmosis) water purifiers to produce drinking water but lack knowledge and management skills. CPF has therefore provided support and helped set up a civil community with the communities to establish a drinking water production plant for consumption with higher safety standards. By joining forces with network partners, namely the Civil State Project, the National Village and Urban Community Fund Office, and Ban Thammachat Lang Sub-district Health Promoting Hospital, we have mutually resolved problems and further supported the communities to produce drinking water for distribution and established drinking water community enterprise to generate additional incomes for the revolving fund to support people in the communities. At the same time, the communities and the Company’s farm can have standard drinking water for consumption, which helps increase water efficiency in the communities as well. Presently, the drinking water community enterprise is able to expand its business by having its drinking water distributed at tourist attractions in Trat Province, as well as developing its online distribution and service channels to strengthen the project’s sustainability.

Promotion of CPF Combine Model in Vietnam, Philippines and Malaysia

Happy Creation Strategic Project on Planting Organic
Supporting Vulnerable Groups...Strengthening the Society

CPF Funds for the Elderly
In 2020, CPF had jointly supported and cared for the elderly by contributing to 869 elderly individuals’ living expenses since 2011. Moreover, CPF’s overseas operations in Cambodia also provided consumer goods and necessities to the elderly living without caretakers in the communities nearby the business establishments, to contribute to the health and well-being of this group of people.

Supporting Employment Prospects of People with Disabilities
In 2020, CPF jointly supported the employments of 755 people with disabilities so that they can live on their own.

Examples of products are clothes, shoes and food.

Accounting, planning e.g., demand planning, industrial hygiene related work, warehouse units e.g., ready-to-eat products warehouses.

Agricultural work, livestock-related work, administrative work, technical services, cleaning services, teaching assistance work, etc.

Supporting Underprivileged People
• Child development is an important driver of national development in the future. CPF realizes the importance of good and complete nutrition for youth, which ensure physical health and proper development; CPF’s overseas operations in Cambodia have therefore played a part in providing support to vulnerable children such as those with health problems, those with disabilities and those who are homeless by serving food products as lunches as well as various consumables and sports equipment for this group of children.

Supporting Social and Community Activities
CPF has focused on supporting activities that benefit communities and society. We have exercised our expertise to create positive social impact through a wide range of support programs to jointly strengthen the communities and contribute to national development.

In 2020, 9% of our contribution to the society accounted for donation, 76.5% accounted for investment as community support and 14.5% accounted for support for marketing activities.

Forms of Contributions (Million THB)

<table>
<thead>
<tr>
<th></th>
<th>In Cash</th>
<th>Time (Volunteer hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>In kind</strong></td>
<td>458.8 Million THB</td>
<td>53.9 Million THB</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong> 602.3 Million THB</td>
<td>management cost 17.8 Million THB</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total</strong> 71.8 Million THB</td>
</tr>
</tbody>
</table>

• CPF’s overseas operations in Philippines jointly provided mobile health and dental checkups jointly for communities with difficulties in accessing medical treatment due to relatively high medical expenses, to ensure good hygiene of people in the communities.
Plastic packaging for food products were reusable or recyclable or upcyclable or compostable by 99.9%.

Direct and indirect GHG emissions per production unit were reduced by 9% compared to the base year 2015.

Mangrove forests and watershed forests in strategic areas and green areas in our operations were conserved, protected, and restored by 10,079 rai (1,613 hectares).

CPF disclosed performance data to CDP and was assessed and received score on:
- Climate Change: C level
- Water Security: B- level
- Forest: B level
Sustainable Packaging Commitment:
Develop sustainable packaging
100% of plastic packaging for food products to be reusable or recyclable or upcyclable or compostable by 2025 for Thailand operations and by 2030 for Overseas operations.

What We Do
CPF has realised the importance of packaging which protects and maintains product quality and safety, as well as taken into account the environmental impacts arising from using resources in packaging production until it eventually becomes waste. Therefore, on a basis of the circular economy throughout the value chain, we are committed to conducting research and development on sustainable packaging design and management to maximize the use of resources in packaging production, to reducing packaging waste problems and to promoting the use of materials that help reduce the environment impact in accordance with our Sustainable Packaging Policy and Principle.

Packaging Management Framework

Production Phase
Allocation of R&D resources to sustainable packaging and alternative solutions from the beginning of the production.

Consumption Phase
To phase-out single-use plastic.

Post Consumption Management
To ensure that recyclable packaging is actually recycled.
Animal Farming
Q-Pass Tanks developed by our aquaculture business are used for containing post larval shrimps during transportation to customers in Thailand, Vietnam, Malaysia, Philippines and India. Q-pass Tanks can be washed, sterilised and reused, which can replace plastic bags and Styrofoam boxes.

Meat Processing and Ready to Eat Food Production
• To Reduce the Weight of Packaging
CPF is committed to reducing the weight of food packaging by 1,000 tons by 2025. Our packaging research and development unit and our packaging suppliers have mutually developed alternative packaging designs by using new materials, reducing thickness, adjusting sizes or changing formats of food packaging while maintaining their properties and effectiveness in completely keeping the products safe and preserving nutritional values. Sample projects being implemented in 2020 included:
  • Discontinuing the use of stickers displaying the product labels and switching to use direct printing on packaging.
  • Improving a method for sealing bags containing fresh chicken from tying the bag mouths to heat sealing which helps reduce sizes of the bags, resulting in a reduction of plastic consumption.
  • Reducing thickness of corrugated boxes, but retaining their strength to prevent product damage during transportation.

To Increase the Use of Reusable Packaging
• Stainless steel trays used for transferring chicken parts in the production process, which can be washed and reused in the chicken meat processing plants.
• Plastic baskets used for transporting food products between the production plants and distribution centers as well as delivering the products to customers.
• Egg trays used for transporting eggs from farms to egg processing plants.

To Increase the Use of Recyclable Packaging
CPF and our packaging supplier have jointly developed new packaging innovation for CP Selection: chilled pork and chicken meat and CP egg rolls omelette by using the mono material of the 2-layer plastic film so that this packaging is 100% recyclable. The plastic film is processed with special technology that enhances its stability and enables beautiful printings similar to laminate plastic film (multi-materials) that is commonly used.
CPF initiated the use of packaging derived from plant-based compostable bioplastic Poly-lactic Acid (PLA). In 2015, this kind of packaging was firstly used with chilled pork and chicken meat at CP Butcher throughout Thailand, and it has been continuously developed. In 2019, its thickness was reduced by 17% without affecting food storage quality. Over the past five years, CPF has used more than 20 million trays. In 2020, PLA packaging innovation received an honorable award at the Thailand Research Expo 2020 Awards.

To Increase the Use of Recycled Material as Packaging Solutions

CPF has promoted the use of recycled materials in various kinds of packaging without affecting the quality and safety of food products, i.e.:

- Plastic pallets used for transporting the products within the factories and distribution centers containing 50-100% of recycled plastic;
- Paper boxes and corrugated boxes which are made from recycled paper used for containing the products for transportation; and
- CP Selection Cage Free; fresh egg trays made from 100% recycled paper and PET plastic egg trays contain 60% of recycled plastic in inner layer that do not be in direct contact with eggs; and
- Glass bottles and metal lids.

Performance in 2020 (Thailand)

Proportions of Recycled Materials Used in Packaging

The Use of Compostable Packaging

Proportions of Food Packaging Categorised by Types of Plastic

<table>
<thead>
<tr>
<th>Plastic Type</th>
<th>Percentage</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>PET</td>
<td>2.5%</td>
<td><img src="image" alt="PET" /></td>
</tr>
<tr>
<td>HDPE</td>
<td>16.2%</td>
<td><img src="image" alt="HDPE" /></td>
</tr>
<tr>
<td>PVC</td>
<td>0.01%</td>
<td><img src="image" alt="PVC" /></td>
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<tr>
<td>LDPE</td>
<td>36.8%</td>
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<td>PP</td>
<td>28.0%</td>
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<tr>
<td>PS</td>
<td>0.2%</td>
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</tr>
<tr>
<td>PLA</td>
<td>16.0%</td>
<td><img src="image" alt="PLA" /></td>
</tr>
<tr>
<td>Multi-materials</td>
<td>0.2%</td>
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</tr>
<tr>
<td>Alufoil</td>
<td>0.1%</td>
<td><img src="image" alt="Alufoil" /></td>
</tr>
<tr>
<td>Recyclable Packaging</td>
<td>99.5%</td>
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</tr>
<tr>
<td>Compostable Packaging</td>
<td>0.2%</td>
<td><img src="image" alt="Compostable Packaging" /></td>
</tr>
<tr>
<td>Reusable Packaging</td>
<td>0.2%</td>
<td><img src="image" alt="Reusable Packaging" /></td>
</tr>
<tr>
<td>Difficult to recycle</td>
<td>0.1%</td>
<td><img src="image" alt="Difficult to recycle" /></td>
</tr>
</tbody>
</table>

1. Quantity of plastic packaging in 2019 has been adjusted from the data disclosed in Sustainability Report 2019 due to re-calculation.
Phasing out Single-use Plastic

The “Chester’s” does not use single-use plastic but provides melamine plates, and stainless steel spoons, forks, and knives, as well as water glasses at more than 200 branches nationwide. This can reduce the quantity of single-use plastic waste by more than 310 tons per year.

The Five Star has used paper buckets for roast and fried chicken instead of plastic buckets, and The Star Coffee’s drinking glass lids are specially designed so that the glasses can be lifted up for drinking instead of using plastic straws. These implementations can reduce the quantity of single-use plastic waste by more than 50 tons.

Building Awareness and Engagement in Plastic Waste Management

CPF has jointly supported the Thailand Responsible Business Network (TRBN) in conducting the project entitled: “Send Plastic Home” which encourages consumers to separate plastic waste for recycling or adding values by making new products, in particular, returning plastic waste during COVID-19 to the recycling process to create the circular economy. This project represents a collaboration among the private sector, the government and the people sectors to provide consumer knowledge on waste separation at the origin and waste collection at the drop points which receive 7 types of clean and dry plastic waste, namely bags, food boxes, cups, glasses, bottles, bottle caps, and films. The project chose Sukhumvit Road as a prototype spot for retrieving and collecting packaging wastes and then, having them passed to recycling companies to ensure that recyclable packaging is actually recycled. This increases the proportion of plastic recycling to maximise efficiency in appropriate form. CPF set its plastic drop point in front of the CP Fresh Mart, Phetchaburi Branch, 38/1 (Soi Sukhumvit 39), which can send 580 kilograms of plastic packaging home in total.
Commitment:
Reduce environmental impacts throughout the value chain

**Strategic Goals (Thailand)**

- 15% of direct and indirect greenhouse gas emissions per production unit (scope 1 and scope 2) to be reduced compared to the base year 2015 by 2020
- 25% of direct and indirect greenhouse gas emissions per production unit (scope 1 and scope 2) to be reduced compared to the base year 2015 by 2025

**Strategic Objectives (Thailand)**

1. 15% of energy consumption per production unit to be reduced compared to the base year 2015 by 2025
2. 30% of revenue in Thailand operations to be from the green products (CPF Green Revenue) by 2020
3. 30% of water withdrawal per production unit to be reduced compared to the base year 2015 by 2025
4. 35% of waste disposal to landfill and incineration per production unit to be reduced compared to the base year 2015 by 2025

*Due to coefficient used for calculating greenhouse gas emissions from electricity consumption determined by the Energy Policy and Planning Office (EPPO) in 2020 was higher than the coefficient used in 2019, and CPF had increased the ready-to-eat foods in product portfolio which have higher energy consumption per unit of production than feed and farm and processing businesses.

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

What We Do

Climate Change and Energy Management

- **High Efficient Manufacturing**
  - Energy consumption per production unit was reduced by 3% compared to base year

- **Promoting Renewable Energy**
  - Use of renewable energy 26% from total energy consumption

- **Climate-friendly Product**
  - Environmentally friendly feed can reduce an occurrence of nitrous oxide from use of manure as the compost

- **Logistics System Planning**
  - Bang Nam Priao Distribution Center has been certified Gold Level by LEED

- **Food Loss & Food Waste**
  - One kilogram of food waste reduction equal to GHG emission reduction by 2.53 kg CO₂e

- **Nature-based Solution**
  - Tree plantation in our operations removed carbon dioxide over 5,960 tons
CPF's energy management planning includes a plant design, where production efficiency and resource use are considered in order to select machinery and equipment, as well as regular maintenance of machinery and equipment to reduce energy loss in the production process. CPF is committed to continuously improving energy efficiency in the production processes by implementing various projects including:

- Co-generation Power Plant Project;
- Improvement of Cooling and Air Conditioning Systems Project; and
- High Efficiency Lighting Equipment Replacement Project (LED Project).

### Reduced energy

- **Cost saving**
  - 38 million THB

### Reduced GHG emissions

- **5,600** tons CO₂e

### Promoting Renewable Energy

**Biomass Energy**

Wastes such as wood chips, sawdust, corn cobs and rice husk are used as substitutes for coal used in steam boilers in livestock and aquatic feed mills in Thailand and Philippines. Moreover, a target has been set to be coal free operations by 2022 in Thailand operations. Energy consumption from biomass was 1.77 million GJ.

**Biogas Energy**

At all CPF's swine farms, 96% of swine farms of farmers in the contract farming project, 7 layer complexes nationwide, and CPF Nong Chok Food Production Plant, animal manure and wastewater are treated through the wastewater treatment system to produce biogas which can be used for power generation for the establishments. The activity has been expanded to Vietnam, Laos, Cambodia, Malaysia and Philippines. In addition, at Korat Food Processing Plant, biogas from the wastewater treatment is used as a substitute for fuel oil used in steam boilers. Energy consumption from biogas was 1.04 million GJ.

**Solar Energy**

Total of 26 locations consisting of feed mills, animal farms, food processing plants, food production plants, and distribution centers installed solar PV panels to generate electricity to be used in production processes. The total production capacity is 15 MW. Energy consumption from solar power was 0.02 million GJ.

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**Due to coefficient used for calculating greenhouse gas emissions from electricity consumption determined by the Energy Policy and Planning Office (EPPO) in 2020 was higher than the coefficient used in 2019, and CPF had increased the ready-to-eat foods in product portfolio which have higher energy consumption per unit of production than feed and farm and processing businesses.**
Climate-friendly Products

- **Environmentally Friendly Feed Innovation**
  Since 2017, CPF has developed an environmentally friendly swine feed that can reduce excess nitrogen from swine excretion by 20-30%. In 2020, we further developed layer chicken feed by balancing sources of protein together with the selection of suitable enzymes for animals at different ages, all of which increase digestive efficiency of animals. As a result, animals grow effectively and are healthy. At the same time, it reduces animal feed ingredients such as fishmeal and soybean meal that exceeds animal needs and thus is excreted. It also helps reduce odor caused by manure as well, nitrogen from layer chicken excretion was reduced by 12-13%.

- **PLANT-TEC Innovation**
  CPF is committed to developing plant-based meat as an alternative source of protein for environmentally conscious consumers. Plant-based meat emits 90% lower greenhouse gas than meat.8

- **Low-Carbon Products**
  Since 2009, CPF has been assessing our product carbon footprint by applying principles of product life cycle assessment in accordance with the international standards; ISO14040, ISO14044 and ISO 14067. More than 790 products received carbon footprint labels and carbon footprint reduction labels. In 2020, our broiler chicken feed, piglet, fattening pig and pork products received carbon footprint reduction labels. This is due to our consistent development of production efficiency, which includes research and development of animal feeds to ensure nutrition that is suitable for growth in each age range; energy efficiency enhancement; and use of renewable energy in the production. Subsequently, throughout the product processes and raw material acquisition, there is a continuous decrease in greenhouse gas emissions, resulting in low-carbon products.

\[\text{Reduced excess nitrogen from swine manure: } 20-30\% \]
\[\text{Reduced excess nitrogen from layer chicken manure: } 12-13\% \]

\[\text{Our products over } 790 \text{ products received carbon footprint labels and carbon footprint reduction labels} \]

\[\text{Reduced GHG emissions} \]
\[\text{72,500 tons } \text{CO}_2\text{e} \]

**2012**
- Hygienic pork
- Hygienic chicken, Shrimp wonton
- Broiler chicks, Live chicken
- Broiler chicken feed, Piglet, Fattening pig and Pork products

**2015**
- Livestock feed, Broiler duckling, Cooked duck meat
- Live duck, Fresh duck meat, Chicken meat and Chicken parts
- Broiler chicken feed, Piglet, Fattening pig and Pork products

**2016**
- 30% of revenue is from CPF green products (CPF Green Revenue)6
- 3.2% (58,444 million THB) of revenue derived from green products.

**2019**
- Reduced GHG emissions by products being granted carbon footprint reduction labels for over than 1,418,000 tons CO2-e

**2020**
- Performance in 2020
- Reduced GHG emissions by products being granted carbon footprint reduction labels for over than 1,418,000 tons CO2-e

CPF selects distribution centers that are situated between its manufacturing plants and customer locations, ensuring proper distance for transportations and designs of storage and distribution systems that enable resource efficiency. To manage and optimise transportation efficiency, we use Transportation Management System (TMS), a platform that can manage routing for each truck according to customers’ orders as much as possible on a daily basis, reduce free space inside the truck and optimise fuel efficiency. In the near future, a plan to switch to the vehicles that consume fuels that emits less greenhouse gas. Bang Nam Prio Distribution Center is the first automated distribution center in Thailand and Southeast Asia that has been certified Gold Level by LEED (Leadership in Energy and Environmental Design) for its energy-saving design and construction, water efficiency and reduction of greenhouse gas emissions. In addition, the solar PV panels have installed on the roof of the building, all of which enable the Center to:
- reduce greenhouse gas emissions by 34% by not using fire extinguishing agent and refrigerants containing CFCs and HCFCs etc.;
- reduce electricity consumption by 25% by using heat-resistant glasses as exterior walls with a design that allows natural light in the office building as well as using solar energy instead of grid electricity etc.;
- reduce water consumption by 11% by using water-saving sanitary wares, a water sensor system and a wastewater treatment system etc.;
- reduce maintenance cost by 19% below an average cost of maintenance of buildings that are not certified Gold Level by LEED; and
- potentially reduce the possibility of Sick Building Syndrome as the building environment is improved.


7 CPF green revenue derived from the product groups that have been granted carbon footprint labels, carbon footprint reduction label, and water footprint label.
CPF has introduced and implemented the Food Loss and Food Waste Policy with goals and operating guidelines as follows:

**Goals:**
- To promote reduction of food waste in the value chain of sustainable production and consumption through a wide range of collaboration projects to contribute to the achievement of the Sustainable Development Goal (SDG) 12.3 which aims to reduce global food waste by more than half by 2030; and
- To reduce surplus food and food waste in CPF’s business operations to zero by 2030.

**Operating guidelines:**

1. Reducing food loss, surplus food and food waste from the beginning of production and covering the value chain of food production under the management framework as follows:
   - **Production planning**
     Ensuring production planning procedure for all stages from purchasing raw materials, manufacturing, transporting, and distributing goods in order to determine quantities of raw materials, production volumes, and quantities of goods that meet consumer requirements.
   - **Quality control**
     Controlling qualities of raw materials and products according to set standards or established criteria to reduce disposals of raw materials and poor quality products.
   - **Maintenance and inspection**
     Maintaining and inspecting qualities of raw materials and goods in optimal conditions to minimize potential damage during storage and transportation.
   - **Management of food loss and food waste**
     Maximizing value of by-products to minimize food loss and food waste.

2. Promoting the best use of surplus food and food waste based on food safety standards to benefit society and reduce impacts on the environment and climate change.

   - **Maximising value added of by-products**
     - Selling fresh or processed animal parts in order to add value to the products for safe consumption, which include CP Pasteurized Pork Blood, natural pork lard “Cheeva” under U Farm brand, CP Garlic Chicken Gizzards and Hearts, and fish skins under Chip Chip Brand.
     - In Cambodia operations, adding value to raw ingredients from the first part and final part of the chicken bologna production line by having them processed to produce white chicken sausages.

   - **Creating value of surplus food and food waste**
     - In cooperation with the Scholars of Sustenance Foundation (SOS), donating surplus food to foundations and those in need.
     - Using as composting and soil improvement materials from food waste.

3. Raising awareness of and promoting sustainable consumption and production to stakeholders including customers, partners, employees and farmers through communication, education and campaigning on reducing surplus food loss and food waste.

   - **Food Rescue Project**
     CPF organises a pilot project in collaboration between Tao Kae Klang Project (Leader 4.0 Development Program); CP Freshmart, Bangkok Model, Ratchadapisek Area and the Scholars of Sustenance Foundation (SOS) to conduct the following activities:
     - Experts from SOS provide knowledge to CP Freshmart’s employees on food security issues and food chain management, introduces examples of food conservation projects and cooperation with the Rak Project (CP Freshmart) in order to prepare employees to drive a prototype shop that reduces surplus food and food waste;
     - Enhancing understanding and experiences of employees who are CP Freshmart’s “Food Guardians” to raise awareness of the correct and proper management of surplus food and food waste; and
     - Delivering surplus food to the SOS Foundation for further distribution or food preparation in accordance with hygienic standards in order to deliver safe food to those in need in various communities around Bangkok and vicinity.

In 2020, CPF conducted a research study to collect quantitative, qualitative and economic food loss data based on Food and Agriculture Organization of the United Nations (FAO)’s data collection guidelines to assess food loss and seek measures to reduce losses throughout the value chain. CPF has implemented a pilot project with chicken meat and egg products.

In 2021, CPF plans to collect and analyse food loss data on chicken meat and egg products in each activity throughout the CPF value chain to identify critical loss points (hotspot) which will lead to a project that prevents and reduces food loss. CPF will also expand collaboration projects with business partners, for instance, a project promoting high-efficiency and sustainable crops (sustainable agriculture), which is implemented to increase yields and reduce losses starting from the planting fields, in order to contribute to food security and to enhance farmers and communities’ quality of life.
In 2020, 4 branches of CP Freshmart, namely Senanikom, Amornpan, Suparuek Branch, and Lad Phrao 80, donated more than 760 kilograms of surplus food, accounting for 3,200 serving sizes, which reduced greenhouse gas emissions by more than 1 ton CO₂e.

In addition, the Food World in the Conference Center of the United Nations Economic and Social Commission for Asia and the Pacific (UN ESCAP) has jointly implemented the projects according to the UN Greening the Blue Initiative through:

- Managing food loss by:
  - planning raw ingredients procurement;
  - minimizing raw ingredient waste; and
  - organising a low carbon menu day by creating a menu showing carbon emissions data of the dishes for consumer selection.

- Managing food waste by:
  - separating waste into 6 types: by separating fruit, vegetables, and food scraps out of other types of waste; and
  - using more than 8 tons of fruit, vegetables and food scraps to produce animal feed and soil improvement material instead of taking them to landfill.

The amount of food waste and its recovery was displayed in cafeteria “Food World.”

The watershed forest, Phraya Doen Thong Mountain, was conserved and restored in Lopburi province.

Solving climate change with nature-based solutions is one of the significant strategies that can offer benefits both in terms of carbon removal and protection of biodiversity. Thus, we have planned the following important actions:

- Responsible sourcing of raw materials
- Promoting sustainable sources of raw materials
- Removing carbon dioxide via the green area in our operation
- Conserving, protecting and restoring watershed and mangrove forests

Details on the action plans are presented under the topic: “Biodiversity”, found on pages 118-127.
Water Stewardship

Water resources are significant to the continuing operations of integrated agro-industrial and food business. Moreover, CPF is very perceptive of intensified droughts that occur frequently. We, therefore, focus on selecting locations of business establishments on the basis of basic utility risk management which should go in tandem with water efficiency. CPF uses water in the production processes; for instance, water used for steam boiler in the feed business, water used for animal raising and as coolant in animal housing in the farm and processing business, water cooling systems, and tools and equipment cleaning systems in the food business, etc.

Water Risk Assessment

CPF annually assesses water risks by using database on the amount of water withdrawn for use in each unit together with the baseline water stress of watershed areas where CPF's establishments are situated. In this regard, Aqueduct Water Risk Atlas developed by the World Resources Institute (WRI) is used as an annual water risk assessment, which enables us to prioritize water management at the unit level as follows:

1. Setting targets for short-term and long-term water withdrawals for each unit of production as well as continuing to follow up on results.
2. Preparing water reserves and reserving water for future use.
3. Continuously increasing water efficiency according to the 3Rs principles.
4. Evaluating impacts and setting a plan to reduce the impacts of effluent released from the unit to public water sources.
5. Preparing a Business Continuity Plan (BCP) to withstand severe water shortage crisis.
6. Conducting opinion surveys to gather feedback from or water users and surrounding communities.

Wastewater Management

CPF strives to improve the production processes by taking into consideration optimal use of water resources and reduction of wastewater. The wastewater treatment system has been designed to circulate treated water for recycle. Moreover, the quality of treated wastewater is constantly monitored and tested by CPF's laboratory registered under the Department of Industrial Works in order to maintain and improve the quality of effluent based on the standards set by the relevant laws before releasing the effluent.

Collaborating with Communities to Manage Water Resources

CPF recognises the importance of water resource which as a key factor for living. Therefore, CPF has carried out a wide range of projects in collaboration with stakeholders to conserve watershed forests, maintain water sources, and improve community access to water resources, with detail as follows:

- The Korat Food Processing Plant is the first plant in Thailand that started using has used air chillers instead of water chillers to reduce temperature of chicken carcasses. It can reduce water consumption by over than 426,000 cubic meters per year and reduce cost by THB 9 million per year.
- Mitburi 1 Food Processing Plant optimizes water-use efficiency in various production processes, namely cooling systems, tool and equipment cleaning systems, uniform cleaning systems; uses wastewater treatment systems; reduces water consumption by 10% or 240,000 cubic meters per year; and cuts cost by THB 4 million per year.
- Residual water from the reverse osmosis filter system (RO reject water) is reused in non-production activities of the animal feed business, such as plant watering plants, and cleaning road surfaces cleaning, etc.
- The Korat chicken meat processing plant uses ultrafiltration (UF) to filter treated wastewater in order to obtain clean water to be recycled and used in the production process, such as tools and equipment cleaning tools and equipment. This reduces consumption of water withdrawn from external sources by more than 720,000 cubic meters per year and cuts cost by over THB 21 million per year.
- Treated wastewater is recycled and used in non-production activities of the animal feed business, animal husbandry and food business, such as watering plant watering, road surface cleanings and washing animal housing washing.
Selecting and sourcing quality feed
applying the bio-floc system to treat waste with
Maintaining temperature inside applying the Recirculating Aquaculture System
Reducing risks of airborne diseases.

Case Study: Development of Prototype Shrimp Farming System

Shrimp is considered an important source of protein for the future. Most shrimp farms in Asia use outdoor ponds for shrimp culture, which relies on water exchange to control the water quality. This method poses risks of disease contraction and requires a large amount of water. CPF has made great efforts to improve the shrimp farming industry in the Asian regions; therefore, we have been continuously conducting research and development in building a prototype of shrimp farming systems at Roipetch Farm in Trat Province and Bang Srakao Farm in Chanthaburi Province. The system will be able to reduce risks of disease outbreaks, increase productivity and reduce use of natural resources simultaneously. Then, we will apply the system to other shrimp farms under our care and transfer CPF’s efficient shrimp farming system technology to farmers in Thailand and foreign countries for their applications under the “CPF Combine” project.

The research and development of the shrimp farming system prototype at Roipetch Farm and Bang Srakao Farm includes:

- **Good Quality Feed**
  - Selecting and sourcing quality feed ingredients responsibly.
  - Developing high growth rate shrimp feed recipes.

- **Closed Housing System**
  - Reducing risks of airborne diseases.
  - Maintaining temperature inside the housing so that it is stable and suitable for shrimp growth.

- **Hydrophone and Image Processing System**
  - Measuring chewing sound of shrimp and taking underwater pictures after feeding in order to analyse the amount of feed and time for feeding that are suitable for the nutritional needs of shrimp. These help reduce any excessive amount of feed which may be become water-soluble waste.

In addition, CPF has implemented the “CPF Rak Ni-Ves at Phraya Doen Thong Mountain Project”. Detail is presented in pages 124-125.
Performance in 2020 (Thailand)

Water Withdrawal

Water Consumption

Water reused and recycled

Performance in 2020 (Thailand)

Waste Management

CPF adopts the circular economy as guidelines for reducing waste in the production processes and optimising use of resources. CPF is committed to reducing amount of waste and recovering waste as follows:

- From animal manure, chicken housing’s flooring materials, sludge from wastewater treatment system, eggshells, organic waste, and boiler ash.
- Producing biogas from animal manure to generate electricity or thermal power;
- Recovering used vegetable oil to be biodiesel;
- Burning organic waste to obtain thermal power.

Recovered waste to energy

Performance in 2020 (Thailand)

Waste Disposal

Waste Disposal by Landfill and Incineration per Production Unit (ton/ton of product)

Water Withdrawal per Production Unit

(m^3/ton of product)

Waste Withdrawal by Area

Waste Recovery

96%

445,139 tons

4%

18,312 tons
Strategic Goal (Thailand)

Commitment:
Protect and restore biodiversity

9,000 rai of mangrove and watershed forests in the country’s strategic areas, including green areas in our operations to be conserved, protected and restored by 2020

10,079 rai (1,612 hectares)

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

What We Do

Responsible Sourcing of Raw Materials

Responsible Sourcing Standards

Corn used in Thailand

Corn used in animal feed business is procured from legal crop plantations with title deeds, which is in line with our guideline of “no forest encroachment, no burning, we buy”, and we make purchases through the corn traceability system only.

Fishmeal used in Thailand

Fishmeal used in animal feed business is made from by-products of processing plants that are:
- Certified by MarinTrust or MarinTrust Improver Programme
- Not by-products of species with extinction risk as defined in the IUCN Red List of Threatened Species™
- Traceable to the sources

Palm Oil used in Thailand

- 79% of Palm oil used in food business is procured from sources that are Roundtable on Sustainable Palm Oil (RSPO) certified
- Palm oil used in animal feed business can be traceable to produce collectors.

1 CPF shall not use species with extinction risk as defined in the International Union for Conservation of Nature’s Red List or the IUCN Red List of Threatened Species™, which are internationally accepted.
Agricultural Raw Materials Traceability in 2020

<table>
<thead>
<tr>
<th>Agricultural Raw Material (Thailand)</th>
<th>Traceable to Processing Plants (Tier 1)</th>
<th>Traceable to Produce Collectors/Fishing Port (Tier 2)</th>
<th>Traceable to Plantation/Fishery Area or Farm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Fishmeal</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Palm Oil</td>
<td>96%</td>
<td>96%</td>
<td>15%</td>
</tr>
<tr>
<td>Soybean Meal</td>
<td>100%</td>
<td>50%</td>
<td>100%</td>
</tr>
<tr>
<td>Cassava</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td><strong>5 Key Agricultural Raw Materials</strong></td>
<td><strong>99.97%</strong></td>
<td><strong>84.80%</strong></td>
<td><strong>68.56%</strong></td>
</tr>
</tbody>
</table>

Studies on Sustainable Sourcing

CPF has conducted research and development on sustainable aquatic feed formulations by balancing uses of raw materials in the best possible way with the most benefit, and the quality and efficiency of aquatic feed. We have continuously selected high-quality alternative protein and sustainable ingredients to meet business requirements. One example is the use of 8-15% sustainable by-product fishmeal in feed formulations. In addition, we support responsible fisheries since the beginning with fishing vessels in the Gulf of Thailand, which improve Thailand’s sustainability of fishmeal at the industrial level. We have also expanded this approach to CPF’s operations in Vietnam, India, Philippines and Malaysia.

Promoting Sustainable Sources of Raw Materials

Direct agricultural raw materials farmers and producers are considered crucial as our business partners and for natural resource security. We have not only delivered our Sustainable Sourcing Policy and Supplier Guiding Principles to our business partners but also realised an important of promoting and sharing specialized knowledge to farmers in Thailand, who are an important raw material base in the supply chain.

Corn

Through the “Self-Sufficient Farmers, Sustainable Corn Project” implemented since 2011, CPF has provided corn farmers in Thailand with knowledge, understanding and modern agricultural technologies, which are adjusted to suit farmers’ local contexts, in order to mitigate impacts on climate change and people’s health due to improper use of fertilisers or chemicals in cultivation. Over 9,500 farmers participated in the project, covering agricultural lands of approximately 38,595 hectares or about 241,200 rai. In addition, the farmers were able to increase produce by 32% in 2020.

Due to the COVID-19 situation and to ensure employee safety as well as to reduce risk of disease transmission which may occur while employees travel to organise field trips to support new farmers, we have financially supported more than 140 farmers in the program in transportation and harvesting costs, totalling 685,000 baht, in order to reduce cost burden during the COVID-19 pandemic. In addition, we have launched corn purchase points in the areas with farmers in the project to ensure continuity in promoting farmers’ incomes and well-being. Thus, corn yields can be purchased at prices that are appropriate for qualities. This can also reduce the burden of farmers in transporting corn to feed mills.

- We have further improved the corn feed traceability system by developing a satellite imaging system that can detect slash-and-burn agriculture. This allows us to be aware of any slash-and-burn activities that may take place in the cultivated areas of the farmers in the company’s supply chain. Moreover, we also have proactive measures to promote and transfer to the farmers knowledge of corn cultivation without stubble burning which is one of the causes of PM 2.5 and consequently air pollution.

Fishmeal

Sustainable Sources of Fishmeal from the Sea

- In collaboration with Thai Sustainable Fisheries Roundtable (TSFR), CPF has promoted sustainable fishmeal sourcing in the Gulf of Thailand where a wide variety of aquatic animal species are available, to ensure world-class standard certification. Through the implementation of Fishery Improvement Project or FIP. We have also prepared the Fishery Action Plan (FAP) of the Gulf of Thailand since 2016. As a result, the FIP project was approved this year for the entry into enter the MarinTrust Improver Programme. The approval was made in accordance with the requirements of the MarinTrust; Multi-species Assessment Methodology. Thus, this implementation is considered the world’s first multi-species fisheries development project and an important milestone of Thai fisheries.

Traceable Fishmeal Plants

- CPF has promoted and exchanged experiences on certification of sustainable fishmeal production standards, which allow us to trace fishmeal back to the source and vessels, in order to develop Thailand’s sustainable feed supply chain at the industrial level. In this regard, we have succeeded in promoting the standards to a fishmeal supplier in India.
Production Process of Products Made from Standardized and Traceable Fishmeal
- In CPF’s animal feed factory, we have ensured that our feed production process is traceable to its source and MarinTrust Chain of Custody (MarinTrust CoC) certified to ensure that fishmeal entering the production process is procured from sustainable sources and responsible fishing methods without illegal labour, all of which sustain marine resources and ensure proper care and treatment for fishermen in accordance with labour laws or international standards.

Conserving, Protecting and Restoring Biodiversity of Terrestrial and Marine Ecosystems

CPF Grow-Share-Protect Mangrove Forestation Project

- Social and Environmental Impact Valuation
  Since 2014, CPF has been devoted effort to conserving and restoring mangrove forests under CPF Grow-Share-Protect Mangrove Forestation Project by continually afforesting, reforesting and monitoring mangrove forests to prevent coastal erosion and to ensure fertile mangrove forests and a robust ecosystem which are suitable for nursery areas which can, in turn, lead to the recovery of aquatic animal resources. The mangrove forest areas that have been jointly preserved and restored by CPF, the public sector and local communities are further developed into eco-tourism destinations.

<table>
<thead>
<tr>
<th>Economic Impact</th>
<th>Social Impact</th>
<th>Environmental Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community members’ livelihoods are improved due to a 1.7-fold increase in the average income in Bang Ya Praek Sub-district in Samut Sakhon Province, and a 2.2-fold increase in the average income in Pak Nam Prasae Sub-district in Rayong Province.</td>
<td>Elders have better mental health due to their participation in tourism activities, resulting in reduced cost of mental health care of THB 12,900 per doctor visit per person.</td>
<td>Mangrove forests can prevent coastal erosion and serve as natural aquaculture areas. New mangrove forests absorb more than 439 tons CO₂ per year in Bang Ya Praek Sub-district in Samut Sakhon Province, and 28 tons CO₂ per year in Pak Nam Prasae Sub-district in Rayong Province.</td>
</tr>
</tbody>
</table>

ECONOMIC SOCIAL ENVIRONMENT RESULT

**Bang Ya Praek Sub-district, Samut Sakhon Province in 2018-2019**

<table>
<thead>
<tr>
<th>Benefit from being natural aquaculture areas</th>
<th>Benefit from protection of coastal erosion</th>
<th>Benefit from reduced cost of mental health care</th>
<th>Income from tourism and sales of local products</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,491,148</td>
<td>57,193</td>
<td>25,792</td>
<td>986,000</td>
</tr>
</tbody>
</table>

**Pak Nam Prasae Sub-district, Rayong Province in 2018-2019**

<table>
<thead>
<tr>
<th>Benefit from being natural aquaculture areas</th>
<th>Benefit from protection of coastal erosion</th>
<th>Benefit from reduced cost of mental health care</th>
<th>Income from tourism and sales of local products</th>
</tr>
</thead>
<tbody>
<tr>
<td>332,828</td>
<td>25,792</td>
<td>25,792</td>
<td>1,260,000</td>
</tr>
</tbody>
</table>

**ECONOMIC SOCIAL ENVIRONMENT RESULT**

<table>
<thead>
<tr>
<th>ECONOMIC</th>
<th>SOCIAL</th>
<th>ENVIRONMENT</th>
<th>RESULT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,228,980</td>
<td>25,792</td>
<td>5,162,881</td>
<td>5,024,803</td>
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</tbody>
</table>

**ECONOMIC SOCIAL ENVIRONMENT RESULT**

<table>
<thead>
<tr>
<th>ECONOMIC</th>
<th>SOCIAL</th>
<th>ENVIRONMENT</th>
<th>RESULT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,609,200</td>
<td>25,792</td>
<td>1,695,467</td>
<td>2,377,931</td>
</tr>
</tbody>
</table>

Remark: the project expenses = THB 1,392,850

Remark: the project expenses = THB 952,528

The true value of the project is calculated by subtracting the project expenses from the combined total of the economic, social and environmental benefits, and the data is verified by independent third-party assurance Lloyd Register’s Quality Assurance Ltd. (LRQA)
• Community-based Tourism in New Normal Way
In 2020, the outbreak of COVID-19 had caused stagnation of economy and tourism. CPF, therefore, helped community-based tourism enterprises in Pak Nam Prasae Sub-district in Rayong Province, to adapt to the new normal in order to create tourist confidence on sanitation safety of products and tourism services in the area, as well as to prevent the impact of the lack of income of the enterprise group members. CPF introduced the following initiatives:
- Organising trainings to educate members about Amazing Thailand Safety and Health Administration (SHA) standards;
- Establishing requirements that are in line with SHA Standards as guidelines (currently in the process of certification) with which all members shall strictly comply;
- Communicating the outbreak control measures used for welcoming tourists and work groups;
- Creating interest and diversity activities. There are activities that promote environmental conservation such as reducing plastic use by using custom-made packaging from natural materials, which can expand the market to the government agencies for study visits as well. Moreover; and
- Collaborating with Tourism Authority of Thailand; Rayong Province, Designated Areas for Sustainable Tourism Administration (Public Organization) and Thailand Convention and Exhibition Bureau (Public Organization) to create public relations and tourism network.

By combining public health safety measures with quality services to reduce the risk and prevent the spread of COVID-19 from the community-based tourism’s products and services in Pak Nam Prasae Sub-district in Rayong Province, the incomes of the enterprise group did not decrease compared to the incomes generated during the normal situation in 2019.

• Protecting the forest and maintaining wildlife habitats
CPF, the Royal Forest Department and the communities surrounding the Phraya Doen Thong Mountain are committed to conserving and restoring the forest as well as reforesting in the Phraya Doen Thong Mountain area, Phathana Nikhom Sub-district, Phathana Nikhom District, Lopburi Province, which is a part of conservation of water in Pasak Chonlasit Dam which can serve as the food source for 11 villages or about 300 households.

Since 2019, in collaboration with the Faculty of Forestry, Kasetsart University, we have been conducting wildlife population surveys and monitoring the population by using camera traps on a yearly basis compared to 2019 data, we found that predator population continues to increase on a yearly basis. This includes foxes, common palm civets, small Asian mongooses and leopard cats. These predators help control the population of other animals in the area reducing the risk of overpopulation of certain species such as rats which often destroy seedlings, fruits and wood grains in forest restoration area. They also help control the population of alien species such as iguanas found in the area. Increased abundance means higher density in the area. Wildlife population growth depends on various factors; however, the factors that have the most obvious effect are habitat and food. Firebreaks and retarding reservoirs constructed therefore attract animals as they seek water sources as well as shelter to avoid heat in the dry season. The Phraya Doen Thong Mountain is a wildfire safety zone and provides food and water to animals in the area.

When the habitat conditions are suitable and the area can offer more food, the wildlife population in the area can increase.

• Intelligent Forest, You Can’t Miss It!
Based upon accumulated experience of forest conservation at Phraya Doen Tong Mountain, we aim to pass on the knowledge and experience under the concept of "Intelligent Forest, You Can’t Miss It!" to organisations or individuals in order to establish a learning center for forest conservation and restoration and raise awareness of the value of biodiversity and forest fertility. We therefore organised a trekking activity which allowed our participants to study nature and a complete ecosystem, local seed collecting and planting, four types of forest planting that are suitable for area conditions, distributing wood seeds with seed balls, and constructing a reservoir to increase soil moisture. In 2020, more than 590 people gained knowledge on forest conservation and restoration.

• Conserving Forests, Creating Happiness
Forest conservation and restoration successes require cooperation from communities around the area. CPF therefore promotes community engagement activities around Phraya Doen Thong Mountain within the Creation of Happiness Strategic Project with an aim to create food security for communities, jointly take care of the forest and to allow the communities to live in harmony with the forests sustainably. The activities are as follows:

Growing vegetables naturally

To encourage community members to grow organic vegetables for their own consumption and for selling to generate additional incomes, as well as establishing a seed bank according to community wisdom to keep seeds for planting and distributing to villagers in the future. Currently, members from 8 villages comprising 24 people have participated in the project.

Releasing fishes into the reservoir

This is to provide communities with knowledge on fish farming such as fish nursery methods in order to keep fish healthy and grow in size before being released into floating baskets. This helps improve survival rate of fish released into natural water sources and helps increase the number of fish in water sources to serve as food sources for the communities, helps generate income for fishing communities, and helps restore aquatic animal resources. More than one hundred thousand of carp and Jullien’s golden price carp have already been released which can serve as the food source for 11 villages or about 300 households.
In the past, Khao Phraya Doen Thong forest was invaded and destroyed, and became infertile, but its condition has changed a lot recently. Villagers have recovered their forest. We are discussing among ourselves that “the mountain is getting bigger” because the trees planted in the Phraya Doen Thong area are growing higher and higher. This looks promising. We would like to see all sectors take part in forest conservation and restoration, especially the private sector which is financially sound coming here to plant the forest and possibly follow up and nurture it and ensure that it leads to community awareness building, so that the communities can conserve and live in harmony with the forest sustainably.

Mr. Prateep Onsalung, A villager of Khok Salung Village, Phatthana Nikhom Sub-district

Mangrove forests were conserved, protected, and restored at

2,388 rai (382 hectares)

Forest area at Phraya Doen Tong Mountain was conserved, protected, and restored at

5,971 rai (955 hectares)

Green areas in our operations at

1,720 rai (275 hectares)

True value of the CPF Grow-Share-Protect Mangrove Forestation Project implemented at Samut Sakhon and Rayong is

7,402,734 THB

Amount of carbon dioxide removed by CPF’s green area in our operation that have been certified LESS\(^1\) in forestry and agriculture scheme by TGO\(^2\) is

5,960 tons (58 locations)

In addition, CPF’s overseas operations have carried out forest conservation and restoration projects, including planting trees in green areas within the operation. These aim to remove carbon dioxide and reduce the impact of climate change while protecting biodiversity.

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of trees</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turkey</td>
<td>2,037</td>
<td>31 rai (5 hectares)</td>
</tr>
<tr>
<td>India</td>
<td>17,411</td>
<td>339 rai (54 hectares)</td>
</tr>
<tr>
<td>Malaysia</td>
<td>350,050</td>
<td>502 rai (80 hectares)</td>
</tr>
<tr>
<td>Philippines</td>
<td>138,750</td>
<td>289 rai (48 hectares)</td>
</tr>
<tr>
<td>Vietnam</td>
<td>234,466</td>
<td>3,855 rai (617 hectares)</td>
</tr>
<tr>
<td>Laos</td>
<td>7,000</td>
<td>54 rai (9 hectares)</td>
</tr>
<tr>
<td>Cambodia</td>
<td>5,450</td>
<td>550 rai (88 hectares)</td>
</tr>
</tbody>
</table>

\(^1\) Low Emission Support Scheme (LESS) \n\(^2\) Thailand Greenhouse Gas Management Organization (Public Organization)
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:**
A fiscal year of 2020, from 1 January to 31 December 2020

**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 Annual Report 2020.

**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)

- Reporting on the Communication on Progress (COP) at the Advanced level in compliance with United Nations Global Compact (UN Global Compact)
- Reporting on the performance of the Company supporting on the Sustainable Development Goals (SDGs)
- Reporting on the climate-related performance of the Company in compliance with the Recommendation of the Task Force on Climate-Related Financial Disclosures (TCFD)

The report and additional documents as follows:
- Performances Data
  - Human Resources
  - Occupational Health and Safety
  - Environment
- Reporting Boundary
- GRI Content Index
- Communication on Progress – UN Global Compact
- Assurance Statement

The documents are available at: www.cpffowards.com under “Sustainability” Topic: “Sustainability Report”

CPF is dedicated to creating innovation on quality products with safe standards to ensure food security for consumers globally on the basis of mutual sustainability.

Please scan this QR Code to give us your feedback on our sustainability report, because your opinions are valuable to our sustainable development.

Contact Point:
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