Making Today a Better Tomorrow
Collaborating for Sustainable Living

Charoen Pokphand Group has been collaborating with partners from various sectors to develop our capacity in all fields to sustainably create a better tomorrow for the country, the people, our employees and the organization.

Throughout the past century, Charoen Pokphand Group has been mindful of the benefits that we can deliver first and foremost to the country, then to the people, and lastly to the organization. Such concept, called the "Three Benefit Principle", has been upheld by the Group as the heart of our business operations.

Charoen Pokphand Group has been operating and collaborating with partners from various sectors, both domestically and internationally, on efforts such as improving the education system to provide children and youth with sufficient knowledge and abilities to grow in the age of digital and technology and creating new knowledge and skills for employees to enable the creation of innovative products and services. We also aim to develop a production process that is environmentally friendly in response to the goals of becoming a carbon neutral organization by 2030 and to achieve net zero emissions by 2050. The Group is committed to carrying out these efforts and collaborations to achieve our established goals while, creating benefits and delivering values in a sustainable manner.
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Message from THE SENIOR CHAIRMAN

Since the founding of our business, Charoen Pokphand Group has committed to enhancing our corporate competencies in order to achieve sustainability in all dimensions. Today, we have succeeded in expanding our investment and becoming a large conglomerate that encompasses 14 business groups in 21 countries worldwide.

Amid the great winds of change the world is experiencing today, uncertainty have become a fact of life. These changes are both severe and sudden, confronting humanity with endless challenges. For instance, the COVID-19 outbreak over the past two years – from 2020 to 2021 – has caused great economic and social damage and hardships. Nevertheless, I encourage everyone to regard such obstacles as constants and crises as opportunities. Likewise, the COVID-19 pandemic has occasioned Thailand’s full transition into digital society. It became the major turning point that urged consumers to learn how to use online technology whether they are ready to do so or not. This has caused unprecedented changes to the conventional way of life. Therefore, Charoen Pokphand Group must establish sustainability in all our business group, while quickly adapting and responding to changes in a bid to keep pace with variable consumer demands by delivering value through high quality products that satisfy the consumers’ every need.

Since the founding of our business, Charoen Pokphand Group has committed to enhancing our corporate competencies in order to achieve sustainability in all dimensions. Today, we have succeeded in expanding our investment and becoming a large conglomerate that encompasses 14 business groups in 21 countries worldwide. The diversity of our business ranges from the production industry to the service industry. One of the Group’s core sustainability strategies is sharing and exchanging knowledge and experience concerning strengths or advantages that serve as powerful tool in building success for the Group’s businesses, no matter where they are located. Because of this, our businesses do not have to waste time on trial and error. Furthermore, this knowledge can be adopted and utilized in various situations. The process unifies the entire organization through the sharing or resources and knowledge, which drives our business to become globally competitive and strengthen management potential and efficiency. This is a critical element that supports Charoen Pokphand Group’s sustainability targets and our efforts in becoming a world-class organization with pride.

Charoen Pokphand Group believes that the organization’s solid groundwork will contribute to the robust and secure foundation of the society and country.

On behalf of Charoen Pokphand Group Company Limited, I would like to extend my gratitude to everyone for their constant trust and support. Charoen Pokphand Group will adhere to honesty and integrity when conducting our business with transparency under good governance and the corporate governance principles. At the same time, we will center our focus on creating value for all stakeholders, while upholding our sense of social responsibility to enable the sustainable growth of the organization as well as the establishment of a society of sustainable coexistence.
Message from The CHAIRMAN

The world has continuously faced major challenges for over a course of two years. Even though the prolonged COVID-19 situation has eased up in many countries, its impact on the economy, society and environment remains. Meanwhile, geopolitical conflicts that have arisen are exacting their tolls on the global economy and the supply chain of major raw materials. Amidst these challenges, Charoen Pokphand Group, a global food producer, recognizes our vital responsibility toward the establishment of sustainable food security and production chains. We deliver high-quality, clean and safe food, bring nutrition and good health to communities around the globe in tandem with protecting and conserving the environment.

Over the past two years, Charoen Pokphand Group’s executives, colleagues, business partners, suppliers and stakeholders across our supply chain have tirelessly worked together to provide aid to those affected by the global crisis and to restore local economies in countries where we operate our businesses. We adhere to our Six Core Values which are Accept Change, Innovate, Simplification, Speed and Quality, and Integrity aiming to create sustainable benefits to the country, the people and the company through our business operations. In 2021, we have elevated our Sustainability Strategic Plan in line with the increasingly challenging global sustainability context in order to safeguard the impact of related global and national policy, mitigate the climate risk and strengthen our value chain worldwide. We encourage a strict compliance with the principles of good corporate governance and the Code of Conduct. We strive to produce good and talented new generation leaders to be our driving force addressing all aspects of global challenges. Charoen Pokphand Group has also expedited the adoption of technology in all of our business units to raise our global competitiveness.

The year 2021 marks Charoen Pokphand Group’s 100th year of weathering and even thriving through global crises and challenges. On this centennial occasion, I would like to pay tribute to our senior management and colleagues in each and every country for their passion, dedication, sacrifice and patience that has driven sustainable growth for Charoen Pokphand Group. I would like to extend my sincere gratitude to our customers, strategic partners, suppliers and all of the stakeholders across our supply chain for their enduring confidence, trust, support and cooperation. These are the vital forces driving Charoen Pokphand Group into the next century with confidence, enabling us to achieve our sustainability goals with efficiency and yielding the sustainable benefits for the country, the people and the organization.

In 2021, we have elevated our Sustainability Strategic Plan in line with the increasingly challenging global sustainability context in order to safeguard the impact of related global and national policy, mitigate the climate risk and strengthen our value chain worldwide.

Soopakij Chearavanont
Chairman
Charoen Pokphand Group
Message from The CEO

We will be another major force in reducing global warming according to our declaration of intent to become "a Net Zero Emissions Organization" to achieve sustainability and create value.

Suphachai Chearavanont
Chief Executive Officer
Charoen Pokphand Group

2021 had proven to be another difficult year due to the persisting spread of COVID-19. It was also a year we were confronted with numerous global challenges, such as digital transformation, radical innovations, changing consumer behaviors, entry into an aging society and, most importantly, climate change which has been recognized and regarded as an urgent agenda that cannot be overlooked by the global community. All these challenges have an effect on economies, societies, businesses, cultures and the lives of everyone on this planet.

Charoen Pokphand Group, or C.P. Group, had successfully advanced into our 100th year by remaining committed to the Six Core Values which encompass gratitude and the creation of sustainable benefits for the countries where we invest, for the people and society in which we operate and, last but not least, for the company. The Group has also adhered to ethics and the Code of Conduct to prevent all forms of bribery and corruption while promoting operations that are consistent with the principles of corporate governance and sustainable development, which takes into account all stakeholders in the economic, social and environmental dimensions. This has laid a solid groundwork that will lead to the Group’s further growth in our second century. C.P. Group aims to remain on the course of creating values to serve communities, societies and the country according to the aspirations of our founders and their business successors in every era.

Without clear goals, it is difficult, if not impossible, to affect change. Therefore, Charoen Pokphand Group followed and achieved the goals that we had announced in 2016 with the full cooperation from all sectors. Such accomplishment has brought international recognition to the Group. In order to continue creating values sustainably, the Group has set new and more challenging targets under the scope of Charoen Pokphand Group’s Sustainability Goals 2030. The Group views that our Sustainability Goals are very much in line with the changing global trends. We strongly believe that our business direction under these Goals will render benefits to Thailand and all countries where the Group has made investments, while creating happiness and smiles for the people, communities and societies of those countries.

2021 was a milestone in our history as we were able to achieve several goals. We are truly grateful to have been awarded and recognized by various organizations, including international entities. Such success must be regarded as the result of the cooperation of various sectors. The Group took part in the S&P Global Sustainability Assessment and ranked third under the Industrial Conglomerates sector. We were also awarded the S&P Global Bronze Class in the Sustainability Yearbook 2022. Such accomplishments stemmed from the commitment of the management and all employees who joined efforts to produce good results. It also reaffirmed our status as the leading Thai business that aims to become a "leader of global sustainability". In the same year, we were also recognized as one of the "World’s Most Ethical Companies 2021" by Ethisphere, a world-class institute that evaluates ethical business conduct standards. C.P. Group was also named a “Global Compact LEAD” company by the United Nations. This reflects our commitment to operate under the principles of sustainable development in all dimensions.

In addition to sustainable business operations with consideration for the society, economy and environment, Charoen Pokphand Group’s next step entails the commitment to create an innovative organization that researches and develops better quality products and services. We promise that people will have access to sources of quality food for both the body and mind. The Group also intends to develop our personnel into good and talented individuals who possess digital skills in order to help drive the Group’s sustainable growth and the creation of shared benefits for the public.

There is no doubt that Charoen Pokphand Group will expand our business in response to changes in the global situation and consumer behavior. We will be another major force in reducing global warming according to our declaration of intent to become “Carbon Neutral by 2050” and “Net Zero Emission by 2050” in order to achieve sustainability and create value, such as lowering greenhouse gas emissions, reducing inequality, etc. We will also move forward with projects for the sustainability of each and every community and country where we invest to maximize our contributions to society.

Charoen Pokphand Group has stood by Thai society from the start of the COVID-19 pandemic until today. The Group and all our affiliates have joined forces to give back to the Thai people in this time of crisis through various projects, such as C.P. Hearts as One Fight COVID-19 which has donated food, beverages and communication supplies worth over 200 million THB to field hospitals in an effort to alleviate the burden of the public health sector. We have also distributed a total of over 31 million C.P. hygienic face masks to medical personnel, vulnerable group, and the public. Furthermore, the Group has joined forces with affiliated companies and over 100 partners to distribute 2 million meal boxes under the “Klua Pan Im : C.P. Hearts as One Fight COVID-19” initiative. The Group also conducted the “CP Plant and Share Fah Talai Jona” project where we plant Fah Talai Jona (green chiretta or Andrographis paniculate) on 100 rai of land in Saraburi province for the production and distribution of 30 million capsules of Fah Talai Jona herbal medicine for the public to boost their immunity during the COVID-19 situation.

I would like to take this opportunity to express my appreciation to all sectors who have contributed to driving the Group’s sustainability during this time of change and challenge in terms of increasing inequality, digital transformation and environmental changes. Charoen Pokphand Group will remain committed to leveraging new technologies to affect changes for the sustainability of the economy, society and environment while striving to promote and develop our people.
Performance Highlights

- Total Revenue: 2,333,506 Million THB
- Health & Well-being Products: 852
- Waste Generation Reduction: 114,908 Tons
- Water Withdrawal Reduction: 65.51 Million M³
- GHG Intensity Reduction: 0.24 Ton CO₂e/Million THB
- Patents and Petty Patents: 3,012
- Employees Training and Development Expenditure: 853 Million THB
- Scholarship Provided: 103,480 Scholars
- Percentage of Renewable Energy Consumption: 12%
- Cybersecurity Complaint Cases: 0

Charoen Pokphand Group Sustainability Report 2021
Action Plan towards 2030 Sustainability Goals

**HEART**

Living Right

- **Corporate Governance**
  - All businesses implement a corporate governance impact scoring assessment

- **Human Rights and Labor Practices**
  - People supported through education, skill-learning and upskilling

- **Education and Inequality Reduction**
  - Employees engaged in learning and initiatives

- **Leadership and Human Capital Development**
  - All businesses certified on international standard of data security and data privacy

- **Cybersecurity and Data Protection**
  - Engagement score of multi-stakeholder perception survey

**HEALTH**

Living Well

- **Health and Well-being**
  - Total sales volume of B2B and B2C products and services help promote health and well-being

- **Social Impact and Economic Contribution**
  - Jobs for those in need, such as small farmers, SMEs and vulnerable groups across the supply chain

- **Food Security and Access to Food**
  - Reduction of food waste and waste to landfill and all plastic packaging are recyclable, reusable or compostable

- **Innovation**
  - Number of registered patents and petty patents

- **Stakeholder Engagement**
  - High-risk raw materials are traceable and high-risk suppliers are audited

**HOME**

Living Together

- **Climate Resilience**
  - Achieve carbon neutrality in its own operations (Scope 1 and Scope 2)

- **Circular Economy**
  - Zero food waste and waste to landfill and all plastic packaging are recyclable, reusable or compostable

- **Water Stewardship**
  - Reduction of water withdrawal per unit of revenue compared to 2020 based year

- **Ecosystem and Biodiversity Protection**
  - All businesses having/participating in programs with relevant international partners

- **Responsible Supply Chain Management**
  - Million persons

Charoen Pokphand Group Sustainability Report 2021
About this Report

Reporting Guidelines

Charoen Pokphand Group has annually published the Sustainability Report since 2016. The Sustainability Report 2021 is the sixth in its series. The contents of the report are centered on strategies, management, goals, performance and our way forward regarding the Group’s material issues with significant impact on all stakeholder groups across the value chain. The contents cover all three dimensions of sustainability, namely economic, social and environmental. Furthermore, the report also compiles information on corporate performances that support the Sustainable Development Goals (SDGs).

The preparation of the Sustainability Report 2021 is based on the reporting guidelines of GRI Standards: Core Option. The report also presents progress in complying with the criteria of the UN Global Compact: LEAD Level and the guidelines of the Task Force on Climate Related Financial Disclosures (TCFD).

Reporting Scope

The scope of the Sustainability Report 2021 takes into account business relevance, availability of information, impact on company operations, environment and society as well as the overall sustainability performance of Charoen Pokphand Group’s domestic and overseas affiliates covering 14 business groups between 1 January and 31 December 2021.

Report Assurance

Performance data on environment, health, safety and number of complaints through whistleblowing channels have been verified for accuracy and compliance with the reporting guidelines of GRI Standards 2021 by an appointed external consultant. More information is available on pages 194-195.

Links to Websites and Topic-specific Report

In order to create a seamless learning experience about Charoen Pokphand Group’s sustainability operations, more information is available on the website and in other reports:

- Materiality Assessment Report 2021
- Corporate Governance Report 2020
- Human Rights Report 2020
- UN SDGs Mapping Report 2021
- GRI & SASB Content Index Report 2021
- TCFD Report 2021
From our commitment in all three dimensions of sustainability, Charoen Pokphand Group has achieved awards and recognitions from various institutions worldwide in 2021. The Group is proud and honored to have received all these awards and recognitions, which do not only reflect the efficiency of our sustainability performances, but also guarantee recognition from our stakeholders.

**UN Global Compact:**
Charoen Pokphand Group participate in driving sustainability issues with UNGC as a LEAD level.

**Dow Jones Sustainability Indices:**
TRUE, CP ALL and CPF were ranked and certified as DJSI members in Telecommunication Service, Food & Staples Retailing and Food Products, respectively.

**Dow Jones Sustainability Indices**

**Sustainability Award Bronze Class 2022: S&P Global**
Charoen Pokphand Group was listed as the Top 3 global sustainable companies under "Industrial Conglomerates" sector.

**S&P Global CSA**
Charoen Pokphand Group participate in driving sustainability issues with UNGC as a LEAD level.

**UN Global Compact: LEAD**
Charoen Pokphand Group, CPF, TRUE and CP ALL received the Low Carbon and Sustainable Business Index (LCSI) Award 2021.

**LCSI**
Charoen Pokphand Group, CPF, TRUE and CP ALL were awarded LEED Gold for Communities, which is the first for the country.

**FTSE4Good**
TRUE, CP ALL and CPF have been continuously selected as members of the FTSE4Good Emerging Index.

**FTSE4Good**

**Ethisphere**
Charoen Pokphand Group was ranked one of the world’s most ethical companies for the second consecutive year in the 2022 World’s Most Ethical Companies by Ethisphere.

**HR Asia Best Company to Work for in Asia 2021**
CPF was awarded the “Best Company to Work for in Asia”.

**US Green Building Council: LEED**
Luoyang CP International Plaza by C.P. Luoyang received the LEED Gold for Communities, which is the first for the country.
In 2021, COVID-19 still presented impacts and challenges on all sectors, including the government, industries, businesses and the people. The World Health Organization (WHO) has forecasted that the impacts of COVID-19 will persist through to 2022. Charoen Pokphand Group has carried out various types of operations since the initial wave of the pandemic until present. We have also formulated plans for the future in order to create a balance for the society and turn the COVID-19 crisis into opportunities. Meanwhile, we focus on developing a new normal lifestyle which centers around social distancing, hygienic mask wearing, and constant access to cleanliness and hygiene.

Collaboration to set up field Hospitals and Waiting Center

The COVID-19 pandemic has obliged many businesses, especially real estates and hospitals, to face challenges. For this reason, Charoen Pokphand Group has collaborated with the government and private sectors to set up two field hospitals and one waiting center, namely CP – WHA – CHG Field Hospital with 620 beds, Department of Medicine – Lerdsin Field Hospital with 200 beds, and CP - Ramkhamhaeng – Nopparat Rajathanee Waiting Center with 620 beds. The three medical facilities have contributed to reducing infection for medical personnel, non-COVID-19 patients, and communities. Besides cooperating to build these facilities, the Group has so far distributed over 31 million pieces of hygienic masks free of charge.

C.P. Planted Fah Talai Jone... Boosting Immune System to Fight COVID-19

Charoen Pokphand Group has planted Fah Talai Jone (Andrographis paniculate) on 100 rai of land for the production of 30 million capsules of Fah Talai Jone herbal medicine for the Thai people. The herbs were planted at the Sabaeng Phan Research Center and Kham Phan Farm in Saraburi, which have been certified with the Good Agricultural Practice (GAP) label, established by the Department of Agriculture, Ministry of Agriculture and Cooperatives. The encapsulation process has been certified with the GMP PIC/S standard while the production complied with the Herbal Product Act. The herbal capsules have been registered as a herbal medicine with the Food and Drug Administration which strictly controls the quantity of Andrographolide in raw materials. We concentrated on distributing the capsules to vulnerable groups, partner agencies and volunteer groups for further distribution to various regions across Thailand in an effort to boost the immune system and prevent diseases during the COVID-19.

Krua Pan Im ... C.P. Hearts as One Fight COVID-19

Charoen Pokphand Group has joined efforts with over 100 partners to help the Thai people during the COVID-19 pandemic through “Krua Pan Im ... C.P. Hearts as One Fight COVID-19”. The project was aimed at helping locals of communities in Bangkok and the vicinity who are affected by COVID-19, small-scale restaurant operators who were forced to close during the lockdown, and farmers who were impacted by falling prices. The project distributed 2 million meal boxes, half which was sponsored by C.P. Group and the other half came from C.P. Group’s support for small scale restaurants affected by COVID-19. The meals were cooked, clean, nutritious and hygienic. In addition, the Group also set up a special COVID-19 hotline to help patients in establishing communications without interruptions. This is part of the C.P. Hearts as One Fight COVID-19 project, which leverages the potential of communication technology to support the mission of all sectors, including the public health sector. Meanwhile, the Group has moved forward to offer assistance in all dimensions and provide encouragement to the Thai people in overcoming the COVID-19 pandemic together.
Our Portfolio

Charoen Pokphand Group’s Vision

“To be a leading tech and innovative conglomerate, providing food for both the body and mind, that creates shared values and brings health and well-being for all.”

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<thead>
<tr>
<th>Symbol</th>
<th>Main Business Lines</th>
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<tr>
<td>🍒</td>
<td>Agro-industry and Food</td>
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<td>🌲</td>
<td>Retail and Distribution</td>
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<td>📚</td>
<td>Media and Telecommunication</td>
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<td>🛍️</td>
<td>E-commerce and Digital</td>
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<td>Property Development</td>
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<td>Automotive and Industrial Products</td>
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<td>🏥</td>
<td>Pharmaceutical</td>
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<tr>
<td>🏢</td>
<td>Finance and Investment</td>
</tr>
</tbody>
</table>

### Production Plants
- **Thailand (Headquarters)**: 370 Plants
- **East Asia**: 150 Plants
- **Southeast Asia**: 58 Plants
- **South Asia and West Asia**: 29 Plants
- **Europe and the US**: 13 Plants

### Livestock/Aquaculture Farms
- **Thailand (Headquarters)**: 989 Farms
- **East Asia**: 126 Farms
- **Southeast Asia**: 248 Farms
- **South Asia and West Asia**: 172 Farms
- **Europe and the US**: 10 Farms

### 7-Eleven Stores
- **Thailand (Headquarters)**: 13,134 Branches
- **East Asia**: - Branches
- **Southeast Asia**: 7 Branches
- **South Asia and West Asia**: - Branches
- **Europe and the US**: - Branches

### Makro Store
- **Thailand (Headquarters)**: 149 Branches
- **East Asia**: 142 Branches
- **Southeast Asia**: 3 Branches
- **South Asia and West Asia**: 3 Branches
- **Europe and the US**: - Branches

### Lotus’s and Lotus Supercenter’s Hypermarket / Supermarket / Mini-supermarket
- **Thailand (Headquarters)**: 2,618* Branches
- **East Asia**: 111 Branches
- **Southeast Asia**: 62 Branches
- **South Asia and West Asia**: - Branches
- **Europe and the US**: - Branches

### R&D Centers/Research Centers
- **Thailand (Headquarters)**: 95 Centers
- **East Asia**: 44 Centers
- **Southeast Asia**: 48 Centers
- **South Asia and West Asia**: 3 Centers
- **Europe and the US**: - Centers

### Total Employees
- **Thailand (Headquarters)**: 268,977 Persons
- **East Asia**: 95,118 Persons
- **Southeast Asia**: 51,974 Persons
- **South Asia and West Asia**: 5,460 Persons
- **Europe and the US**: 7,047 Persons

*Include 305 branches of CP Fresh Mart
Charoen Pokphand Group (C.P. Group) operates a diverse business across its 8 business lines, including: Agro-Industry and Food Business, Retail and Distribution Business, Media and Telecommunications Business, E-Commerce and Digital Business, Property Development Business, Automotive and Industrial Products Business, Pharmaceuticals Business to Finance and Investment Business. C.P. Group has been integrating the strengths from each business group, in order to sustainably maximize the benefits and deliver the utmost value to the country, people, and then the company.
Our Business

Main Businesses
Charoen Pokphand Group Co., Ltd. serves as parent company of Charoen Pokphand Group as its holding company. It holds shares of subsidiaries in Thailand and overseas. The Group operates across many industries, ranging from industrial, production to services.

Agro-Industry and Food Business
Charoen Pokphand Group Co., Ltd. serves as parent company of Charoen Pokphand Group as its holding company. It holds shares of subsidiaries in Thailand and overseas. The Group operates across many industries, ranging from industrial, production to services.

Retail and Distribution Business

<table>
<thead>
<tr>
<th>Thailand</th>
<th>Overseas</th>
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<tr>
<td>CP ALL Public Co., Ltd.</td>
<td>C.P. Lotus Corporation</td>
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<tr>
<td>Ek-chai Distribution System Co., Ltd.</td>
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Supporting the UN SDGs

As a world-class organization with commitment to create a sustainable future for the country, the people and our employees, Charoen Pokphand Group holds as one of our core missions to contribute to the achievement of the United Nations Sustainable Development Goals (SDGs). Therefore, in order to support this commitment in 2021, the Group conducted a review and prioritization of SDGs and set targets based on their relevance to the Group’s operations, the action plan towards the 2030 Sustainability Goals, the Group’s ability in providing support, the potential impact on the Group and stakeholders. The SDGs prioritization can be classified into two levels: strategically important and major contribution.

More information is available in UN SDGs Mapping Report 2021

SDG 4: Quality Education
Charoen Pokphand Group endeavors to provide access to quality education for people of all genders and ages as well as grooming quality individuals for the society.

SDG 5: Gender Equality
Charoen Pokphand Group has always operated on the principles of fairness for all parties, transparency, accountability and in strict compliance with the law, which are the keystones of our operations.

SDG 6: Clean Water and Sanitation
Water is an intrinsic resource for Charoen Pokphand Group’s operations. Therefore, we have implemented an integrated water management guideline to reduce water withdrawal from natural sources and encourage efficient water use.

SDG 8: Decent Work and Economic Growth
Charoen Pokphand Group strives to create a safe, diverse and equal working environment to provide happiness for employees in their work and participation. Furthermore, the Group provides support to communities and the society through collaborative projects for product development and procurement of community products.

SDG 11: Sustainable Cities and Communities
Charoen Pokphand Group has joined efforts with all sectors, both nationally and internationally, to enhance the capacity of the country, the people, our employees and the organization in progressing towards sustainability.

SDG 12: Responsible Consumption and Production
Charoen Pokphand Group has integrated innovation into the product and services production process to deliver the best value to stakeholders while reducing environmental impacts.

SDG 13: Climate Action
Charoen Pokphand Group is set to achieve the Carbon Neutral Goal by 2030 using a holistic approach to advance towards such goal, e.g., reducing dependency on natural resources.
Six Core Values

The Six Core Values shape our personnel to have the same beliefs, behaviors, and practices. These allow C.P. Group to overcome various obstacles and able to growth in all aspects, namely economically, socially, and environmentally, in order to bring benefits that have been created to the next generation in a sustainable manner.

Three Benefit

C.P. Group has always operated our business by adhering to the ‘Three-Benefit Principle.’ This states that the business should benefit not just the Company and employees but also the communities we engage with and the countries of operations. Since our Company’s foundation, this principle has guided how we have grown and also ensured that operations both in Thailand and around the world benefit, not just the Group’s business but society as a whole.

Speed with Quality

Modern businesses must be fast moving, without compromising on quality. They must be able to adapt to new circumstances, adopt the latest technologies, respond to changing consumer tastes and preferences, all the while responding to evolving regulatory systems. As a result, C.P. Group places great importance on the efficiency and effectiveness of our business and of our employees.

Simplification

C.P. Group holds investments in 21 countries and economies worldwide, operating through more than 200 subsidiaries and employing over 420,000 people. The Group is therefore committed to implementing technology and innovation to streamline the systems and operations across the entire Group, which leads to improved efficiency and greater effectiveness. Simplification is one of the key practices which has enabling much business success to the Group.

Accept Change

Global businesses face circumstances that change daily, from political events and environmental issues to consumer needs and technological development. Our key strategy is to embrace change. This allows us to manage our response to evolving circumstances across all our markets. To ensure this, we encourage all our employees to stay informed about new opportunities so that we can deliver more to our customers.

Innovate

Innovation is the force that drives every aspect of a business from process to products. Businesses must constantly innovate to keep pace with a rapidly changing world. We actively encourage innovation in our employees and our goal is to foster innovation across all our businesses to enable us to deliver the best products and services to our customers.

Integrity

Since the day we were founded, we have operated our business with integrity, and this applies to every action we take, whether large or small. Even as we expand into new industries, integrity remains key pillars of our philosophy. We firmly believe that a business that focuses solely on enriching itself without regard to these values will ultimately erode the trust of all its stakeholders and will not be able to operate in the long term. Whether it was a sell for one product, or hundreds of tons, the Group is committed to integrity and transparency.
Charoen Pokphand Group attaches great importance to corporate governance and sustainability governance. This includes the definition of structures, roles and responsibilities as well as the appointment of various committees to supervise compliance with corporate visions, policies, goals, rules and best practices. Good corporate governance must cover every business under the Group and all stakeholders along the value chain. This allows for a transparent, flexible and strong organization that can overcome obstacles with pride.

At Charoen Pokphand Group, comprehensive sustainability governance does not only take into account the contexts and opinions of internal stakeholders, but it also analyzes external contexts in terms of relevant short-term, medium-term and long-term risks as well as industrial and global trends in order to adopt such issues in the formulation of the Group’s directions and sustainability strategies.
Value Creation Process

Charoen Pokphand Group operates a diverse business. Our 8 business lines combined with strategies promote operations and strengthen one another. This is evidenced by our expedition through 100 years of economic development and other milestones.

The Group not only offers our experiences and abilities to support the country’s operations, but we also promote the well-being of the people with focus on building holistic values. The integration of value creation with 15 material issues is shown in each chapter of this Report.

Charoen Pokphand Group’s Businesses and Activities: Cooperation / Competence / Sustainability Culture

Stakeholders

Heart: Living Rights
- 2,333,506 million THB total revenue
- 100% of businesses have assessed on human rights risks
- 7.26 million people received skill development
- 100% of employees received training
- 100% of businesses have data security management system

Health: Living Well
- 852 new products that promote good health and well-being
- 1.8 million people have been supported with careers
- 3,946 million THB children and youth have access to nutritious food
- 3,012 patents and petty patents received
- 82% stakeholder engagement score

Home: Living Together
- 1.07 million tons CO₂ greenhouse gas emissions reduction from environmental projects
- 115 thousand tons waste reduction
- 65 million cubic meters reduction of water withdrawal
- 19% of businesses collaborated on ecosystem restoration
- 92.2% critical raw materials are traceable

C.P. Group Sustainability Goals 2030

Our Business Groups

Corporate Strategy

S1 New Business Platform
S2 Digital Transformation
S3 R&D / Excellence Center
S4 Global Talent & Leadership Development
S5 Investment for Growth & Competitiveness
S6 Sustainable Growth through Data & Analytics
S7 Sustainable Development & Corporate Governance

Businesses and Activities

Six Core Values: Cooperation / Competence / Sustainability Culture

Financial Capital
- 914,481 million THB operating costs

Manufacturing Capital
- 370 production plants
- 989 animal farms and horticultural/crop farms
- 13,141 7-Eleven stores
- 149 Makro branches
- 2,791 hypermarkets/supermarkets/mini supermarkets

Intellectual Capital
- 95 R&D centers
- 22,889 million THB R&D costs

Human Capital
- 428,576 Employees
- 19.09 hour/person/year average training hours for employees
- 206,750 million THB employee related expenses

Relationship Capital
- Relationship with partner organizations

Natural Capital
- 57.13 million GJ energy consumption
- 95 million cubic meters water reused
- 7.05 million GJ renewable energy consumption
Analysis of Global Contexts and Trends

One of the keys to sustainable business operations is a good corporate governance structure coupled with flexible strategies and operating guidelines. These factors provide businesses with the ability to withstand unpredictable changes, challenges and risks with efficiency.

Charoen Pokphand Group has formed a comprehensive risk management structure to build readiness and resilience in conducting a business. The Corporate Governance, Risk and Audit Steering Committee thus oversees the overall risk management system, analyzes internal and external business environment, and examines global economic, social, environmental, political and technological trends to assess key risk factors or trends. The Steering Committee also considers and defines mitigation measures to address these key risks factors.

In 2021, Charoen Pokphand Group has analyzed and categorized key risk factors or trends into three groups, namely

- Business as Usual Risks
- Emerging Risks / Trends
- Future Risks / Trends

The factors discussed in this Report are potential risk factors / trends that may occur to the Group’s operations and includes our preparations to mitigate and respond to such risk factors.

Emerging Risks / Trends

Cybersecurity Vulnerabilities

Risk Type: Technological

It is undeniable that technology, IT systems and digitalization have become indispensable tools in accelerating business progress and efficiently overcoming obstacles. However, they have obliged organizations or businesses to confront with increasing cybersecurity risks that are evolving at such rapid pace that these organizations or businesses find it hard to install appropriate protection systems in time.

COVID-19 Impact

The increased dependence on the use of digital technology and seamless connectivity has left organizations vulnerable to cyber risks, such as hacking to obtain operational data or to interfere with the Group’s production process.

Response Actions

In order to strengthen the security of the current IT system, Charoen Pokphand Group has determined two main governance principles.

- The first involves establishing and announcing the implementation of policies and guidelines across the Group as well as raising employee awareness to ensure acknowledgement of such policies and guidelines.
- The second IT risk management which focuses on creating a protection system that meets international criteria.
Failure in Climate Management
Risk Type: Environmental

At present, the impact of climate change is evident around the world in the forms of unprecedented temperature increase or decrease, droughts, forest fires, floods, natural resource shortage and extinction of animals and plants. These are the consequences of failures to manage climate change in accordance with the Paris Agreement by governments, the private sector and the population. Furthermore, the results of the COP26 in 2021 concluded that climate change remains a top global threat and is highly likely to intensify and become more widespread in the medium to long run. Meanwhile, the forecast of climate change impacts poses direct risks to Charoen Pokphand Group in terms of rising operating costs as carbon trading policy is expected to intensify, the need for labor migration which creates shortage of labor needed to run businesses, and loss of biodiversity as a result of biotechnology or the use of renewable materials that may not have been tested for a reasonable period of time.

Value Chain Security
Risk Type: Economic

Value chain security is of paramount importance to business operations in all industries, in particular Charoen Pokphand Group which has various business ventures and a complex value chain that involves all stakeholder groups from upstream to downstream. However, the worldwide impact of climate change that is likely to intensify in the near future has significantly affected the growth and product quantity of the Group’s critical upstream raw materials, such as corn and rice, etc. In addition, future geopolitical uncertainties have affected the transportation system of raw materials and products, such as preventive measures that cause logistics disruptions, etc. This shortage of raw materials directly affects the Group’s efficiency and capacity to manufacture adequate products to meet consumer demands as well as products enriched with sufficient nutrition for good health and well-being.

COVID-19 Impact

Although energy consumption and greenhouse gas emissions decreased during the COVID-19 pandemic, many sectors have speculated that they are likely to increase in comparison with the figures in 2021 as a result of economic recovery and acceleration of production processes to meet consumer demands.

Response Actions

Charoen Pokphand Group has set as our main goals to become carbon neutral by 2030 and achieve net zero emissions by 2050 in order to reduce potential impacts on the society. In the meantime, we have also taken part in supporting the Paris Agreement. The Group does not only limit the efforts to achieve both goals to the Group’s operational scope and processes, but we also encourage business partners across the supply chain to adopt our goals and operational guidelines in their own businesses in order to ensure positive contributions.

COVID-19 Impact

The COVID-19 pandemic has caused direct impacts on the production and transportation of products. At the same time, disruption to suppliers’ businesses have also resulted in the shortage of healthy food and medical supplies for the daily lives of the people.

Response Actions

As leader of agro-industry and food, retail and distribution, and pharmaceutical businesses, Charoen Pokphand Group gives priority to the development of product, process and transportation innovation to increase opportunities in manufacturing and delivering products of the future to all stakeholder groups. An operational strategy that has been implemented to achieve value chain security is the value enhancement of key raw materials, for example, improving current processing of raw materials to boost outputs while decreasing food loss in the production process, researching and developing alternative raw materials with greater or equivalent utility as current ones, and joining forces within the organization to build a connectivity network and efficiently transport raw materials and products, etc. Besides the aforementioned strategies and directions, the Group has also set the goal for all business groups to implement a traceability system for all high-risk raw materials to ensure consumers of the Group’s ethical raw material sourcing. Furthermore, all business groups are required to perform periodic audits on the sustainability performance of high-risk suppliers to prepare appropriate corrective measures in a timely manner.
Sustainability Governance

Conducting business on the foundation of sustainability in tandem with a comprehensive and effective governance structure will enable Charoen Pokphand Group to achieve our goal of proudly becoming the leader in technology and innovation that creates food for both the body and mind.

At Charoen Pokphand Group, the principles of sustainability have been integrated into each and every business process, including decision-making, management and relevant activities of the organization itself and that of our suppliers, in order to ensure stakeholders that the Group’s operations will not produce negative impacts on the society and environment throughout the value chain.

In order to reiterate Charoen Pokphand Group’s commitment to operate towards sustainability, the Sustainability, Good Governance and Corporate Communication Operating Committee (SGC Operating Committee) has been appointed with the Chief Executive Officer as its Chairman. The SGC Operating Committee oversees policies and sets sustainability goals to ensure maximum benefit for stakeholders, defines strategies and guidelines that are consistent with the corporate strategy, drives sustainability operations in line with international principles while managing and monitoring sustainability performance in Thailand and abroad. The performance of all 15 Sustainability Goals 2030 are linked to the remuneration of the management based on their scope of responsibility. The performance of sustainability development is periodically reported to the Group’s Board of Directors and the senior management by all business groups.

The SGC Operating Committee meets every three months to monitor sustainability performance of business groups and shape sustainability directions on issues such as progressing towards the Net Zero Goal which is a Science Based Target initiative (SBTi), undergoing sustainability assessment by international authorities, e.g., S&P, World Business Alliance, driving and supporting business groups to achieve better sustainability performance in economic, social and environmental dimensions.

Additionally, Charoen Pokphand Group has appointed an SGC Operating Committee in China to serve as a supporting mechanism in driving the Sustainability Strategy 2030. The SGC Operating Committee in China reports relevant progresses and performance to its central counterpart on a regular basis. Furthermore, the Group plans to appoint SGC Operating Committees in other countries where the Group has investment to align the direction of sustainability operations throughout the Group.
Material Issues Discussed at the Sustainability Committee Meeting

One of the responsibilities of Charoen Pokphand Group’s SGC Operating Committee is driving sustainability performance in line with international principles. Material sustainability issues that were discussed during the Meeting of the SGC Operating Committee in 2021 include:

Review and Formulation of Additional Group-Level Environmental and Human Rights Policies

In 2021, the Corporate Governance, Risk and Audit Steering Committee reviewed and approved 10 additional environmental policies, guidelines and sub-policies as well as 3 additional human rights policies, guidelines and sub-policies.

Management of Food Loss and Food Waste

As leader of the agro-industry and food business as well as retail and distribution businesses, food waste is an issue of utmost importance to Charoen Pokphand Group. The Group has collaborated with external partners to manage surplus food through distribution to extend positive contributions more widely. Besides working to reduce food loss and food waste, the concerned working group has suggested a systematic collection, monitoring and analysis of food waste quantity according to international standards to efficiently manage the supply chain. The Committee has agreed in principle and according to international standards to efficiently manage the collection, monitoring and analysis of food waste quantity.

Determing the Group’s Greenhouse Gas Reduction Targets

The meeting of the SGC Operating Committee also discussed the establishment of an additional greenhouse gas reduction goal or the goal to become a Carbon Neutral Organization in 2030. This new goal includes additional details in line with the guidelines of the United Nations which has set up the Race to Zero Campaign aimed at reducing global greenhouse gas emissions and maintaining global temperature rise to no more than 1.5 °C. The Committee has agreed and approved these additional goals and supported them to be validated by the Science Base Target initiative (SBTi) in order to progress towards achieving the global Sustainable Development Goals and the Paris Agreement.

Driving Human Rights and Employee Safety Plans

In 2021, the Group’s Human Rights Working Group has convened a meeting to drive the continuity of human rights operations in accordance with the United Nations Guiding Principles on Business and Human Rights (UNGPs) and Charoen Pokphand Group’s Human Rights Guidelines.

Charoen Pokphand Group Sustainability Report 2021

In 2020, Charoen Pokphand Group accomplished 11 out of 12 Sustainability Goals. The Group was unsuccessful in achieving the climate management goal which had targeted to reduce greenhouse gas emissions per unit of revenue by 10 percent from 2015 base year. According to 2020 performance, emissions lowered by only 8.5 percent. Therefore, the Group had to purchase carbon credits to offset the difference. Meanwhile, the implementation of the Sustainability Goals 2030 commenced in 2021. The results from the implementation of all 15 goals are as follows:

### Summary of Sustainability Goals 2020 Implementation and the Initiation of Sustainability Goals 2030

In 2020, Charoen Pokphand Group accomplished 11 out of 12 Sustainability Goals. The Group was unsuccessful in achieving the climate management goal which had targeted to reduce greenhouse gas emissions per unit of revenue by 10 percent from 2015 base year. According to 2020 performance, emissions lowered by only 8.5 percent. Therefore, the Group had to purchase carbon credits to offset the difference. Meanwhile, the implementation of the Sustainability Goals 2030 commenced in 2021. The results from the implementation of all 15 goals are as follows:
Charoen Pokphand Group regularly reviews material sustainability issues to consider their coverage of relevant issues, risks, stakeholder expectations and new trends and directions in order to plan strategies, set appropriate directions and sustainably create values for the society and environment.

In 2021, Charoen Pokphand Group has conducted a review of material sustainability issues which had been intensively assessed in 2020 based on the materiality assessment process of the Global Reporting Initiative Standards (GRI Standards) and based on an integrated format adopted by the Group for more comprehensive results and connectivity of issues, both internally and externally.

The materiality review process in 2021 included analysis of emerging risks and opportunities by executives from all business groups, analysis of movements, trends and positive/negative impacts from around the world and relevant industries, stakeholder opinion survey and in-depth analysis of 11 stakeholder groups, evaluation and prioritization, verification by executives and relevant parties, and certification from credible external authorities.

More information is available in Materiality Assessment Report 2021.

Analysis of Emerging Risks and Opportunities

Charoen Pokphand Group has considered the suitability of materiality issues assessed in 2020 to current and future circumstances. We have thereby taken into account risks and opportunities as well as the Group’s abilities in managing such issues. The analysis results by executives from all business groups combined with the analysis of movements, positive and negative global and industrial trends found that environmental issues and the commitment to alleviate climate change impacts continued to be key issues of interest for many sectors around the world. This is followed by innovation management in the production process and the production of products and services that do not only reduce environmental impacts, but also improves the quality of life and well being of the people. Additionally, the management has also highlighted the continuous development of employees, communities and societies by providing them with more knowledge for equal advancement into the era of innovation and technology. In addition, supply chain security is also an issue of interest as the Group operates a sophisticated supply chain while also using a large variety of critical raw materials. Therefore, the responsible management of the supply chain will support the mutual growth of the Group and our stakeholders.

Stakeholder Survey

In 2021, Charoen Pokphand Group has conducted an analysis of stakeholder groups that may have been positively and negatively affected by the Group’s business operations. The management has approved the separation of creditors from investors and shareholders as the impact on the former is perceived to be significantly different than that of the latter group. Therefore, in 2021, the Group has categorized stakeholders into 11 groups. The Group has conducted an opinion survey on all groups of stakeholders regarding the overall operation of the Group as well as on sustainability. It also explored which material issues stakeholders find important and influence decision-making. The survey results and in-depth analysis concluded that all stakeholder groups have confidence in the Group’s sustainability operations; however, they still expect continuous improvements, especially in the areas of communication where they deemed that the Group should communicate more to the society on operational approaches and performance. Stakeholders also viewed that product development should answer to both consumer demands and environmental conservation.

Materiality Matrix Assessment Result 2021

<table>
<thead>
<tr>
<th>Stakeholder Engagement</th>
<th>Water Stewardship</th>
<th>Corporate Governance</th>
<th>Food Security and Access to Nutrition</th>
<th>Climate Resilience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Rights and Labor Practices</td>
<td>Health and Well-being</td>
<td>Circular Economy</td>
<td>Responsible Supply Chain Management</td>
<td>Innovation</td>
</tr>
<tr>
<td>Social Impact and Economic Contribution</td>
<td>Ecosystem and Biodiversity Protection</td>
<td>Cybersecurity and Data Protection</td>
<td>Leadership and Human Capital Development</td>
<td></td>
</tr>
</tbody>
</table>

[Materiality Assessment Report 2021]
By operating the business with good corporate governance, ethics and transparency for all stakeholders is the heart of Charoen Pokphand Group’s business operations and sustainable growth. Besides operating the business with strict compliance to rules and regulations, management of employees’ safety, knowledge and skill development, as well as development of information security are other factors that will promote the Group’s ability to compete, grow and deliver value to all stakeholders in a continuous and sustainable manner.
Opportunities and Challenges

Nowadays, businesses are operated in the midst of global crises, such as the COVID-19 pandemic which has affected the global economy as well as the lives and safety of human beings, coupled with a new global trend which recognizes that climate change impacts are affecting conventional business structures and models in an unpredictable manner and at a more accelerated pace than previously believed. At the same time, stakeholders expect organizations to conduct businesses with more transparency, ethics, and responsibility towards the society.

Therefore, Charoen Pokphand Group is committed to conducting our business with responsibility, honesty, integrity, transparency, fairness and in accordance with rules and regulations while taking into consideration the benefit of the country, the people and our employees. We also attach great importance to the effective integration of corporate governance, risk management and compliance. Clear policies and operational frameworks have been established to enable implementation and achievement of concrete results across the Group. The Executive Board, the Board of Directors and executives at all levels must portray good role model behavior in ethics and strict compliance to support the Group’s stable and sustainable growth.

C.P. Group’s Businesses and Activities

Analysis of Sustainable Development Goals and Key Impacted Stakeholders along the Value Chain

Supporting the SDGs

Outcomes and Benefits

Progress towards C.P. Group 2030 Sustainability Goals

Key Performance in 2021

Revised and developed policies and guidelines in line with the changing trends of corporate governance by integrating opinions of executives and representatives from all affiliated companies into the process of formulating policies and guidelines.

More information available in

- Stakeholder Engagement Report 2021
- UN SDGs Mapping Report 2021
Creating an Ethical Corporate Culture

Charoen Pokphand Group’s ethical corporate culture stems from exemplary behavior of complying with corporate values, the Code of Conduct and Group-level policies by the Board of Directors, the Executive Board and executives of all levels. The Group also focuses on cultivating our staff by raising awareness and promoting ethical working behaviors whereby employees are required to sign their acknowledgement in the Code of Conduct. At the same time, we also organize trainings continuously and evaluate employee knowledge and understanding annually through tests. Furthermore, the Group also raise stakeholder awareness across the value chain and encourage their engagement in the creation of an ethical business environment in accordance with the principles of good corporate governance.

Our Way Forward

Charoen Pokphand Group is committed to improving our performance in corporate governance to be on par with international standards while applying the same standards throughout the Group in order to achieve tangible results. Therefore, the following action plans have been defined:

01 Develop a corporate governance system for non-listed affiliates to provide comprehensive support in corporate governance, risk management and compliance across the Group.

02 Embed employee engagement by applying the results of the Ethics and Compliance Survey in developing various forms of knowledge-building activities in order to enable compliance with the Code of Conduct.

03 Leverage technology and digital platform to develop a corporate governance system for affiliated companies to achieve higher efficiency in monitoring operations.

Corporate Governance for Responsible Operations

Key Performance

Charoen Pokphand Group is recognized by ETHISPHERE as one of the World’s Most Ethical Companies for the second consecutive year.

Executive Board Performance Evaluation

Full Board Evaluation

Raising Awareness on the Code of Conduct

100% 100% 100%

Very good

Individual Evaluation

Very good

Corporate Governance Policies and Guidelines

Revised Policies and Guidelines

- Sustainability
- Environmental
- Human Rights
- Sustainable Procurement

Newly Developed Policies

- Ecosystem and Biodiversity Protection
- Food Loss and Food Waste
- Sustainable Packaging
- Waste Management
- Product Stewardship
- Air Quality Management
- Chemical Management

Corporate Governance

Creating value for stakeholders is one of Charoen Pokphand Group’s core missions. The Group continually adheres to conducting our business with responsibility, fairness, transparency and ethics in accordance with the principles of good corporate governance as we believe that it is the key to creating long-term values for stakeholders as well as build competitiveness and sustainable business growth.

Under a complex business environment and fast-changing uncertainties, Charoen Pokphand Group aims to drive corporate governance in a systematic manner across the Group. In doing so, the Group focuses on the structure and process of governance. We have thereby established Group-level policies and guidelines relating to corporate governance and the Code of Conduct as a framework for aligning operations.

In 2021, the Sustainability and Environmental Policies and Guidelines were revised while ten new environmental sub-policies were developed by integrating the opinions of executives and representatives from all affiliated companies into the process of formulating policies and guidelines. This is to enable implementation and align contents with global trends of sustainable development.

Board of Directors and Executive Board

The Board of Directors takes the lead in determining the overall operation of the management in accordance with the vision and policies set for efficiency and effectiveness. It consists of 11 directors, 10 of whom are non-executive directors and 1 executive director. The members of the Board of Directors are diverse in terms of age, ethnicity, nationality, domicile, knowledge, abilities, skills, expertise and work experience in various fields that are beneficial for operations in accordance with strategies, goals, and objectives that have been set forth.

The Board of Directors has assigned the Executive Board to ensure that the Group’s operations are in accordance with the Corporate Governance Principles, policies and practices relating to good corporate governance. The Executive Board is chaired by the Chief Executive Officer and comprises senior executives of Charoen Pokphand Group Company Limited as well as listed and non-listed affiliates.

The Executive Board regularly monitors the performance of affiliated businesses. The "Corporate Governance, Risk and Audit Steering Committee" and "Compliance Steering Committee" were appointed in 2021 to screen corporate governance-related works to ensure the tangible implementation of corporate governance across the Group.

In 2021, the Executive Board conducted a self-assessment of the full board’s performance under four topics, namely structure and qualifications, role and duties, meetings and self-development. The overall evaluation of the full board’s performance is "very good". In addition, the Executive Board also commenced the individual assessment of directors’ performance for the first year using the self-assessment and cross-assessment methods. The overall individual evaluation result is "very good".

More information available in Corporate Governance.
Risk Management for Corporate Security

Risk Governance

Charoen Pokphand Group focuses on creating short-term and long-term values for stakeholders. The Group has implemented a risk and crisis management system as well as an appropriate risk management structure which increases the Group’s confidence in continually achieving objectives and goals.

In addition to a comprehensive risk management structure, Charoen Pokphand Group is also committed to upgrading risk management to cover all business units through an ethics & compliance risk assessment and management process which covers economic, social and environmental impact issues. Policies and plans have been formulated to ensure that all businesses create value and sustainable corporate growth in their operations:

1. **Tone at the top** to embed a risk culture where each business group define their respective risk appetite and risk-taking behavior consistent with corporate goals.
2. **All business units govern risk management on par with international standards** and implements an effective risk control self-assessment for continuous improvement and future risk prevention.
3. **Risk expert synergy** through the creation of knowledge and understanding as well as exchange of management best practices to prevent risks and keep up with business expansions leading to the management of emerging risks that challenge the Group’s sustainable growth.

Charoen Pokphand Group places importance in good corporate governance and upholds ethical, honest and transparent business operations.

In the past year, the Group has monitored and assessed improvements and corrective actions carried out by affiliates in accordance with the Code of Conduct compliance assessment in order to drive business operations and ensure compliance with the Code of Conduct in a continuous and tangible manner.

Furthermore, the Group also gives priority to abiding with applicable policies, practices and laws. Therefore, we have planned to perform an assessment on compliance with the Anti-Bribery and Anti-Corruption Policy and Guidelines in 2022 based on the results of the self-assessment of the Group’s non-listed affiliated companies. An assessment on the implementation of the Anti-Bribery and Anti-Corruption Policy and Guidelines in business operations will also be conducted.
Compliance

Compliance Governance

Compliance is another supporting factor for Charoen Pokphand Group’s transparent, fair and accountable operations and enables our ability to efficiently cope with more complex risk factors. For this reason, the Group is determined to conduct our business smoothly, efficiently and in compliance with relevant laws, rules and regulations by taking into account responsibility for the society and environment as key. This means that executives and employees must strictly respect and abide by such laws, rules and regulations in all countries with business operations.

Charoen Pokphand Group promotes and ensures that executives and employees are aware, understand and strictly comply with corporate policies under the responsibility of the management and supervisors who ensure employee compliance with relevant policies and act as role model for employees. If there are any doubts, questions or uncertainties concerning legal matters, employees are urged to consult supervisors or relevant authorities, such as the Corporate Compliance Office or the Legal Office.

Violation and Anti-Corruption

Charoen Pokphand Group recognizes that anti-corruption can cause unfathomable damage to businesses in terms of progress and reputation. For this reason, the Group has announced zero tolerance for behaviors against or violations to the Group’s Code of Conduct, Corporate Governance Policy and other relevant policies. All cases of violations to the Code of Conduct and corporate policies shall be investigated and reported to the Audit and Compliance Steering Committee who review reports on such violations and submit them through whistleblowing channels.

Grievances

Charoen Pokphand Group has established the Whistleblowing Policy and Guidelines to receive recommendations and opinions from both internal and external stakeholders. The whistleblowing process has been audited by an external party since 2020. This ensures that the company’s whistleblowing system is effective, transparent, accountable and in line with international standards. All complaints received as well as data of the complainant shall be protected and classified according to international standards.

At the same time, investigations and remedies shall be conducted fairly for all parties.

In 2021, Charoen Pokphand Group received 34 cases of complaints relating to ethics and morality and other relevant issues. Out of this figure, 13 cases were proven guilty. The Group has imposed penalties, such as warnings or dismissals, according to the Code of Conduct and the Zero Tolerance Policy.

More information available in

Corporate Governance

Number of Complaints relating to Employee Misconduct and Management Measures in 2021

<table>
<thead>
<tr>
<th>Complaints Related to Ethics and Morality (case)</th>
<th>2021</th>
<th>Management Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Cases</td>
<td>Under Investigation</td>
<td>Substantiated Case</td>
</tr>
<tr>
<td>Fraud</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Conflict of interest</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td>Non-compliance</td>
<td>7</td>
<td>-</td>
</tr>
<tr>
<td>Discrimination</td>
<td>8</td>
<td>-</td>
</tr>
<tr>
<td>Harassment</td>
<td>9</td>
<td>-</td>
</tr>
<tr>
<td>Corruption</td>
<td>3</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Complaints Related to Anti-Competitive Behaviors (case)</th>
<th>2021</th>
<th>Management Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Cases</td>
<td>Under Investigation</td>
<td>Substantiated Case</td>
</tr>
<tr>
<td>Anti competitive Behavior</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Total (case) 34 0 13 21 7 4 0 2

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More information available in

Corporate Governance

0 Cases of significant violations of environmental regulations or laws in the past 4 years*
Human Rights and Labor Practices

Opportunities and Challenges

With a diversified business context and a growth strategy that focuses on the continuous and sustainable value creation for the country, society and environment, Charoen Pokphand Group must rely on a large number of labor workforces throughout the value chain. Therefore, the comprehensive protection of human rights, the equal treatment of labor, and the safety of employees and related parties are issues of interest to other organizations, and stakeholders who expect the Group to align operations with international standards. For this reason, the Group has always adhered to and placed priority in driving our business in agreement with the management of respect for human rights, labor practices and the safety of employees, customers, business partners and all stakeholders across the value chain. The Group has thereby announced the implementation of the Human Rights and Labor Practices Policy and Guidelines that is in line with the UN Guiding Principles on Business and Human Rights (UNGPs), the Universal Declaration of Human Rights (UDHR), the United Nations Global Compact (UN Global Compact), and the Declaration on Fundamental Principles and Rights at Work.
Protecting Human Rights Throughout the Value Chain

Key Performance

Human Rights Risk Assessment

With unwavering commitment to protect human rights across the entire value chain, Charoen Pokphand Group requires all Business Units and relevant stakeholders along the value chain to take into account the risks and impacts of human rights throughout current operations and in any investment decisions relating to mergers and acquisitions as well as sales of businesses in the future. Furthermore, the human rights due diligence must be performed in accordance with the UN Guiding Principles on Business and Human Rights (UNGPs).

In line with the UNGP Reporting Framework, Charoen Pokphand Group conducts the Human Rights Risk Assessment (HRRA) once every three years on all business lines. In doing so, clear procedures and contexts, consisting of context analysis, risk registration and identification, and risk scoring, have been established to ensure all stakeholders that the Group's operations are complete and comprehensive.

More information available in

Human Rights and Labor Practices Policy and Guidelines

Charoen Pokphand Group Sustainability Report 2021
C.P. Group Human Rights Salient Issue

<table>
<thead>
<tr>
<th>Human Rights Issue</th>
<th>Risk Details</th>
<th>Likelihood</th>
<th>Impacted Stakeholder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupational Health and Safety</td>
<td>Operating in high-risk areas, employees lacking skills, knowledge and tools for safe working conditions</td>
<td>High</td>
<td>Employees, workers, including contractors working on the Group’s premises</td>
</tr>
<tr>
<td>Forced Labor and Foreign Workers</td>
<td>Illegal immigration resulting in ineligibility to access care from the government and other healthcare services</td>
<td>Medium</td>
<td>Foreign workers in value chain</td>
</tr>
<tr>
<td>Child Labor</td>
<td>Child labor in agricultural and fishing sectors</td>
<td>Low</td>
<td>Children in agricultural and fishing sectors</td>
</tr>
<tr>
<td>Discrimination</td>
<td>Inability to access equal healthcare services</td>
<td>Low</td>
<td>Foreign workers in value chain</td>
</tr>
<tr>
<td>Personal Data Protection</td>
<td>Cyber attacks and theft of personal and corporate data</td>
<td>Low</td>
<td>Customers, business partners, employees</td>
</tr>
</tbody>
</table>

Charoen Pokphand Group builds awareness of human rights for employees at all levels as well as relevant parties across the value chain through various forms of training and continuous communications.

More information available in:

- Trainings and Communications on Human Rights in 2021

Human Rights Risk Management Measures

<table>
<thead>
<tr>
<th>Human Rights Issue</th>
<th>Business Units with Implementation</th>
<th>Risk Mitigation Approach</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupational Health and Safety</td>
<td>Throughout Charoen Pokphand Group</td>
<td>SHE policy and committee, and employee engagement in occupational health and safety</td>
<td>Management of personal hygiene, safe working area that does not cause occupational illnesses</td>
</tr>
<tr>
<td>Discrimination</td>
<td>Throughout Charoen Pokphand Group</td>
<td>Diversity and Inclusion Best Practices, Non-Discrimination and Anti-Harassment Policy</td>
<td>Establish a rigorous and tangible measures</td>
</tr>
<tr>
<td>Child Labor</td>
<td>Throughout Charoen Pokphand Group</td>
<td>Supplier Code of Conduct</td>
<td>Lower child labor risk assessment results</td>
</tr>
<tr>
<td>Forced Labor and Foreign Workers</td>
<td>Throughout Charoen Pokphand Group</td>
<td>Reviewing Foreign Workers Recruitment Policy</td>
<td>Reduce risks of workers being forced to work by recruiting agencies that do not meet the standards of the Group</td>
</tr>
<tr>
<td>Personal Data Protection</td>
<td>Throughout Charoen Pokphand Group</td>
<td>Cybersecurity Policy and Guidelines, Personal Data Protection Policy and Guidelines</td>
<td>Security system and awareness of data theft risks from online transactions</td>
</tr>
</tbody>
</table>

Our Way Forward

Charoen Pokphand Group is determined to eliminate human rights violation throughout the value chain. In this regard, our plan of action to achieve C.P. Group 2030 Sustainability Goals in Human Rights consists of:

01 Periodically conducting Human Rights Risk Assessment on 100% of activities carried out by the Group and suppliers.

02 Performing Human Rights Risk Assessment on all relevant stakeholders across the value chain.

03 Developing appropriate and adequate remedial mechanisms for victims of human rights impact.
Creating a Culture of Equality

Over the past decade, Charoen Pokphand Group has set our focus on cultivating employees at all levels to uphold the Six Core Values that have been passed down from generation to generation in order to create benefit for the country, promote quality of life for the people and support exponential and sustainable growth for the organization. Besides the Six Core Values, the Group has also incorporated relevant emerging issues into our operational guidelines. For example, in 2021, the Group has revised and publicized the Diversity and Inclusion Best Practices and the Non-Discrimination and Anti-Harassment Policy with the objective of creating an appropriate working environment, reinforcing employee engagement, and motivating all employees to be part of the organization and be ready to develop one’s own skills in order to grow sustainably alongside Charoen Pokphand Group.

Furthermore, Charoen Pokphand Group also considers the changing international context which directly impacts the livelihood of employees and their families. For this reason, the Group plans to improve employee care in line with the changing context in order to create happiness and peace of mind for employees and families in a sustainable manner.

Apart from creating equality and appropriate working environment for our employees, Charoen Pokphand Group also recognizes the importance of enhancing the well being of contractors and foreign workers. Therefore, we have revised the Foreign Workers Recruitment Policy and Guidelines to comply with other standards of the Group.

Our Way Forward

With a commitment to provide equal career advancement opportunities for all employees and create an atmosphere of inclusion and diversity, Charoen Pokphand Group has defined the following C.P. Group 2030 Sustainability Goals relating to Labor Practices:

1. Similar ratio between male and female employees
2. Zero complaints regarding discrimination and harassment
3. More suitable job positions for vulnerable groups

More information available in
GRI & SASB Content Index Report 2021
Occupation Health & Safety Management

Occupational health and safety is a critical issue for Charoen Pokphand Group’s business operation. Inappropriate safety management may disrupt the production process and can also produce related impacts on stakeholders’ operations and activities along the value chain. Consequently, the Group places priority in strictly managing occupational health and safety for employees, contractors and stakeholders in order to create a safe working environment and build confidence for stakeholders from all sectors.

Therefore, in order to achieve a systematic and aligned occupational health and safety management throughout the organization as well as with business partners and contractors, Charoen Pokphand Group has communicated information on safety, occupational health and environment policy and management to all concerned parties. We have also provided trainings to impart in-depth understanding which can be further implemented in a strict and correct manner. Furthermore, the Group has plans to establish additional technical guidelines to support systematic and aligned operations throughout the organization, such as:

- Hazardous work permit system
- Safety in electrical work
- Safety in hazardous energy work
- Safety in heat or spark-producing operations
- Safety in working at height
- Safety in working in confined space
- Management of Change

More information available in
- Occupation Health & Safety in the Workplace
Accident Reduction Strategy

Cooperating to Become a Zero Accident Organization

Charoen Pokphand Group has set the target to become an organization with zero accidents and fatalities of employees, contractors, and relevant stakeholders. The Group’s executives and all subsidiaries have thereby given their full support to such commitment by establishing strategies, work plans and indicators at the Group, Business Unit and employee levels. We have also dedicated human resources to fully drive the organization towards the achievement of the goal. Charoen Pokphand Group’s accident reduction strategy consists of:

- Regularly monitoring performance and establishing risk reduction measures
- Determining safety indicators for the management and employees
- Creating awareness among employees at all levels
- Creating a safety culture
- Establishing a recognition, commendation, and awards program
- Declaration of commitment by top management of each Business Unit
- Regularly improving safety systems and standards

Case Study 1

Cooperating to Become a Zero Accident Organization

Charoen Pokphand Group has implemented management systems according to international standards, such as ISO 45001, to raise the efficiency of our occupational health and safety management. Incorporated into each and every operation carried out by the Group and our subsidiaries, these systems and standards ensure that an occupational health and safety management system is applied throughout the Group and that the Group is able to achieve our sustainability goals with full efficiency.

Charoen Pokphand Group has determined the following strategy and goals in occupational health and safety:

- Senior management is committed to create a safety culture and encourage employee engagement at all levels in order to manage risks and lower accidents to zero throughout the organization.
- Raise the level of Safety, Occupational Health and Environment Management Standards to increase management efficiency both domestically and internationally.
- Establish safety goals and indicators to ensure the achievement of zero fatality and lost time injury goals by all companies.

Charoen Pokphand Group endorses subsidiaries with continual occupational health and safety management. We thereby award the Zero Accident Certificate to those companies that have received national establishment awards in safety for more than ten consecutive years.

Number of companies awarded with Zero Accident Certificate

5 companies

More information available in Occupation Health & Safety in the Workplace
Fleet Safety Management

Key Performance Dashboard

Data on Fleet Safety

Charoen Pokphand Group has raised vehicle utilization standard in order to reduce road accidents that may result in the death or severe injury of employees and contractors by implementing a digital platform to manage the readiness of drivers and analyze transportation duration and routes.

Fleet Safety Enhancement

Transportation and logistics are key activities in Charoen Pokphand Group’s business. This includes the transportation of raw materials from the source or production site to the production process, the transportation of goods to storage, including retailers and wholesalers. Throughout such processes, the goods must be kept fresh, clean, complete and, most importantly, safe. Therefore, the Group has collaborated with business groups and contractors to develop an efficient transportation system that provides safety for goods, drivers and all stakeholder groups.

Despite our standards and approaches to prevent road accidents as well as constant audits, accidents continued to occur during the past few years. Most of these accidents were caused by tailgating and collision with objects in the operating area. Therefore, in order to actively prevent vehicle accidents, Charoen Pokphand Group monitors the driving behavior of drivers through GPS and vehicle camera systems via a central command center as well as organize the “Train the Trainer” safety activities by their supervisors.

Our Way Forward

Charoen Pokphand Group plans to strengthen occupational health and safety in the workplace and production process with the following action plans:

01 Trainings on safety for employees at all levels, contractors, suppliers and stakeholders in order to create a safety culture.

02 Categorizing safety management by priority and impact.

03 Supporting operational discipline.
Opportunities and Challenges

At present, education inequality remains a key global concern as it is a core issue that leads to income gaps in the society. For this reason, Charoen Pokphand Group is committed to take part in uplifting the quality of life of communities by setting the goal to support access to quality and uninterrupted education in support of the United Nations Sustainable Development Goals (UN SDGs). The Group firmly believes that quality education will enhance capabilities and set one free from dependence on others. Furthermore, education creates jobs and improves quality of life while serving as an indicator of people’s capacity in driving the economy, society, and country. The Group has built a network of cooperation with relevant sectors to develop basic education infrastructure, access to education for children, youths and vulnerable groups, and upgrade skills and knowledge for living in a digital world. In addition, the Group has an opportunity to cooperate with international partners, the World Business Council for Sustainable Development (WBCSD), to enhance a positive impact at scale. The Group has represented the Thai business sector, jointly identify problems and address the issues of inequality through Business Commission to Tackle Inequality (BCTI). One of the goals is to increase knowledge and empower youth and society to be ready for their careers in the future as well as to be capable of keeping pace with the rapidly changing economy. This development reflects stability, freedom, and social equality.

Education and Inequality Reduction

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In supporting and furthering efforts under the CONNEXT ED Foundation, which consists of over 44 partners, the Group’s subsidiaries have conducted projects and provided funding in various areas worth 2,961 million THB for 1,742 schools.

ICT Talent Project

**Objective:**
Having ICT talent stationed in every school and every community is equipped with digital skills and are able to apply such skills for living.

**Performance:**
- **Public sector ICT talents:** Over 500 government teachers have been selected to join the “Public Sector ICT Talent” course, since 2018 until present.
- **The “Public Sector ICT Talent” course** has been certified by the Human Capital Excellence Management Center (HCEMC).
- **700 ICT talents covering over 2,000 schools.**

### Performance of Strategy to Drive and Enhance Quality of Education Management in 2021

The CONNEXT ED Foundation has been in operation for the fifth consecutive year under the vision to reduce inequality, enhance human capital quality and increase competitiveness. It holds the mission to encourage Thai children and youths to develop their capacity into good and talented people. In 2021, Charoen Pokphand Group joined the effort to drive operations according to the five key strategies which were established as the main mechanisms in developing Thai education towards achievement of goals. Highlight performances include:

**TRANSPARENCY**
- Information on 5,567 Connext ED schools is available online via Connected.org

**MARKET MECHANISMS**
- 932 school partners
- 200 ICT talents and 500 public sector ICT talents

**HIGH-QUALITY PRINCIPALS & TEACHERS**
- Training for 20,000 school administrators and teachers

**CHILD CENTRIC & CURRICULUM**
- Established 13 pilot learning centers
- Develop an online knowledge bank covering all education levels and subject areas

**DIGITAL INFRASTRUCTURES**
- 1,294 schools with high-speed internet
- 31,836 classrooms with IT devices and media
- 5,000 notebook computers for pilot schools in 17 provinces

More information available online [Education and Inequality Reduction](#)

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**Case Study 2**

**CP University**

Charoen Pokphand Group has launched an online learning platform for the future called CP University with focus on knowledge sharing to the social, education and business sectors by experts from the Group, experienced professionals and renowned academics in Thailand and abroad. This learning platform grants equal access to sources of knowledge and reduces learning limitations as learners can choose to study the topic of their interest anywhere and anytime.

- **10 curriculum groups**, e.g., New Generation Entrepreneur Development Course
- **34 subjects**, e.g., Introduction to Intellectual Property
- **21 seminars**, e.g., Branding 5.0

More information available online [Education and Inequality Reduction](#)
Supporting Education Scholarships

"C.P. Group Scholarship" is an increased "life capital". By this, I refer to the "opportunities and experiences" that gave me courage to think beyond my comfort zone and constantly develop myself. It was the turning point that brought me to success. C.P. Group Scholarship has played a major role in encouraging me to progress with stability.

Atthapon Pawatrattanaphum
C.P. Group Scholarship alumni

"C.P. Group Scholarship is a part of education for development, helping me to advance towards success in my life."
Santikom Sricharoen
C.P. Group Scholarship alumni

Collaborating with the World Business Council for Sustainable Development to Tackle with Inequality

Charoen Pokphand Group was the sole representative of the Thai business sector to join the Business Commission to Tackle Inequality with world-class partner, the World Business Council for Sustainable Development (WBCSD), to discuss and plan awareness raising in tangibly tackling inequality and creating cooperation to identify problems and solutions in the business sector. Furthermore, this session was a platform for exchanging opinions on the issue of inequality as a global agenda. The Group intends to create benefit for the countries and communities where we operate while remaining committed to work with small farmers, SMEs and other stakeholders throughout the supply chain in order to increase skills and improve the well-being of all towards sustainable growth.

More information available online
Education and Inequality Reduction

Case Study 3
Intelligent Learning Platform by Young People

PIM Demonstration School formed a team of young generation startup comprising members from Grade 11 to develop OpenMirai, a platform for education that emphasizes on career-based learning. The platform uses AI technology to analyze a suitable field of work for users and implements a system that selects appropriate subjects. With its career-based feature, learning will not only be confined to textbooks; however, the platform will enhance learners’ experience and build more confidence, helping to solve the problem of teenagers and other people who are uncertain about their field of interest both in education and work. OpenMirai won the 1st Prize from the Pitch @School Competition 2021, hosted by the Global Entrepreneurship Network (GEN) which focuses on cultivating innovators and youth.

Case Study 4

Collaborating with Partners to Bridge Education Gap

Charoen Pokphand Group and True Group joined the "EEF FORUM : Exploring Education Inequality during COVID-19, how Thai education is progressing and how to keep children in the education loop?", hosted by the Equitable Education Fund (EEF). Partners, academics, consultants and private operators joined the seminar to grant Thai youths and poor children access to knowledge. The Group focuses on reducing connectivity gap by supporting and facilitating communication technology to underprivileged children so that they can adapt to online education at present.

More information available online
Education and Inequality Reduction

Our Way Forward

Charoen Pokphand Group aims to raise the quality of and increase access to education while reducing social inequality. Therefore, in order to achieve C.P. Group 2030 Sustainability Goals, the Group has defined the following plan of action:

01 Develop additional bodies of knowledge and learning activities through CP University.
02 Provide technological devices/digital media to promote integrated learning in line with the current way of life.
03 Drive reduction of global inequality through WBCSD’s International Commission.
Opportunities and Challenges

Charoen Pokphand Group upholds the importance of leadership and human capital development for sustainable business growth. Accordingly, the Group has laid out well-planned career paths and arranged capacity development programs for employees. We believe that human capitals are the major force in driving the organization; therefore, we offer employees from all sectors the opportunity to engage in activities that promote a learning culture, build experience and strengthen quality leadership. This is in line with the Group’s human resources strategy which focuses on developing ‘new generation leaders’ and equipping over 420,000 employees with management abilities in the digital age with rapid market changes. Due to the variety of businesses and the continuous expansion of our business base, the Group has established the CP Leadership Institute as a center for developing human resources in all business lines. The Institute utilizes technology as a means of communication to connect employees from all corners of the world through an easy-to-access e-learning system that compiles useful courses relating to their respective area of work. Furthermore, the Group supports and encourages engagement in creating and developing novelties in the organization in order to lay a strong groundwork for innovation.
Developing Leaders and Human Resources

Charoen Pokphand Group’s Human Resources Strategy

With a diversified business context and a large pool of personnel under Charoen Pokphand Group, human resources action plans are therefore the essential core of human capital development. The Group places emphasis on strengthening employee capacity to enable their response to rapid changes as well as enhancing specific skills to prevent impact from potential replacement of human labor with technology. For this reason, the Group has conducted a review of our previous strategy, revised and developed a new operational plan to better correspond with the current context. Subsequently, the new “Charoen Pokphand Group Human Resources Strategy” was conceived and adopted as a management principle since 2021. The new strategy focuses on four key areas:

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<tr>
<th>No.</th>
<th>Area</th>
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<tbody>
<tr>
<td>01</td>
<td>Attracting and recruiting good and capable individuals worldwide</td>
</tr>
<tr>
<td>02</td>
<td>Building leaders and developing future skills</td>
</tr>
<tr>
<td>03</td>
<td>Building startups and modular organizations in 4.0 era</td>
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<tr>
<td>04</td>
<td>Strengthening a culture of love for the organization</td>
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</tbody>
</table>

Human Resources Development Performance in 2021

Charoen Pokphand Group has continued to develop human resources in a systematic manner to enhance knowledge, ability and readiness in achieving stable and sustainable career advancement alongside the Group. In 2021, more online learning materials were developed in response to the current work format. The Group also measures learning effectiveness and operational performance of employees at all levels against established goals to identify competency gaps and further boost employees’ strengths.

Average Training Hour

<table>
<thead>
<tr>
<th>Year</th>
<th>Average Training Hour (hour/person/year)</th>
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</thead>
<tbody>
<tr>
<td>2019</td>
<td>13.49</td>
</tr>
<tr>
<td>2020</td>
<td>20.01</td>
</tr>
<tr>
<td>2021</td>
<td>19.09</td>
</tr>
</tbody>
</table>

Percentage of Employee Engaged in Sustainability Training and Activity

| Employee engaged in sustainability training | 86.9 percent |
| Employee engaged in corporate shared value program | 15.8 percent |

More information available in
GRI & SASB Content Index Report 2021
Attracting and Recruiting Good and Capable Individuals Worldwide

Charoen Pokphand Group gives highest priority to the incorporation of our corporate values in the personnel selection process. The Group emphasizes on recruiting good and capable individuals to take part in sustainably driving our operations. In 2021, the Group continues to search for a new generation of well-rounded and disciplined individuals with a sense of entrepreneurship who dare to think and act to participate in building the Group’s future through the CP Future Leaders Development Program (FLP). The Program has been publicized by leaders already working with the organization, via online social media, by word of mouth among friends and seniors juniors who narrate about experiences, opportunities and challenges, and through collaborative partnerships with leading universities, projects, and associations that recommend the Program. Consequently, the proportion of total participants in FLP has increased by 122%, reflecting the potential of C.P. Leadership Institute in attracting good and capable individuals to join its leader development programs. Moreover, we aim to retain new talents to work for the organization in the long run. The Group believes that this strategy can develop well-rounded skills for the new generation who dare to think and act while also enhancing the organization to become an outstanding employer at the international level.

Proportion of total participants in FLP increased by 122%
Proportion of participants in FLP based on the recommendations of the course’s alumni 40%

“I have learnt how to operate a business through hands-on experience with five business groups. I was also given the opportunity to think outside the box and innovate for sustainable business growth.”

Oranut Chaipark  FLP- PLP 5 Synergies

Building Leaders and Developing Future Skills by C.P. Leadership Institute

With a commitment to cultivate and develop human resource capacity for quality leadership through leader development programs by C.P. Leadership Institute, courses are thus based on hands-on learning. Despite difficulties in operations due to COVID-19 in the past year, the courses’ participants learnt to adapt, solve problems and crystallize ideas into various business strategies. At the same time, knowledge can also be passed down from generation to generation through the Knowledge Management System. These efforts create career advancement opportunities, and enhance problem solving skills, a sense of leadership and competencies in performing roles and responsibilities. The courses have been tailored to match four levels of employees:

- CP Future Leaders Development Program
- CP Potential Leaders Development Program
- CP Leaders Development Program
- CP Senior Leaders Development Program

Human Resources Training through C.P. Group’s Action Learning Program in 2021

FLP CP Future Leaders Development Program
PLP CP Potential Leaders Development Program
LDP CP Leaders Development Program
SLP CP Senior Leaders Development Program

More information available in C.P. Leadership Institute
Lotus Zhengzhou Leads Team of New Generations to Set Strategy for Outstanding Performance

Zhengzhou branch of Lotus China formed a team of 105 new generations to devise B2B and B2C strategy to increase sales and market shares. The team was given the opportunity to make onsite surveys of products on sale, study data on demographics, shops and restaurants in the neighborhood to boost sales that accurately meet consumer needs. Such strategy can address customer needs in various aspects, e.g., reducing shopping time, transportation costs and inventory, remodeling store for customers’ convenience. Consequently, Lotus Zhengzhou team was highly successful and achieved sales beyond established goals.

Case Study 5

Lotus Zhengzhou Leads Team of New Generations to Set Strategy for Outstanding Performance

Case Study 6

LDP CP ALL 7-Eleven Delivery Team Develops Innovative Integration Strategy

With 7-Eleven sales hit by COVID-19, the LDP team joined forces to make site visits to analyze problems and consumer behaviors as well as conduct trial practices. Consequently, three main strategies were conceived:

1. Sales through delivery channels
2. Integrating data analytics programs to recommend promotions and additional products
3. Promoting 7 Green Delivery Project to protect the environment through use of electronic receipts

As a result, sales were increased, customers were impressed, and employees’ knowledge and skills were enhanced. The project became a model for all 7-Eleven branches nationwide.

Increase sales from B2B up to 7 times or value of 22.42 Million RMB compare to the same period of previous year

Increase sales from B2C up to 2 times or value of 4.77 Million RMB compare to the same period of previous year

Building Startups and Modular Organizations in 4.0 Era

Charoen Pokphand Group holds the intention to engage our staff in innovating novelties by promoting cross-functional work in the Group’s subsidiaries to gather experience leading to diverse skills and develop our personnel in all aspects. We also target to create business benefits from driving an innovative organization and innovative projects that can be quantitatively measured in order to reaffirm the organization’s flexibility and agility in constantly adjusting strategies, structures, processes, personnel and technology. This is the groundwork for development towards the 2030 Sustainability Goals. In 2021, strategic projects at the business group level and across business groups increased by 53 percent while employees’ participation raised by 33 percent.

Our Way Forward

In order to continuously and sustainably drive the organization, Charoen Pokphand Group is mindful about cultivating the Six Core Values in all our employees. We focus on building a strong corporate culture, creating inspiration, love and pride in being part of the organization. For this reason, the Group emphasizes on thorough care for our employees in various aspects:

1. Care for Career: Define human resource development plan to enable career advancement, promote and support trainings and development projects.
2. Care for Culture: Encourage with guidance not orders to enable capacity development and offer compliments upon task completion.
3. Care for Welfare: Provide support for personnel in various aspects, such as education scholarship for employees and children, annual health checkup program, etc.
4. Care for Well-being: Create a safe and warm working environment.

Our Way Forward

In order to sustainably develop leaders and human resources, Charoen Pokphand Group has established the following goals to achieve the 2030 Sustainability Strategy:

01. Encourage all employees to engage in learning processes according to corporate values.
02. Create opportunities to participate in sustainability activities and support well-being of employee and society.
03. Conduct performance assessment using methods that are suitable for employees’ duties and responsibilities.
04. Groom good and capable individuals through leader development programs and provide continuous learning opportunities.
Opportunities and Challenges

At present, the digital system, IT system and Internet of Things (IoT) are playing a pivotal role in business operations by providing support for the production process, logistics management, product inventory and storage, and customer and employee data management. These systems are critical to Charoen Pokphand Group as they assist the Group in appropriately planning our production and responding to the demands of customers and consumers. Moreover, they enable the Group to analyze and reduce energy consumption from the transportation sector with efficiency. Besides gaining benefits from the implementation of the digital system, IT system and IoT, the Group is also aware that cyber risks can be detrimental to our operations and information security. C.P. Group attaches the highest priority to the data of our business partners, customers, and employees.

Meanwhile, the COVID-19 pandemic has generated direct impact on the Group’s IT system as well as altered the method of working for employees which now relies on Work from Home (WFH) and cloud computing. Without proper and efficient IT security management, the New Normal working style could increase risks of data leakage from employees’ devices and the cloud’s vulnerability.

Cybersecurity & Data Protection

4.4 Substantially increase the number of youths and adults who have relevant skills, including technical and vocational skills.

16.10 Ensure public access to information and protect fundamental freedoms in accordance with national legislation and international agreements.

C.P. Group Businesses and Activities

Analysis of Sustainable Development Goals and Key Impacted Stakeholders along the Value Chain

Key Impacted Stakeholders

Supporting the SDGs

Outcome and Benefits

Progress towards C.P. Group 2030 Sustainability Goals

100% 100% 100%

2021 2030

Businesses certified on international standards of data security and data privacy

Highlight Performances in 2021

- Announced the implementation of C.P. Group policies relating to cybersecurity and data protection.
- Established IT security and safety standard system for infrastructures.
- Established the Security Operation Center.
Cybersecurity & Data Protection

Highway Performance

<table>
<thead>
<tr>
<th>0 Cases</th>
<th>0 Case</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of cyber threats</td>
<td>Number of data security complaints</td>
<td>of IT infrastructure certified with international IT standards</td>
</tr>
</tbody>
</table>

Besides the cybersecurity and data protection structure, Charoen Pokphand Group also places importance in the development of a comprehensive cybersecurity and data protection system by defining operational guidelines that span across all Group activities as well as carrying out collaborations with various business groups to appropriately implement such guidelines throughout the entire organization.

Charoen Pokphand Group’s cybersecurity and data protection management guidelines are as follows:

- Defining a Group-level management structure, or the C.P. Group Cybersecurity Center of Excellence. Composed of committees and working groups from C.P. Group and all business groups, this management structure holds the core responsibility of formulating relevant policies and guidelines, monitoring and ensuring that cybersecurity, IT and data protection performance are aligned towards the same direction and in consistent with C.P. Group’s strategies.

- Announcing the implementation of more than 20 policies and standards relating to cybersecurity, IT and data protection; for example, Personal Data Protection Policy and Guidelines, Information Management Policy and Guidelines, Information Security Policy, Vulnerability Management Standard, Bring Your Own Device Standard, Compliance Standard, Human Resource Security Standard, Security Incident Management Standard, etc. Executives and employees at all levels must study and strictly comply with the requirements of these policies and standards.

- Arranging regular trainings on cybersecurity, IT and data protection for executives and employees at all levels to create awareness and efficiently prevent cyber threats.

More information available in
- Information Management Policy and Guidelines
- Personal Data Protection Policy and Guidelines
Cybersecurity and data protection is a vital issue for Charoen Pokphand Group. Meanwhile, cybersecurity constitutes one of the 15 goals of the C.P. Group Sustainability Strategy. In 2021, the Group has established the CPG Cybersecurity Center of Excellence with the objective to strengthen cybersecurity and digital transformation. Its core missions in 2021 include:

- Establishing the Centralized Security Operation Center which enables the integrated management of cybersecurity, reduces cybersecurity management costs and enables knowledge sharing between business groups under C.P. Group.
- Centralizing the procurement of cybersecurity tools and services to optimize budget efficiency.
- Announcing the implementation of the Information Management Policy and Guidelines which cover cybersecurity management measures, establishing self-assessment templates based on best practice frameworks in cybersecurity, such as PCI, DSS, ISO 27001 and NIST, and instructing each business group under C.P. Group to perform assessments on the conformity and level of cybersecurity protection while determining IT key performance indicators in order to continually enhance and improve their cybersecurity performance.

Case Study 7

C.P. Group Cybersecurity Center of Excellence

Cybersecurity and data protection is a vital issue for Charoen Pokphand Group. Meanwhile, cybersecurity constitutes one of the 15 goals of the C.P. Group Sustainability Strategy. In 2021, the Group has established the CPG Cybersecurity Center of Excellence with the objective to strengthen cybersecurity and digital transformation. Its core missions in 2021 include:

- Establishing the Centralized Security Operation Center which enables the integrated management of cybersecurity, reduces cybersecurity management costs and enables knowledge sharing between business groups under C.P. Group.
- Centralizing the procurement of cybersecurity tools and services to optimize budget efficiency.
- Announcing the implementation of the Information Management Policy and Guidelines which cover cybersecurity management measures, establishing self-assessment templates based on best practice frameworks in cybersecurity, such as PCI, DSS, ISO 27001 and NIST, and instructing each business group under C.P. Group to perform assessments on the conformity and level of cybersecurity protection while determining IT key performance indicators in order to continually enhance and improve their cybersecurity performance.

Our Way Forward

With firm commitment to uplift our cybersecurity, IT and data protection management in order to achieve C.P. Group 2030 Sustainability Goals, Charoen Pokphand Group has determined the following plan of action:

1. Assess cybersecurity and data protection risks of each business group.
2. Collaborate with all business groups to achieve international standard certification.

Number of Employees who Received Foundation of Cybersecurity Training

45,183 person
Health & Well-being

One of the major missions for Charoen Pokphand Group is to promote sustainable and mutual growth for both society and the Group. With this in mind, the Group has been continuously collaborating with various sectors to innovatively develop products and services that not only respond to stakeholders’ needs, but also promote sustainable health and well-being. In addition to these products and services, the Group has been supporting farmers and business partners in adopting technology and innovation into their operations or production processes. This will create opportunities for sustainable mutual growth.
Opportunities and Challenges

Charoen Pokphand Group has always given priority to products and services that are good for health and well-being. Besides production and service innovation, the Group also emphasizes product and service responsibility. However, fast-changing and uncertain situations, such as the COVID-19 pandemic, has urged most consumers to shift their focus to health by consuming good, clean and nutritious food to strengthen bodily health and immunity. At the same time, climate change also affects the Group’s production plans and products as climate variability increases impact risks on plants and animals which are the Group’s key raw materials. Therefore, the necessity to develop products and alter recipes for good health and well-being is a major challenge for the Group in order to maintain our position as leader in technology and innovation in producing food for both the body and mind, creating shared values, and bringing health and well-being to all.
Delivering Good Health and Well-Being for the Society and Individuals

Key Performance Dashboard

Production Process and Nutritious Products

Proportion of Total Sales from Health and Well-being Products and Services

- 40% Health or well-being products and services
- 27% Health product for all ages
- 3% Consumer goods with added nutritious ingredients
- 2% Consumer goods with lower saturated fat, trans fat, sodium or sugar than other products in the market

Healthier Products

- Number of new products that promote good health and well-being (products)

<table>
<thead>
<tr>
<th>Year</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>283</td>
<td>525</td>
<td>791</td>
<td>652</td>
</tr>
</tbody>
</table>

Animal Welfare Promotion

- 100% of animals reared in compliance with the Five Freedoms of Animals and under the responsible and prudent use of antibiotics
- 150% Increase production capacity of cage-free egg by 30% per year based on year 2020 with total production capacity of 12 million eggs in 2020 and total production capacity of 30 million eggs in 2021
- 27.18% of sows raised group gestation pen housing system

Health Promotion

- Blood donations received: 14,700,400 c.c.
- Number of people committing to organ and eye donations: 187,641 Persons
- Total value of donations to ‘Let them See Love’ project: 3.94 Million THB

Promoting Good Health and Well-being for All

Health and Well-being Management

As a leader in the agro-industry and food, retail and pharmaceutical businesses, promoting the health and well-being of people of all genders, ages and status through our products and services is one of Charoen Pokphand Group’s key missions. For this reason, the Group strives to continually develop our capacity in various aspects, such as equipping employees with knowledge, capabilities and expertise for innovating products and services that proactively answer to the needs of customers and consumers; streamlining production processes and operations in line with international standards to achieve quality products and services that are safe for users and consumers; developing products that promote health and well being for consumers; and promoting health through transparent and complete communication of product information in combination with traceability.

Production Quality and Standards

Charoen Pokphand Group has dedicated our commitment and efforts to continuously enhance the Group’s production process in order to ensure all stakeholders that our products are of high quality, safe and recognized with national and international certifications, such as ISO 9001, GMP, HACCP, GAP and BAP, etc. Furthermore, the Group has worked closely with farmers and critical suppliers to develop and manufacture high quality and safe products for the market. These collaborative efforts did not only raise stakeholder confidence, but also led to the development of a traceability process throughout the supply chain. Additionally, the Group continues to strive for excellence in developing products that promote good health and well-being for consumers. In this regard, the Group has food testing laboratories both in Thailand and overseas, including Vietnam, China and USA, all of which have been certified by ISO/IEC 17025 and other relevant standards.

Life Partners Agriculturists Project by CPRAM

As a manufacturer and distributor of ready-to-eat food that meets international standards, CPRAM has conducted the “Life Partners Agriculturists Project” with the objective of raising farmers’ quality of life and promoting their knowledge and understanding in good farming practices in line with the Good Agricultural Practices (GAP). In order to achieve such objective, CPRAM has worked with farmers to produce holy basil leaves which are the key ingredient of 7-Eleven’s best-selling menu. The project focuses on adopting organic farming and integrating farmers’ knowledge on agricultural practices to achieve utmost efficiency and effectiveness.

Case Study 8

Income that farmers received from the project

21 Million THB
Healthier Products and Food for the Future

Healthier Products

Over the course of 100 years, Charoen Pokphand Group has set our focus on developing food enriched with nutrition that is suitable for all genders and ages. The significance of this commitment has been amplified under the COVID-19 situations with consumers turning their attention to health and the ability to build immunity. Consequently, under C.P. Group 2030 Sustainability Goals in Health and Well-being, the Group has announced that 70 percent of sales must derive from health and well-being products. At present, the Group has 852 food products that focus on health and well-being, which can be classified into three principal categories, namely reduced fat/sugar/sodium products, nutritionally enhanced products and reformulated products.

37.1% of marketing budget to promote healthy food products

Food for A Sustainable Future

Besides our commitment in producing food for better health, Charoen Pokphand Group is also mindful about the environment and resource efficiency in food production. For this reason, Charoen Pokphand Foods Public Company Limited, or CPF, has adopted advanced technology in its production system in response to sustainable development and the demands of the society that have shifted to alternative protein consumption. In doing so, CPF has selected high protein plant-based raw materials, such as nuts, mushrooms, oats, almonds, to undergo flavor, aroma and color enhancement to imitate meat products. MEAT ZERO is one such product to have hit the market. It uses the Plant-tec Innovation to produce plant-based meat that not only offers similar taste and texture, but also provides similar nutritional value to animal meat.

Charoen Pokphand Group Sustainability Report 2021
Responsibility towards Animal Welfare and Consumer Health

Rearing Animals according to the Principle of Animal Welfare

Charoen Pokphand Group places importance in research and development to enhance animal welfare promotion throughout the supply chain, covering broilers, layers, swine and shrimps. We also apply innovation and technology in tandem with the implementation of universal animal welfare principles, or the ‘Five Freedoms’, which are the basis in supporting animals to live comfortably with sufficient food while being able to freely express their natural behavior. As the animals are in perfect health conditions, there has been no need to use hormones to accelerate growth nor medicinal treatment. Meanwhile, a biosecurity system enhances the efficiency of managing disease prevention in farms according to the safety guidelines for food production.

Adopting Birdoo Smart Eyes in Broiler Farms

Birdoo Smart Eyes is an automatic remote-control system to track animal welfare in real-time and provides rapid data analysis, such as chicken weight, drinking and eating behavior. The data is displayed via mobile application.

Reducing Fighting Behavior of Piglets Mixed after weaning

Using powdered herbal extracts and spraying disinfectant of the same odor on swine to give the newcomer an odor similar to others, helping them to get accepted into the herd and reducing natural fighting behaviors.

“Probiotic” Shrimp Farming

Focusing on good sanitation in the raising process and management system throughout production, as well as implementing "probiotic farming" practices which emphasizes on using microorganisms to increase immunity and strengthen health for shrimps while improving water quality to prevent diseases and reduce the need to change water in shrimp farming. As a result, C.P. shrimps are free of antibiotics throughout their lifespan.
Communicating through Product Labels

Charoen Pokphand Group has recognized the importance of conducting transparent communications with consumers throughout the past century. Initially, the Group, or "Chia Tai Chung", clearly indicated expiration dates on agricultural product packaging. Such action reaffirms the Group’s aspiration to operate on the basis of “honesty and integrity”, which has been passed down from generation to generation as the Group’s values of food and beverages. For this reason, the Group has developed proactive communication methods and displayed details of food and other products using, for instance, product labels, printed media, online media, direct line, etc., to offer information and knowledge on a product’s accurate, appropriate and timely consumption. The displayed contents include key ingredients, nutritional information, recommended consumption proportion, conservation, usage, consumption information for children and pregnant women, etc.

Besides internal operations, the Group has also collaborated with suppliers to align operations towards the same direction with constant operational guideline improvements. At present, customers and consumers are concerned about the nutritional values of food and beverages. For this reason, the Group has developed proactive communication methods and displayed details of food and other products using, for instance, product labels, printed media, online media, direct line, etc., to offer information and knowledge on a product’s accurate, appropriate and timely consumption.

Promoting the Well-being of Consumers

The COVID-19 pandemic has had a widespread impact, especially on peoples’ life and well being. Therefore, Charoen Pokphand Group has utilized our capacity to assist the country and people by continuously distributing hygienic masks to hospitals nationwide, medical personnel and people who lack access to quality masks. We have also conducted the "Krua Pan Im CP Hearts as One Fights COVID-19" to help the society by sponsoring food and beverages. Through the joint efforts of over 100 organizations from all sectors, the project distributed 2 million meal boxes at 40 distribution points around Bangkok to communities in hopes of alleviating the suffering of locals and assisting operators of small-scale restaurants to overcome this crisis together.

Over the course of the years, Charoen Pokphand Group has engaged with various sectors in Thailand and abroad to increase full and equal access to good health for the people through projects, such as “C.P. Group 100 Years : Giving Back Through Blood Donations” executed by the Special Project Management Offices under the supervision of Mr. Wanlop Chearavanont, C.P. Group Senior Vice Chairman, in collaboration with the National Blood Center of the Thai Red Cross Society. The project encourages the staff of all business groups to give back to the society by donating blood. During 1991-2021, the project received 535,087 units of blood, which is equivalent to 198,406,000 c.c. In 2021 alone, 235 business units held blood donation activities, acquiring 36,751 units or 14,700,400 c.c. of blood.

Besides internal operations, the Group has also collaborated with suppliers to align operations towards the same direction in order to thoroughly create safety, hygiene, and well being for the people.

36.27%
Percentage of product with front-of-package labelling according to regulation and voluntary schemes. The label much be easy to understand and noticeable.
Opportunities and Challenges

The current global situation combined with key trends have contributed to massive changes that have impacted people from all around the world in different ways. Social inequality is among one of the problems that have persisted for many years and is likely to worsen due to COVID-19. Meanwhile, the advancement of technology and innovation have created a digital divide which has left part of the population unable to compete on the job market and without sufficient knowledge to access to useful technologies. Charoen Pokphand Group recognizes these challenges and has thus encouraged the cooperation of our personnel to create a balance between the sustainable response to the needs of the society and communities, and the Group’s business growth to jointly create value through projects that generate careers and income for those in need. This pioneer effort is focused on three core groups, namely farmers, SMEs and vulnerable groups. Additionally, the Group recognizes the capacity of employees and the opportunities in collaborating with partners to share knowledge and enhance skills necessary for this digital era for the society. The Group firmly believes that our endeavors towards the 2030 Goals can improve quality of life so that everyone can live freely and equally without discrimination.

Social Impact and Economic Contribution

C.P. Group Businesses and Activities

Analysis of Sustainable Development Goals and Key Impacted Stakeholders along the Value Chain

Key Impacted Stakeholders

- Farmers
- Communities and Societies
- Business Partners
- Raw Material Supplier
- Raw Material Transportation
- Production and Management
- Products and Services Distribution
- Product Usage
- Product End-of-Life

Supporting the SDGs

1. Reduce at least by half the proportion of men, women and children of all ages living in poverty
2. Double the agricultural productivity and incomes of small-scale food producers
3. Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines.

Outcome and Benefits

Progress towards C.P. Group 2030 Sustainability Goals

1.2 Million jobs supported to generate incomes for people in need e.g. smallholder farmers, SMEs and vulnerable groups along our supply chain

Highlight Performances in 2021

- Promoted jobs and employment to continuously develop quality of life throughout the value chain.
- Created value and engagement of societies and communities.
- Supported knowledge and shared technology to societies and communities.
Creating Social Impact and Economic Benefits for the Society in 2021

704,329 Persons farmers supported
909,615 Persons SMEs supported
135,728 Persons members of vulnerable groups supported
54,021 Persons Others

Value of Social Impact and Benefit
- In-cash donation: 621 Million THB
- In-kind donation: 220 Million THB
- Management costs for social value creation project: 166 Million THB
- Employee voluntary hours: 8,822 Million THB

Case Study 11
Bag for Life

Lotus’s has launched reusable plastic bags under the Bag for Life campaign as an alternative for customers who forget to bring cloth bags. The Bag for Life is made from recycled plastic, it has a thick, and durable characteristics, which allows it to be reused several times. Customers can exchange their bags when worn out for a new one without any cost. The worn-out bags are then recycled into new ones. In its latest edition, Lotus’s joined hands with 11-year-old Arna, the artist behind “NFT (Non-Fungible Token)”, for a special design to give moral support to frontline workers and the people in fighting against COVID-19. 300,000 THB from sales were donated to the Rural Doctor Fund to procure medical equipment and tools for community hospitals to fight against COVID-19.

Supporting Farmers and Improving Rural Life

Charoen Pokphand Group recognizes the value of agriculture as Thailand’s asset and the origin of our business. Therefore, supporting farmers and enhancing agriculture is one of the Group’s main commitments in creating value and benefit for the society. In this regard, the Group has implemented the ‘Integrated Agriculture 4.0’ method as a key approach in encouraging and developing farmers to sustainably adopt new farming practices by promoting the creation of technological skills and knowledge necessary for today’s agriculture. We also promote new action plans that will bring benefits all around, such as mitigation plans to minimize impacts from damaged crops, reduction of operating time to take the load off farmers, risk assessment, technology investment, and increase of sale and distribution channels. These help promote self-reliance and a better quality of life for farmers. In 2021, the Group has collaborated with farmers and partners in many countries to develop projects that continuously render benefit to the agricultural, economic and social sectors.
Case Study 12

Swine Production and Integrated Raw Material Cultivation Project in Xiangyang

Swine Production and Integrated Raw Material Cultivation Project in Xiangyang, Prefecture, Wuhan City, Hubei Province is a strategic collaboration between Charoen Pokphand Group and the People’s Government of Hubei Province on new rural development. It features an extensive intelligent end-to-end industrial supply chain that incorporates feedstock production for animal feed, swine farming, food processing plants and logistics with a traceability system based on advanced technology. The project also holds 150,000 Mu of land for corn cultivation and 300,000 Mu of land for cultivation of feedstock for animal feed. It is also home to a large biogas development project, a 100,000 Mu ecological cultivation base for winter vegetables and barley, and organic farming that utilizes manure that has been adapted to local conditions. Consequently, the project has contributed to the achievement of the Three Benefit Principle, namely benefit for over 10,000 farmers with an increased income of 150 million RMB per year, benefit for the society in the form of food safety awareness and benefit for the organization with steady and safe supply of swine to match needs throughout the supply chain.

* 1 Mu = 666.7 Sq.M.

Case Study 13

Thai Farmer’s Rice

Purchased freshly harvested rice from 9,509 farmers

indicative price plus an additional of 300 THB per ton

The “Thai Farmer’s Rice” project was carried out for the third consecutive year by Royal Umbrella Rice to help farmers cope with COVID-19 impacts and falling rice prices. In 2021, points of purchase for freshly harvested rice by farmers were established at the Sor Kor Kor Cooperative Rice Mill, including Agricultural Marketing Co-operatives of BAAC Consumers in Chiang Rai, Phayao, Kamphaeng Phet, Yasothon, Surin, Maha Sarakham, Uttaradit, Buriram, Roi Et, Srirakhet, Ubon Ratchathani, Nakorn Sawan, Petchaburi, and Surat Thani provinces. There were a total of 46 points of purchase nationwide covering an area of 190,198 rai and 9,509 farmers. Rice was bought at an indicative price plus an additional 300 THB per ton. The purchased rice undergoes quality improvement and then packaged under the brand “Thai Farmer’s Rice”. Produced by a large advanced factory that meets international standards, the rice is 100% freshly harvested jasmine rice (aged 1-5 months) of high quality that is translucent, white, fragrant, soft, sticky, and delicious. Thai Farmer’s Rice is sold through partners under Charoen Pokphand Group.

Case Study 14

Platform of Opportunities Project

Lotus’s also acts as a partner, supporting farmers and SMEs in building a stable groundwork to enable sustainable growth. Lotus’s works with partners from many sectors including the public and private sectors to become the “Platform of Opportunities” for Thai SMEs and farmers. Throughout 2021, Lotus’s has assisted almost 7,000 SMEs operators and farmers in gaining income and growing sustainably through different forms of support, tailored to each operator’s capacity and readiness.

More information available online
Social Impact and Economic Contribution

Supporting SMEs

At present, more and more SMEs are equipped with the capacity to produce new and quality products to meet the needs of consumers. Therefore, Charoen Pokphand Group is committed to promote these SMEs by focusing on their development through the Group’s framework of operations to develop safe products and services that meet standards and to create continuity in production. We also collaborated on designing new business models that focuses more on convenience and offering new experience to consumers. This has generated income and provided stability for entrepreneurs, especially in present circumstances where many businesses are negatively impacted by COVID-19. Thus, cooperation is one of the key principles that the Group upholds to develop and grow sustainably together with society.

More information available online
Social Impact and Economic Contribution

Supported
7,000 SMEs and farmers
Supporting Vulnerable Groups

Charoen Pokphand Group places priority in equally caring for all groups in the society. We promote among our personnel awareness of social inequalities, covering vulnerable groups that lack social opportunities. For this reason, our personnel joined efforts in initiating and developing projects that render benefits to these vulnerable groups so that they may have appropriate and adequate knowledge and skills to perform a job. At the same time, the Group and our subsidiaries have collaborated with partners and relevant organizations to extend key projects to vulnerable groups in areas where our businesses are located. We aim to jointly create value and enable them to make a living on their own.

Case Study 15

Sapling Raising Project

Charoen Pokphand Group and our subsidiaries jointly piloted the Sapling Raising Project, Good Deeds For the World CP100th Anniversary, in three communities in Chonburi province, namely Huay Yai, Na Jomtien and Khao Chee Chan sub-districts. The project created employment for 2,000 households, which were directly impacted by the pandemic. This included vulnerable groups such as the unemployed, farmers, fishermen, and people who create public benefit. Each family in the communities is hired to grow 1,000 plant saplings at a rate of 15,000 THB per family throughout a three-month duration, helping to provide remedy in this time of crisis.

Online Business Training for People with Autism

True Corporation Public Company Limited together with the Ministry of Social Development and Human Security and the Autistic Parents Club Pathum Thani Province, organized online business training based on the 'New Normal' way of living for the hearing impaired, autistic persons, and their families, including 40 families. The training focused on learning to use online media in the career, such as taking product photos, creating a post to sell products, promoting the store, and creating a page to sell products online through popular platforms. This initiative will enable these groups to generate income to support themselves and their families.

Worldwide Projects

Charoen Pokphand Group strives to promote value and create economic benefit for the society through the implementation of diverse projects spanning across all areas where the Group operates according to the Three Benefit Principle, which are benefit for the country, the people and the organization. The group drives these projects with the intent of developing together in a sustainable manner.

Our Way Forward

For continuity in pursuing the C.P. Group 2030 Sustainability Goals to support and promote jobs to create income for those in need, Charoen Pokphand Group has set the following plan of action:

01 Extend scope of job support and promotion to other groups in need
02 Increase proportion of local employment through various projects.
03 Promote digital technology platform to communities and SMEs.

More information available online
Charoen Pokphand Group Sustainability Report 2021
Opportunities and Challenges

According to the 2021 Global Report on Food Crises, at least 155 million people across the globe suffered from acute food insecurity in 2020. Such crisis, which persisted and continued to worsen in 2021, was mainly driven by the COVID-19 pandemic, economic shocks, persistent local and national conflicts, and global climate change. Without international cooperation, food insecurity will intensify and become more widespread. This presents a challenge and risk for Charoen Pokphand Group in achieving our vision to be a leading tech and innovative conglomerate, providing food for both body and mind, that creates shared value and brings health and well-being for all. For this reason, the Group has combined efforts with other agencies and organizations to build food security and provide access to nutrition for the society.
Ensuring Food Security for the Future

Key Performance Dashboard

Data on Promoting Access to Food

Number of Children, Youth, the Poor, and vulnerable people given access to safe and nutritious food

<table>
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<tr>
<th>Year</th>
<th>Thailand</th>
<th>China</th>
<th>Other</th>
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<tr>
<td>2021</td>
<td>254,330</td>
<td>567,758</td>
<td>503,145</td>
</tr>
</tbody>
</table>

Number of Meals Donated to Unfortunate People in 2021, especially to Children, Youth, the Poor, and other vulnerable people

4,594,982 meals

Number of organizations in collaboration with Charoen Pokphand Group to build food security in each country

<table>
<thead>
<tr>
<th>Country</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
<td>China</td>
<td>26</td>
</tr>
<tr>
<td>Poland</td>
<td>21</td>
</tr>
</tbody>
</table>

Food Security Management

As a leader in the agro-industry and food, retail, and pharmaceutical businesses, Charoen Pokphand Group acknowledges our duties and responsibilities in ensuring food security for a better future. In doing so, the Group emphasizes on four pillars of food security according to the Food and Agriculture Organization of the United Nations (FAO):

1. **Food Availability**
   - Food availability refers to the adequate supply of food to meet the needs of consumers in a country. In this regard, Charoen Pokphand Group has analyzed and planned productions in accordance with both domestic and overseas demands.

2. **Food Access**
   - Food access means that each and every citizen can obtain safe food that is suitable for them in terms of nutrition, value for money, and price. Charoen Pokphand Group has taken such principle into account and applied it to our entire process, from raw material procurement, invention and research to communication.

3. **Food Utilization**
   - Besides ensuring food availability and food access for people of all genders and ages, the people or consumers must be able to make appropriate use of the food they consume to strengthen bodily health and boost immunity against diseases.

4. **Food Stability**
   - Food stability means having an efficient food availability management system to provide access to quality, safe and adequate food for everyone even under critical or emergency situations, such as natural incidents or epidemics, etc.
Case Study 16

Kin Dai Mai Ting Kan

Leader of retail business, Lotus’s, has partnered with a central organization to distribute safe and nutritious surplus food to underprivileged groups and those affected by the COVID-19 pandemic through the "Kin Dai Mai Ting Kan" Project with the objective of building food security and providing equal access to food. Currently, 40 hypermarkets and five distribution centers under Lotus’s donate surplus food to the underprivileged through organizations, such as Scholars of Sustenance Thailand (SOS Thailand), which would transport the food donations to designated destinations on a daily basis. Furthermore, the Group has also collaborated with local foundations and organizations in other provinces to make donations of edible surplus food.

Charoen Pokphand Group has joined forces with various agencies and organizations to distribute surplus food to vulnerable groups. Food from the distribution program is safe and nutritious according to the principles of food safety and hygiene.

Total amount of safe and nutritious food donation is equivalent to

2.8 Million Meals

More information available in
Food Security and Access to Nutrition

Case Study 17

Food Bank Vietnam

Since 2018, C.P. Vietnam has collaborated with Food Bank Vietnam, a non-profit organization, and community groups to collect food from organizations or the private sector that sell food, and distribute it to those who lack access to food through various programs, such as “Meal of Love” to sponsor food to orphanages, children centers and temples, “Ben Tre Humanity Restaurant” to provide food for the poor, victims of crises, and the underprivileged in Ben Tre province, “Car of Love” to offer food to people in need after completing the COVID-19 quarantine, etc. Until 2021, Food Bank Vietnam has distributed a total of 348,920 meals.

Total Meal Distributed
(2018-2021)
348,920 Meals

Our Way Forward

In order to increase access to quality and nutritious food for children, youths and the poor, Charoen Pokphand Group has set the following action plan in order to achieve C.P. Group 2030 Sustainability Goals in food security and access to nutrition:

01 Provide knowledge or develop skills relating to food safety, nutrition, and sustainable consumption.
02 Expand collaboration with partner organizations to distribute surplus food to those in need.
Opportunities and Challenges

Over the past few years, COVID-19 has left all industries and businesses to confront with rapid and high impact changes, most of which are the consequence of fast changing stakeholder demands. Such changes have led to the development of various new technologies especially digital technologies, which are growing at an exponential rate, such as the high-stability digital communication network, product invention and manufacturing, and new services that respond to healthcare and environmental needs. If an industry or business fails to keep up with, or step up as leader of these changes, such industry or business may lose its competitiveness and growth in no time.

Innovation

Key Impacted Stakeholders

- Business Partner
- Employee and Family
- Communities and Society
- Customers and Consumers

Supporting the SDGs

- 17.17 Encourage effective partnerships
- 8.2 Achieve higher levels of economic productivity through diversification and innovation
- 9.5 Enhance scientific research, upgrade technological capabilities of industrial sectors
- 9.b Support domestic technology development and ensure industrial diversification

Outcome and Benefits

Progress towards C.P. Group 2030 Sustainability Goals

- Number of patents and petty patents registration for innovations or inventions

Highlight Performances in 2021

- Adopted new technology to improve the production process of products and services leading to a digital society.
- Adjusted innovation research and development strategy to enhance operational efficiency.
- Promoted the creation of an innovative organization through employee engagement.
- Built cooperation between companies and organizations in open innovation.
Developing Infrastructure to Support Research

Key Performance Dashboard

Research & Development Investments
R&D Investments (million THB)

<table>
<thead>
<tr>
<th>Year</th>
<th>R&amp;D Investments (million THB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>17,533</td>
</tr>
<tr>
<td>2019</td>
<td>17,735</td>
</tr>
<tr>
<td>2020</td>
<td>19,422</td>
</tr>
<tr>
<td>2021</td>
<td>22,039</td>
</tr>
</tbody>
</table>

| Percent of R&D expenses compared to total revenue | 0.97% |

| In reduced costs from process improvement innovation projects | 3,720 Million THB |

| Research & Development Investments | 95 centers R&D Centers | 3,012 patents Accumulated patents and petty patents | 7,242 Persons R&D personnel |

Innovation Development Approach

Charoen Pokphand Group places importance in innovation research and development. We believe that investing in research and development will reinforce the Group’s competitiveness in the global arena and create long-term sustainable growth for stakeholders. For this reason, the Group has defined the following operational strategy in developing innovation to deliver values to stakeholders:

- **Apply digital technology to provide customers with a pleasant experience**
- **Create a digital body of knowledge for employees and develop a digital platform to connect employees**
- **Adopt the Internet of Things in retail business to create digital retail store and artificial intelligence in animal farming and cultivation**
- **Cybersecurity** Formulate and implement cybersecurity and relevant policies among employees at all levels.
- **Digital Collaboration**
- **Next Generation Technology** Use cloud technology to direct further development of the Group’s technology.
- **Automation**
- **Data and Analysis** Link operating data of each business group to a central location to support accurate business decision-making.

Process Innovation

Enhancing efficiency in the production process is one of the approaches in developing infrastructure to continuously enable innovation for society and the environment. For this reason, Charoen Pokphand Group has studied and applied new technologies to the production processes, from upstream to downstream, to increase competitiveness while caring for the environment through efficient use of resources and reduction of impact from the production process. In 2021, model projects include Micro Organization Operation Center Platform (MOOC), Digital Egg Project, and Xiangyang Million Pigs Whole Industry Chain Slaughtering Industry 4.0 Project.

Case Study 18

**Micro Organization Operation Center Platform (MOOC)**

The Micro Organization Operation Center Platform (MOOC) is a platform that optimizes sales management processes through real-time data analysis of individual customers. Traditionally, offering services to local customers primarily required the skills of salespeople and data analysis to meet customer needs. However, this method cannot analyze the results of customer demand surveys and problems in real time. Therefore, True Corporation Public Company Limited, or TRUE Corporation, has developed the MOOC as a tool for analyzing data which improves performance in matching services to customer needs. The system is efficient can keep up with the needs of customers.

**Increased customers** 322.30%

Product Innovation

At present, customers and consumers look for products and services that contribute to environmental impact reduction. At the same time, they must also fulfill the diverse needs of the modern consumer. Accordingly, Charoen Pokphand Group has collaborated with suppliers, producers, customers and consumers throughout the value chain to identify and develop unique innovative products that not only meet the needs, promote well-being and reduce environmental impact, but also maximizes product capacity, e.g., Charoen Pokphand Foods Public Company Limited has developed transparent Polylactic Acid (PLA) trays made from plant for the packaging of CP Butcher chilled fresh pork and chicken products. This type of tray is 100% compostable and reduces the use of plastic mass by 20-30%. This innovation received a Consolation Prize from the Thailand Research Expo 2020 Award. Other innovative products include Shopping Bag, heatable food bags, and the Blue Pot boilable bag, among others.
Seeking Opportunities and Building Innovation Partnerships

Steamed Dumpling Wrapper Innovation
In response to the vision to become the Kitchen of the World, Charoen Pokphand Group is committed to continue creating and developing products to satisfy to consumers. One of the products that the Group puts meticulous care into producing with constant improvements is the frozen Chinese-style steamed dumplings. This food product is highly competitive in the market and very popular in China. The Group has an annual production capacity of 29,400 tons of frozen dumplings. Therefore, it is one of the main revenue generators of the Group’s food business. Based on market research, when preparing food, frozen dumpling will be warmed and set aside. If left un eaten for too long, the dumpling will dry up and the edges will harden with cracks in the skin underneath. Therefore, the R&D team has developed soft dumpling wrappers that remain tender even if they are cooked and left out for a long time. This method requires advanced freezing technology that makes the wrapper retain more moisture and helps gluten in the wheat distribute evenly. Consequently, the new wrapper has greater steam resistance and retention. Therefore, when consumers heat and set the dumplings aside, the dumpling wrapper and its edge do not dry or crack, enhancing flavor and texture while eating. Furthermore, this research has been selected for exhibition at the CP Innovation Exposition.

Finance via True Money Wallet
Ascend Money Company Limited developed True Money Wallet Application with the target to becoming a leader in the electronic wallet market. In 2021, the company has collaborated with partners in ecosystems relating to finance, online services and overseas services, such as Apple, Netflix, Agoda, Food Panda, SCBAM, KSAM, etc., to develop integrated service innovation covering ready-to-use credit limits, credits for installment payment, high interest savings, and stock investment services. Consequently, the number of customers and revenue have increased by 40% and 50%, respectively.

Cheeva Pork: Omega-3 Enriched Pork Innovation
Cheeva Pork is the world's first high omega-3 fresh pork product. Charoen Pokphand Foods Company Limited in collaboration with the National Laboratory Animal Center has developed a feed formula for swine using a superfood containing flax seed, algae, and deep sea fish oil. As a result, the pork meat is enriched with omega-3 that is 2.5-3 times higher than pork fed with conventional food. No chemicals and antibiotics were used in raising the swine, thus reducing the risk of coronary heart disease for consumers. Product innovations such as Cheeva Pork have increased revenue by over 400 million THB.

Thai Beef Business towards Sustainability Project
Traditionally, the sale of cut meat products involves cutting the meat and packaging it into foam trays sealed with plastic wrap. With this conventional packaging, the meat product has a shelf life of only three days. Therefore, Siam Makro Public Company Limited has collaborated with beef-selling farmers to share meat cutting techniques and develop the "Skin Pack" packaging technology. This new technology lowers moisture and air diffusion in the packaging, resulting in reduced growth rate of microorganisms that rely on air and moisture. The shelf life of beef is thus extended by 21 days, or by 700%. Consequently, this group of products has raised revenues by up to 57 million THB per year and reduced employee wages by 12 million THB per year.

Our Way Forward
In response to C.P. Group 2030 Sustainability Goals in Innovation Management and in support of the corporate vision, Charoen Pokphand Group has established the following action plan:

01. Announce guidelines in formulating compensation policy for employees who create patents/petty patents to incentivize innovation.
02. Promote open and closed innovation to create customer satisfaction.

More information available in Innovation Management
Opportunities and Challenges

Charoen Pokphand Group has been in operation for 100 years. Our businesses continue to grow with expansions to 21 countries and economies worldwide. The Group recognizes that the relationship between the organization and stakeholders is intrinsic to our business operations and leads to the efficient improvement of future performances despite the rising challenges in managing good relationships with internal and external partners due to increased number of stakeholders and expectations. For this reason, the Group has integrated a stakeholder engagement process into many aspects of corporate administration and reviewed the format of activities, communication and engagement channels annually. Furthermore, various channels of communication have been prepared to ensure stakeholders that the organization welcomes engagement and comments from all stakeholders while maintaining good relationship and mutual respect. Additionally, the Group appreciates the opportunity to cooperate with stakeholders and partners at both national and international levels to drive sustainable development for the benefit of the country, the society, and the organization. Our targets have been carried out through diverse projects and activities that focus on discussing, coordinating and cooperating to create peace and justice that sustainably benefit the society as a whole.

Stakeholder Engagement

Outcome and Benefits

Progress towards C.P. Group 2030 Sustainability Goals

80%

82%

Goals 2021 and 2030

Highlight Performances in 2021

• Joined hands with internal business groups to formulate a development plan and conduct a survey of measurable stakeholder perception at the Group level.

• Developed stakeholder relationship management practices

• Charoen Pokphand Group joined discussions in various national and international forums.

More information available in

Stakeholder Engagement Report 2021

UN SDGs Mapping Report 2021
Stakeholder Perception Survey 2021

Charoen Pokphand Group centers on maintaining a balance between crediting value and building relationship and trust between all stakeholder groups and the organization. The Group places importance in listening to, engaging and cooperating with all stakeholders while combing and analyzing these issues with relevant external issues to drive positive changes. Furthermore, we have collaborated with world class partners to enhance our management capacity, apply of appropriate practices, and share of knowledge and resources that create benefit throughout the value chain.

In 2021, Charoen Pokphand Group has conducted the Stakeholder Perception Survey on sustainability management on all business groups for the first time. The survey results were used to review the organization’s strategy and operations to better align with stakeholders’ interest and expectations as well as increase opportunities for cooperation to create sustainable values.

This report shows the result of the Perception Survey, summary of needs, interests and stakeholder communication mechanism covering all 11 core groups under Charoen Pokphand Group. More information is available in the Stakeholder Engagement Report 2021.

Stakeholder Perception Survey Process

In order to incorporate all groups of people and businesses, Charoen Pokphand Group has adopted the multi-stakeholders’ perception survey approach in assessing the quality of engagement between the organization and stakeholders in line with the AA1000 international standard.

At the same time, the Group has conducted the survey in an online format to provide swift and convenient access for all stakeholder groups, enabling an efficient collection of data within the limitation of the situation. The Stakeholder Perception Survey development process is as follows:

1. Plan
   - Study universal survey guidelines
   - Review surveys currently used by the Group’s businesses
   - Prepare plan of action

2. Survey
   - Develop online survey platform
   - Send survey to business groups worldwide
   - Follow up on responses to survey

3. Process
   - Develop survey and processing guidelines
   - Prepare survey
   - Review survey with representatives from business groups

4. Analyze
   - Process and analyze survey results
   - Prepare survey summary report

5. Guide
   - Study survey results
   - Communicate survey results to stakeholders

More information available in Stakeholder Engagement Report 2021
Listening and Responding to Stakeholders

Employees and Families

Make regular communications via online and offline channels to create engagement, uphold human rights principles in employee treatment, maintain commitment to continually enhance capacity and care for good hygiene, occupational health and safety.

I am impressed with the leadership and human capital development at CPRAM Co., Ltd. (CPRAM) where the company is driving this important area effectively. At CPRAM, the executive management focus on the people and the importance of learning and development. The company offers a good work environment and a variety of seminars and trainings which encourage us to work as well as develop ourselves regularly.

I am impressed with the leadership development program, CP Future Leaders Development Program: FLP, that allows new generation leaders to responsible for the chicken manure management project. Each person is responsible for each aspect of the project while having support and advice from senior management.

It is necessary to enhance employees’ skills and knowledge and emphasize company core values and culture. These will support employees, to get along with the company, especially new generations. Eventually, they will be able to work effectively and sustainably.

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Ms. Fu Wenjing
Chia Tai Henning
Modern Agricultural Technology Co., Ltd.

Ms. Vilasinee Chobsa-ard
Ascend Group Co., Ltd.

More information available in Stakeholder Engagement Report 2021

Customers and Consumers

Regularly establish communication tools using modern and diverse channels with focus on strengthening relationships and understanding needs while being receptive to comments and offering consultations to customers and consumers for quality product development with emphasis on stringent protection of customer data security.

I am impressed with how the company pay attention to health and well being of people by producing nutritious products, for an example, chicken with no antibiotics and no growth hormones.

It is necessary to enhance employees’ skills and knowledge and emphasize company core values and culture. These will support employees, to get along with the company, especially new generations. Eventually, they will be able to work effectively and sustainably.

As a customer, C.P. Group (CP) has great support for me in all matters. I have been supported on fertilizer trading and knowledge that helps to increase the number of products. CP supports landcape adjustment, including helping farmers in the area of draft to install and repair water pumps for their crops.

Ms. Fu Wenjing
Chia Tai Henning
Modern Agricultural Technology Co., Ltd.

Mr. Saddam Hossain
Bangladesh

Mr. Suthep Boonchaeng
Thailand

Mr. Mana Saetang
Huawei Technologies (Thailand) Co., Ltd.

More information available in Stakeholder Engagement Report 2021

Business Partners

Arrange meetings with business partners, communicate, and engage in discussions as deemed appropriate to create mutual trust and to maintain a long-term relationship. Provide opportunities to jointly develop quality products and services, enhance business partners’ traceable operations and prepare for global competition. Continuously communicate the Supplier Code of Conduct to jointly uphold transparent and responsible operations.

Chia Tai is a stable and reliable company that offers a fixed price for products. Moreover, the company shares knowledge with business partners as well as gives advice on the agricultural matter.

TRUE takes care of business partners fairly. We have a system to communicate information or for making quotations/bids. We also have a platform that is logical and fair which clarifies the Supplier Code of Conduct to partners.

Mr. Saddam Hossain
Bangladesh

Mr. Mana Saetang
Huawei Technologies (Thailand) Co., Ltd.

Mrs. Anchalee and Mr. Thawatchai Yodwicha
Business Partner,
Nan Province, Thailand

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Mr. Mana Saetang
Huawei Technologies (Thailand) Co., Ltd.

Mrs. Anchalee and Mr. Thawatchai Yodwicha
Business Partner,
Nan Province, Thailand

Mr. Suthep Boonchaeng
Thailand

As a customer, C.P. Group (CP) has great support for me in all matters. I have been supported on fertilizer trading and knowledge that helps to increase the number of products. CP supports landscape adjustment, including helping farmers in the area of draft to install and repair water pumps for their crops.

Mr. Suthep Boonchaeng
Thailand
Listening and Responding to Stakeholders

- **Farmers**: Strengthen relationship with farmers via frequent discussions and focus on collaborative agriculture and produce development by promoting skills in integrating technology for agriculture, developing for change, and mitigating negative impacts through income assurance and increased distribution channels for farmers.

- **Communities and Societies**: Visit and hold activities in communities where the group operates in to create engagement, emphasizing environmental conservation and providing quality of life improvement. Conduct opinion surveys at least once a year to make positive contributions, mitigate negative impacts and maintain good relationships from generation to generation.

- **NGOs**: Arrange meetings, communicate and disclose information on the organization’s performance fully, transparently and rapidly and welcome comments and apply them to improve operations. Exchange opinions, coordinate onsite, analyze and resolve other relevant problems together, leading to sustainable development.

- **Shareholders and Investors**: Established various communication channels and prepared reports detailing our performance for stakeholders and investors to provide convenient and swift access to information and to build a strong relationships. The Group has implemented feedbacks and meeting resolutions improve the efficiency of our performance and corporate governance according to the good governance principles and company regulations.

- **Government**: Regularly communicate information on relevant laws and regulations to make operations transparent and efficient. Be open to discussions and suggestions to enhance development competitiveness and global scale as well as cooperate with the government on projects that are beneficial to the country.

- **Media**: Monitor news and information networks to develop of operational guidelines. Focus on exchanging useful and up-to-date information based on facts to share with the public through official channels.

- **Business Competitors**: Comply with rules and good ethics in competition. Provide a system to oversee, raise awareness and prevent any actions that may lead to the acquisition of competitors’ trade secrets or their defamation by untruthful slander.

- **Creditors**: Provide communications as deemed appropriate via convenient and swift channels to build relationships and maintain trust with creditors. Operate with transparency in accordance with business ethics, and focus on protecting the interest of creditors, the organization and all related stakeholders.

More information available in [Stakeholder Engagement Report 2021](#).
Collaborating with Partners to Drive Sustainable Development in 2021

**2021**

**15-16 June**
Joined the discussion on the topic of "Light the Way to Glasgow and Net Zero: Credible Climate Action for a 1.5°C World" UNGC Leader Summit 2021.

**26-28 July**
Held a discussion on the topic of sustainable food system with participation of executives and employees from various business groups in preparation for the UN Food Systems Summit 2021.

**21 April**
Joined WBCSD Liaison Delegate Meeting under the theme "Skills strategies to future-proof your business and create a sustainable future of work".

**24 May**
Joined the discussion on ASEAN-UK Race to Zero Dialogues under the theme of greenhouse gas reduction in agro-food industry.

**8 July**
Served as part of the Business Commission to Tackle Inequality to discuss and exchange opinion on resolving inequality.

Charoen Pokphand Group participate in driving sustainability issues with United Nations Global Compact as a LEAD company

A reflection of our commitment to the UN Global Compact and its Ten Principles to drive UN Sustainable Development Goals with focus on conducting a business with utmost transparency throughout the value chain and progressing towards carbon neutrality by 2030.

**Our Way Forward**
For continuity in following the C.P. Group 2030 Sustainability Goals, Charoen Pokphand Group has set the following plan of action to encourage stakeholder engagement and cooperation:

- **01** Develop Group-level stakeholder perception survey.
- **02** Organize training course on Stakeholder Engagement Report 2021 Process in E-learning format.
- **02** Join hands with partners to drive and uplift performance in a sustainable manner.

More information available in [Stakeholder Engagement](#)
Integrated environmental management where health of soil, water, forest and air are taken into consideration will help us achieve the global goal of limiting global temperature increase no more than 1.5 degree Celsius, and conserving natural resources that are necessary for human population to thrive. Charoen Pokphand Group aims to conduct its business in environmentally-friendly manner, for instance reduction in greenhouse gas emissions and waste generation, value creation for all raw materials, water stewardship, and ecosystem and biodiversity protection. Moreover, the Group does not only focus on our own operations, but we also extend our effort to suppliers and business partners along the supply chain to create scalable impact.
Climate Resilience

Opportunities and Challenges

Climate change is a global agenda that is likely to produce significant impacts on the economy, society and environment in the future. Charoen Pokphand Group recognizes the importance of taking part in resolving the problem of climate change and commits to conducting business responsibly to mitigate potential impacts. The Group operates with due regard for climate protection while integrating measures for the sustainable management of natural resources and low-carbon development to minimize climate change impacts. This is in line with the goals of the Paris Agreement to limit the global temperature rise to 1.5 degrees Celsius and to achieve net zero emissions within 2050. This greenhouse gas emissions reduction goal is based on the Science Based Targets initiative or SBTi’s Net-Zero Criteria and recommendations.

Furthermore, the Group encourages stakeholders to continuously engage in reducing greenhouse gas emissions while setting the goal to achieve carbon neutrality within 2050. This greenhouse gas emissions reduction goal is based on the Science Based Targets initiative or SBTi’s Net-Zero Criteria and recommendations.

C.P. Group Businesses and Activities

Analysis of Sustainable Development Goals and Key Impacted Stakeholders along the Value Chain

Supporting the SDGs

Outcome and Benefits

Progress towards C.P. Group 2030 Sustainability Goals

4.2% 42%

Reduce GHG emissions from organization (Scope 1 and Scope 2 )

Highlight Performances in 2021

- Voluntarily-disclosed information on climate change management through CDP for the first year.
- Joined the Thailand Carbon Neutral Network and the Carbon Markets Club.
- Announced the implementation of the Climate Resilience Policy.
- Participated in establishing the SBT Near-Term Target.
C.P. Group’s Pathway towards Carbon Neutral Goal by 2030

Charoen Pokphand Group has set the goal to reduce greenhouse gas emissions in accordance with the Net Zero Criteria and recommendations of the Science Based Targets initiatives (SBTi). We have centered our focus on energy management, enhancing energy efficiency and minimizing environmental impacts for our business activities. We have also opted for the use of clean energy and high-performance equipment and technology in our mission to become a Carbon Neutral Organization by 2030 in accordance with the environmental management strategy. At the same time, the Group has also worked to promote stakeholders throughout the supply chain.

C.P. Group Net Zero Pathway
(GHG Emission Scope 1 2 and 3)

*Unit: Million Ton CO₂e

<table>
<thead>
<tr>
<th>Year</th>
<th>2021</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
<th>2040</th>
<th>2045</th>
<th>2050</th>
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</thead>
<tbody>
<tr>
<td>GHG Emission Scope 1 and 2</td>
<td>Tree Planting Absorption</td>
<td>Carbon Removal</td>
<td>Carbon Neutral (Scope 1 and 2)</td>
<td>Science-Based Targets Setting</td>
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</tr>
</tbody>
</table>

Charoen Pokphand Group Sustainability Report 2021
Cooperating with External Organizations to Drive Climate Actions

Charoen Pokphand Group is committed to conducting low-carbon and sustainable businesses. Accordingly, our affiliates adhere to the Three Benefit Principle which focuses on creating benefit for the country in the economic, social and environmental dimensions, while building networks and cooperation with the public, private and civil sectors. To help drive impacts throughout the entire value chain, the Group disseminates information and know-how, evaluates technological solutions, develops tools and sources innovations in the area of climate.

In 2021, the Group demonstrated our commitment to resolve climate change through declarations of intent at various international arenas, including UNFCCC COP26, Climate Action Leader Forum 2021, UN Global Compact Leader Summit and GCNT Forum 2021.

Charoen Pokphand Group has joined the Thailand Carbon Neutral Network (TCNN) and the Carbon Markets Club to promote cooperation between the government, the private sector and communities in enhancing greenhouse gas reduction efforts. This is to enable sustainable growth based on a climate-friendly society that aims towards net zero emissions in accordance with the intent of the global community. In addition, the Group has received Level B-(Management Level) score from our first voluntary disclosure to CDP, which is one of the most internationally recognized climate disclosure platforms.

Charoen Pokphand Group and three affiliates, namely CPF, True, and CP ALL, have achieved LCSi (Low Carbon and Sustainable Business Index) Award 2021. The award recognizes organizations that have met the assessment and ranking criteria for businesses that manage and reduce greenhouse gas in accordance with the Sustainable Development Goals and serve as model for other business organizations in addressing global warming problems.
Climate-Related Risks and Opportunities Assessment

Charoen Pokphand Group has defined a framework to address climate change throughout the supply chain and conducted climate-related risks and opportunities assessment. The Group has also prepared the Climate-Related Risk Management Report according to the guidelines of the Task Force on Climate-Related Financial Disclosure (TCFD).

CLIMATE-RELATED RISKS AND OPPORTUNITIES

![Climate-Related Risk Management Framework]

Product and Service Stewardship
- Conduct Life Cycle Analysis (LCA) to assess environmental impacts of products and services
- Expand the number of products and services with eco-labels and carbon labels

Net Zero Organization
- Set the target to become a carbon neutral organization by 2030
- Join Race to Zero Campaign and set Science-based targets
- Aspire to reach Net Zero by 2050

Energy Management and Emissions Reduction
- Quality and volatile direct and indirect greenhouse gas emissions (Scope 1, 2, and 3)
- Assess Forest, Land, and Agriculture (FLAG) emissions in line with SBTi guidance
- Reduce energy consumption and greenhouse gas emissions

Implementation of Greenhouse Gas Emissions Reduction Initiatives
- Energy efficiency
- Renewable energy
- Waste management
- Sustainable transport

Assessment of Risks and Opportunities of Climate Change
- Assess risks and opportunities of climate change
- Conduct scenario analysis in line with TCFD’s recommendations
- Develop risk mitigation plan to cover climate-related risks

Implementation of Climate Risk Mitigation Measures
- Support transformation towards regenerative and sustainable agriculture
- Develop natural disaster response plan
- Sustainable reforestation

Environmental Investments

Charoen Pokphand Group has continually monitored the use of resources and energy, including the management of waste generated from business operations by implementing systems and equipment that meet international standards. The Group has invested in environmental management through a variety of projects, including the development of alternative energy, e.g., investing in solar energy to reduce the use of electricity generated from dirty energy or the use of geothermal heat, investing in renewable energy, e.g., replacing fossil fuels with biofuels as well as investing in the construction of energy-saving buildings, etc. In the past year, the Group has made environmental investments worth over 4,192 million THB.

Summary of Environmental Investments

<table>
<thead>
<tr>
<th>Year</th>
<th>Investment (Unit: Million THB)</th>
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<tbody>
<tr>
<td>2018</td>
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<tr>
<td>2020</td>
<td>1,464</td>
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<tr>
<td>2021</td>
<td>4,192</td>
</tr>
</tbody>
</table>

Case Study on Environmental Returns on Investment

Environmental Investments
Climate Change and Energy Management

Without efficient use of resources or appropriate impact mitigation, severe climate change may affect business operations; for example, acute drought may lead to shortage of raw materials for the production process. Therefore, the Group strengthens its capabilities to mitigate the impacts of climate change through various projects and activities which can be classified into mitigation actions (activities that reduce greenhouse gas emissions which cause climate change) and adaptation actions (activities that manage risks associated with climate change impacts).

Case Study 20

Cixi Modern Agricultural Park, China

Managing risks from climate change impact

At present, there are more than 200 million mu (Chinese rai), or approximately 13.3 million hectares, of saline land in China. This is partly a result of climate change and inappropriate land management. Consequently, the Group has adopted the “agricultural park” model to address the problem of soil salinization and desert soil conditions by restoring previously abandoned land into fertile arable land for cultivation. The Cixi Modern Agricultural Park was established by the Group to tackle soil salinization using biological methods to restore the fertility of farmlands. Besides resolving the problem of soil salinization, the project has also contributed to reducing resource losses, increasing biodiversity, lowering greenhouse gas emissions from cultivation, reducing the use of fertilizers, pesticides, eliminating unsustainable land management practice, and effectively alleviating environmental pollutions.

The project has also raised output to the level between medium and high while ensuring food security and safety. Furthermore, the project has become the model for saline soil improvement projects in China. Currently, over 10 agricultural parks have been established across China, helping to revive more than 300,000 mu, or approximately 20,000 hectares of land and will be expanded to more than 2 million mu, or 133,333 hectares. At the same time, training programs have also been provided to over 10,000 farmers to jointly carry out such efforts.
2021 Greenhouse Gas Management Data

**Total Greenhouse Gas Emissions**
- Scopes 1+2+3: 57.25 million tons CO₂e
- Scopes 1+2: 6.56 million tons CO₂e
- Greenhouse Gas Emission Reduction: 1.07 million tons CO₂e

**Company Facilities & Company Vehicles**
- 3%
  - 1.42 million tons CO₂e
    - 0.93 Company Facilities
    - 0.22 Company Vehicles
    - 0.07 Fugitive emissions from refrigeration and air conditioning

**Purchased electricity, Steam, Heat and Cooling**
- 9%
  - 5.14 million tons CO₂e
    - 5.10 purchased electricity
    - 0.14 heat and steam
    - 0.001 cooling

**Upstream Activity:**
- 74% purchased goods and services
- 14% waste generated in operation
- 11% capital goods
- 4% business travel
- 1% fuel and energy-related activities
- 1% employee commuting
- 1% transportation and distribution

**Greenhouse Gas Emission per Revenue**

**Greenhouse Gas Emission by Business Group**
- Agro-industry and Food: 3.73
- Retail and Distribution: 2.07
- Telecommunication: 0.33
- E-Commerce and Digital: 0.04
- Property Development: 0.17
- Pharmaceutical: 0.18
- Finance and Investment: 0.001
- Other: 0.04

**Greenhouse Gas Emission Information**
- Greenhouse Gas Emission per Revenue
- Greenhouse Gas Emission by Type
Limited Energy Management and Efficiency Enhancement, and Promoting Renewable Energy Use

Charoen Pokphand Group has continued to implement projects to improve energy efficiency as well as promote the use of renewable energy through projects, such as solar power generation, use of biomass, and bioenergy production efficiency improvements to increase the share of renewable energy consumption to replace fossil fuels. Such effort has been extended to all business groups worldwide.

Renewable Energy Consumption in 2021

2021 Energy Management Data

Case Study 21

Solar Power Generation Project

Business groups within Charoen Pokphand Group have implemented renewable energy projects for the environment by installing Solar Rooftop power generation systems at feed mills, food processing plants, farms, distribution centers, office buildings, mobile phone base stations and convenience stores. The total installed power generation capacity in 2021 is 76 MWp, with an electricity generation capacity of more than 91 million kWh per year, or equivalent to a reduction in greenhouse gas emissions of 43,366 tCO2e.
Product Life Cycle Assessments

The Group has adopted the Life Cycle Assessment (LCA) concept which takes into account the sourcing of raw materials, transportation, production processes, distribution, usage and waste management. This is a comprehensive approach in managing and reducing environmental impacts in a precise manner. In addition, the Group has submitted applications for Carbon Footprint of Product, Carbon Footprint Reduction and Carbon Footprint of Organization certifications from the Thailand Greenhouse Gas Management Organization (Public Organization).

More information available in Product Life Cycle

Life Cycle Assessment of Rice

C.P. Intertrade Company Limited has carried out the life cycle assessment of packaged white rice from paddy fields in Kamphaeng Phet province to analyze environmental impacts of the product throughout its life cycle. This process assesses various aspects of environmental impacts, such as global warming, acidification, eutrophication, water use by implementing the GaBi 5 environmental assessment program. The company has also worked to enhance its personnel with knowledge and understanding of life cycle assessment techniques for the development of environmentally-friendly products.

Life Cycle Assessment of Rice per 1 kilogram of the product

<table>
<thead>
<tr>
<th>Impact Assessment</th>
<th>Amount</th>
<th>Unit</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Warming</td>
<td>3.08</td>
<td>kg CO₂-eq</td>
<td>CML2001 – Nov. 09, Global Warming Potential (GWP 100 years)</td>
</tr>
<tr>
<td>Acidification (AP)</td>
<td>0.01</td>
<td>kg SO₂-eq</td>
<td>CML2001 – Nov. 09, Acidification (AP)</td>
</tr>
<tr>
<td>Eutrophication (EP)</td>
<td>0.00</td>
<td>kg Phosphate-eq</td>
<td>CML2001 – Nov. 09, Eutrophication (EP)</td>
</tr>
<tr>
<td>Abiotic Depletion (ADP elements)</td>
<td>0.00</td>
<td>kg Sb-eq</td>
<td>CML2001 – Nov. 09, Abiotic Depletion (ADP elements)</td>
</tr>
<tr>
<td>Ozone Depletion (ODP)</td>
<td>0.00</td>
<td>kg R11-eq</td>
<td>CML2001 – Nov. 09, Ozone Depletion Potential (ODP)</td>
</tr>
</tbody>
</table>

Energy Consumption: 6.67 MWh

Primary Energy from Resources: 110.68 MWh

Water Use: Total
- Direct: 2.25 M³
- Indirect: 6.65 M³

Our Way Forward

01 Set SBT Long Term Target.
02 Prepare information on the Group’s agricultural, land and forest sectors according to FLAG-SBTi (Forest, Land and Agriculture) standards.
03 Support and encourage stakeholders to engage in greenhouse gas emissions reduction.
Opportunities and Challenges

At present, the demand for natural resources is increasing relentlessly while natural resources remain limited. Charoen Pokphand Group recognizes the importance of optimizing resource efficiency in business operations and complying with the principles of circular economy, while emphasizing on reusing raw materials from used products and reducing the production of single-use products in order to progress towards the Sustainable Development Goals in the economic, social and environmental dimensions. Charoen Pokphand Group has determined sustainability directions and goals for 2030 in order to become a world leader in sustainability, which is a major shift of the Group’s strategy. One of the corporate goals that must be accomplished by 2030 is to become a zero-waste organization that eliminates food waste and waste to landfill. This presents a challenge for the Group in conducting a business that is oriented towards sustainable and strong growth. The Group has also announced the “Circular Economy Policy”, Food Loss and Food Waste Policy, Sustainable Packaging Policy, and Waste Management Policy. Accordingly, the Group has required all business groups operating in Thailand to share a common goal for 2025 and extend such requirement to overseas business groups by 2030. The goal is to make all plastic packaging “recyclable, reusable or compostable.”
Circular Economy Framework

Charoen Pokphand Group aims to transform its business model from the "linear economy" to the "circular economy" approach, in line with UNEP Circularity framework. This approach seeks to capture the maximum value from natural resources, return as much waste or used materials to the production process as possible, and depends on all aspects of the value chain, from design and development, raw material selection, production, consumer use and disposed at the end of product life. Such model can only work when all parties are involved: business, consumer, and the government sectors.

More information available in Circular Economy Framework

Circular Economy to drive C.P. Group’s operation throughout supply chain

In 2021, Charoen Pokphand Group has established the Charoen Pokphand Group Circular Economy Policy as a guideline in transitioning towards a circular economy model. The Group has also formulated the Food Loss and Food Waste Policy, Sustainable Packaging Policy and Waste Management Policy which constitute part of business management in accordance with the principles of circular economy.

Video Series on Lessons Learned from Circular Economy in Tourism Sector SMEs

Charoen Pokphand Group has collaborated with the Thai Chamber of Commerce and the Board of Trade of Thailand to create a video series on lessons learned about circular economy from SMEs in the tourism sector, such as hotels, restaurants and natural attractions. The video series convey the implementation of circular economy concept in business operations and its values to the tourism sector as a whole as well as to individual business. The content of the series include managing food ingredients selected from local raw materials; controlling quantity and extending shelf life and quality of food ingredients; managing excess food through processing; preserving food or distributing to networks and communities; transforming food waste into organic fertilizer, EM solution, cleaning products (e.g., soap, detergent), biogas and animal feed; managing plastic waste by substituting with alternative materials, such as natural materials (e.g., wooden equipment); adjusting management systems to reduce plastic waste, such as water bottles in accommodations and restaurants, cleansing and skin care sets; and sorting plastic waste for recycling.

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Charoen Pokphand Group Sustainability Report 2021
Waste Management

Waste management is an important aspect of all process along Charoen Pokphand Group’s value chain. In 2021, the Group announced the implementation of the Waste Management Policy, which is part of the Group’s Environmental Policy and Guidelines, providing direction for all business groups to strive towards achieving the zero-food waste and zero waste to landfill goal by 2030. Waste management guidelines have been defined as follows:

- Announce zero food waste and waste to landfill goal by 2030
- Publish Charoen Pokphand Group Waste Management Policy
- Formulate waste management plan according to the 5Rs circular economy system management approach
- Communicate and raise awareness to urge employees to work together to achieve goals
- Monitor performance and progress against goals through annual Sustainability Reports

**Case Study 24**

**Layer Chicken Complex under Zero Waste Concept**

Charoen Pokphand Foods Public Company Limited implements circular economy principles in its 7 layer chicken complexes across the country. In the chicken farming process, waste is managed with a system that produces biogas from chicken manure, helping to reduce odors and greenhouse gas emissions into the atmosphere. Meanwhile, clean energy is obtained from methane fermentation process where wastewater is turned into biogas and can be used to generate electricity within the complex. Each complex used electricity from biogas 80% of the total electricity consumption. Furthermore, treated water from the fermentation process in biogas system is not discharged to outside sources. On the contrary, the water can be circulated and combined with chicken manure in the system again without the need to use natural raw water. Biogas waste generated from fermentation and treatment processes is submitted to farmers who request its use for pre-cultivation improvement of soil condition.

**Data on Waste Management in 2021**

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Waste (Thousand Tons)</th>
<th>Diverted from Disposal</th>
<th>Directed to Disposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>2,110</td>
<td>1,295</td>
<td>815</td>
</tr>
<tr>
<td>2019</td>
<td>1,782</td>
<td>1,295</td>
<td>487</td>
</tr>
<tr>
<td>2020</td>
<td>1,410</td>
<td>1,295</td>
<td>115</td>
</tr>
<tr>
<td>2021</td>
<td>1,295</td>
<td>1,295</td>
<td>0</td>
</tr>
</tbody>
</table>

**Waste Quantity Classified by Management Method**

<table>
<thead>
<tr>
<th>Non-hazardous waste by management method (Thousand Tons)</th>
<th>Directed to Disposal</th>
<th>Diverted from Disposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Non-hazardous waste</td>
<td>91%</td>
<td>9%</td>
</tr>
<tr>
<td>Landfill</td>
<td>5.41%</td>
<td>51%</td>
</tr>
<tr>
<td>Incineration</td>
<td>49%</td>
<td>33.29%</td>
</tr>
<tr>
<td>Others</td>
<td>33.29%</td>
<td>0.08%</td>
</tr>
<tr>
<td>Recycle</td>
<td>60.71%</td>
<td>0.45%</td>
</tr>
<tr>
<td>Composting</td>
<td>6.59%</td>
<td>2.96%</td>
</tr>
<tr>
<td>Construction Materials</td>
<td>6.67%</td>
<td>0.45%</td>
</tr>
<tr>
<td>Feed Ingredients</td>
<td>5.41%</td>
<td>17.82%</td>
</tr>
</tbody>
</table>

**Hazardous waste by management method**

<table>
<thead>
<tr>
<th>Hazardous waste by management method (Thousand Tons)</th>
<th>Directed to Disposal</th>
<th>Diverted from Disposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Hazardous waste</td>
<td>49%</td>
<td>51%</td>
</tr>
<tr>
<td>Landfill</td>
<td>6.46%</td>
<td>6.57%</td>
</tr>
<tr>
<td>Incineration</td>
<td>33.29%</td>
<td>7.48%</td>
</tr>
<tr>
<td>Others</td>
<td>9.68%</td>
<td>36.42%</td>
</tr>
</tbody>
</table>

More information available in [GRI & SASB Content Index Report 2021](#)
Food Loss and Food Waste Management

Charoen Pokphand Group’s core businesses include production and distribution of food and beverages. We take into account food loss and food waste management throughout the supply chain from the process of crop cultivation and animal farming through to customer consumption. The Group is committed to reducing food loss and achieve the goal to eliminate food waste and waste to landfill by 2030.

Distributing Surplus Food to Communities

Therefore, instead of disposing of this surplus food which will lead to more impact on the environment, each business group has distributed such food to non-profit organizations, such as SOS, We Share, and Duang Prateep Foundations, to be delivered to underprivileged vulnerable groups and communities that face food insecurity.

The quantity of surplus food distributed by the Group’s affiliates in 2021 is 227.16 tons.

Case Study 25

Makro’s Zero Food Waste to Landfill

Siam Makro Public Company Limited has adopted C.P. Group Sustainability Goals of Zero Food Waste and Zero Waste to Landfill. By delivering food waste to agencies that need it to be used as animal feed and soil conditioners. In 2021, more than 294.14 tons of food waste were utilized as animal feed, 508.96 tons of food waste were converted to soil conditioners, and 46.5 tons were converted to EM water, respectively.

More information available in

GRI & SASB Content Index Report 2021

Charoen Pokphand Group Sustainability Report 2021
Sustainable Plastic Packaging Management

Key Performance in 2021

Total Plastic Packaging Used

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Plastic Packaging (Tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>75.11</td>
</tr>
<tr>
<td>2019</td>
<td>87.94</td>
</tr>
<tr>
<td>2020</td>
<td>91.37</td>
</tr>
<tr>
<td>2021</td>
<td>134.16</td>
</tr>
</tbody>
</table>

Total Recyclable/Reusable/Compostable Plastic Packaging

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Plastic Packaging (Tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>69.09</td>
</tr>
<tr>
<td>2019</td>
<td>82.76</td>
</tr>
<tr>
<td>2020</td>
<td>84.43</td>
</tr>
<tr>
<td>2021</td>
<td>117.94</td>
</tr>
</tbody>
</table>

More information available in GRI & SASB Content Index Report 2021

Case Study 26

Say Hi to Bio, Say No to Foam

Siam Makro Public Company Limited has adopted government goals to stop selling foam food packaging in all Makro stores by 2022 and encouraged restaurant operators to use biodegradable packaging. Under this project, Makro has selected eco-friendly packaging products to be put on sale. The company places special emphasis on products in the biodegradable category which consists of more than 282 items made from bagasse, eucalyptus pulp and corn to substitute foam packaging. So far, such concept has been widely received by store and restaurant operators who acknowledge the existing environmental problems. Consequently, the use of single-use foam food packaging decreased by more than 100 million pieces since the start of the project three years ago. Meanwhile, the use of biodegradable packaging by entrepreneurs have risen by more than 12%.

Our Way Forward

Charoen Pokphand Group is ready to operate in accordance with circular economy principles by utilizing natural resources in the most value-maximizing approach. To support this endeavor, we have established the following C.P. Group 2030 Sustainability Goals:

01. Zero food waste and waste to landfill.
02. Increase the proportion of waste that is reused or recycled.
03. Increase surplus food distribution to those in need.
04. All plastic packaging are recyclable, reusable or compostable.
Opportunities and Challenges

Climate change is already impacting availability of water resources in many parts of the world. Charoen Pokphand Group recognizes the importance of water as an essential natural resource for consumption as well as for businesses in the industrial sector. The Group must adapt to the challenge and develop innovations to enhance water management efficiency according to the 5Rs principle (Reduce, Reuse, Recycle, Restore and Recover). The Group strictly manages the quality of treated wastewater everywhere it operates, ensuring that it meets standards and local laws before discharging into the environment to prevent impact on surrounding communities and ecosystems. In addition, the Group gives priority to sustainable water management throughout the supply chain. In doing so, we have implemented measures to support and enhance water consumption efficiency in collaboration with suppliers. Furthermore, to support the Sustainable Development Goals on Clean Water and Sanitation, the Group is committed to collaborating with partners from all sectors to drive water resource conservation and support local communities to improve access to clean water and good sanitation.

Water Stewardship

C.P. Group’s Businesses and Activities
Analysis of Sustainable Development Goals and Key Impacted Stakeholders along the Value Chain

Outcomes and Benefits
Progress towards C.P. Group 2030 Sustainability Goals

Key Performance in 2021

• Announced the implementation of the Water Stewardship Policy.
• Assessed water related risks according to operational framework for the organization and suppliers.
• Implemented innovation and technology to enhance water consumption efficiency.
• Promote access to clean water and sanitation for communities.

More information available in
- Stakeholder Engagement Report 2021
- UN SDGs Mapping Report 2021
Key Performances 2021

**Total Water Withdrawal**
- Freshwater: 406 Million Cubic Meters
- Seawater: 164 Million Cubic Meters
- Groundwater: 67 Million Cubic Meters
- Third-party Water: 52 Million Cubic Meters
- Rainwater: 7 Million Cubic Meters

Breakdown of Water Withdrawal:
- Freshwater: 59% (TDS ≤ 1,000 mg/L)
- Other Water: 41% (TDS > 1,000 mg/L)

**Total Water Discharge**
- Freshwater: 183 Million Cubic Meters
- Seawater: 219 Million Cubic Meters
- Groundwater: 47 Million Cubic Meters
- Third-party Water: 35 Million Cubic Meters
- Rainwater: 21 Million Cubic Meters

Breakdown of Water Discharge:
- Freshwater: 57% (TDS ≤ 1,000 mg/L)
- Other Water: 43% (TDS > 1,000 mg/L)

**External Water Discharge**
- Freshwater: 26 Million Cubic Meters (TDS > 1,000 mg/L)
- Other Water: 78 Million Cubic Meters (TDS ≤ 1,000 mg/L)

**Total Water Consumption**
- 2021 water withdrawal per unit of revenue is 173.83 cubic meters per million THB
- Reduced water withdrawal per unit of revenue by 21% compared to 2020 base year

More information available in GRI & SASB Content Index Report 2021

**Data on Water Resources in Water Stress Areas**

**Water Withdrawal**
- Freshwater: 78 Million Cubic Meters (TDS ≤ 1,000 mg/L)
- Other Water: 12 Million Cubic Meters (TDS > 1,000 mg/L)

**Water Discharge**
- Freshwater: 26 Million Cubic Meters (TDS > 1,000 mg/L)
- Other Water: 80 Million Cubic Meters (TDS ≤ 1,000 mg/L)

* TDS = Total Dissolved Solids
** Units located in “high” and “extremely high” baseline water stress areas, using the Aqueduct Water Risk Atlas Tool

Charoen Pokphand Group Sustainability Report 2021
Sustainable Water Resource Management throughout the Supply Chain

Charoen Pokphand Group has conducted a water risk assessment framework for implementation within the organization and by critical suppliers. The framework takes into account water withdrawal volume and baseline water stress in order to plan further water resource management.

Water Management for Suppliers
Charoen Pokphand Group has developed water management guidelines for suppliers who are key stakeholders to our business in order to promote water use efficiency, reduce water shortage risks and jointly campaign for the conservation of water resources across the supply chain.

Circular Water Management
Charoen Pokphand Group has adopted the Circular Water Management approach in accordance with the 5Rs principle established by the World Business Council for Sustainable Development (WBCSD) in managing water supply throughout the supply chain to maximize water efficiency.

Case Study 27
CPF Shares ‘CARE Aquaculture Model’ to Upgrade Tilapia Farmers for 4.0 Era
Charoen Pokphand Foods Public Company Limited has initiated a program to share expertise in a modern freshwater aquaculture method called CARE Model to Tilapia farmers. The CARE Model consists of C-Consumer Need (a production that serves the needs of consumers), A-Achieve Easily and Consistently (a simple farming system that yields consistent production), R-Reliable System (quality and reliable products), and E-Environmental Friendly (an environmentally-friendly and traceable system).

Farms under the CARE system emphasize on the management of water resources. The “Gravity Flow” principle has been adopted to set a cascading farming system layout from ready-to-use water pond to aquaculture pond, sedimentation pond and aquatic plant water treatment pond. Furthermore, a water recycling system has also been installed, leading to 80% lower water consumption than in conventional Tilapia farming. In addition, the system reduces the likelihood of diseases spreading into the farm from natural water sources. It is also eco-friendly as waste from the farm is not discharged to the natural environment.
Collaborating with Partners to Promote Community Access to Water and Sanitation

**China**
- Well and Pumping Station Construction Project, Bai Dian Village, Xiangzhou District, Hubei Province
- Village Water Supply System Installation, Chang Shun Village, Zitong District, Sichuan Province

**India**
- Water For Life Project

**Bangladesh**
- Groundwater Well Construction for Communities Project

**Cambodia**
- Clean Toilets for Students Project, Kampong Speu Province

**Vietnam**
- Ka Nau Village Water Pipeline Installation Project, Binh Dinh Province
- Home for Water Construction Project, Trang Bang District, Tay Ninh Province

**Myanmar**
- Clean Drinking Water for Schools in Aung Za Bu
- Water Sources for Sustainable Agriculture Projects in Bago and Naypyitaw

**The Philippines**
- Sharing Water Resources with Barangay Gugo Community Project

In order to achieve corporate goals and support the United Nations Sustainable Development Goals (SDGs), Charoen Pokphand Group has collaborated with partners in various sectors to promote and improve access to water and sanitation for communities throughout the course of our operation. The project in order to provide access to clean, safe and hygienic water sources that is adequate for consumption as well as provide good sanitation.

**Case Study 28**

C.P. Cambodia Delivered Clean Toilets to Students for Sanitation

C.P. Cambodia Company Limited gives priority to the sanitation of students and wishes to instill values in cleanliness in communities. Therefore, it has conducted the "Clean Toilets for Students" project by sponsoring clean toilets, sports equipment and school lunches to students of Ang Ta Preah School in Kampong Speu province.

630 Persons received clean toilets, sports equipment and school lunches

**Our Way Forward**

Charoen Pokphand Group is determined to conserve water, maximize water-use efficiency and promote access to adequate water supply for all. Accordingly, the Group has established the C.P. Group 2030 Sustainability Goals in Water Stewardship as follows:

- Reduce water withdrawal per unit of revenue, especially in areas with high baseline water stress.
- Increase recyclable and reusable water.
- Encourage good water management practice for key suppliers.
- Increase the number of people supported with access to clean water and sanitation.
Ecosystem & Biodiversity Protection

Opportunities and Challenges

Charoen Pokphand Group realizes that the utilization of land, forest resources, flora and fauna, marine resources, as well as biodiversity have significant impacts on the abundance of ecosystems. Therefore, the Group is committed to operating a business that does not harm biodiversity, protects the ecological balance, and creates a nature-positive outcome throughout the value chain. We devote our resources and expertise to the restoration of ecosystem integrity to deliver value to future generations. The Group firmly believes that protecting ecosystems and biodiversity on the basis of equitable and sustainable resource consumption is the shared responsibility of all sectors of society. Therefore, corporate guidelines have been developed in line with the Rio Declaration on Environment and Development and the Convention on Biological Diversity. The Group has continued to promote and protect terrestrial and marine ecosystems and biodiversity to ensure that our operations and those of our suppliers do not lead to biodiversity losses and move toward nature-positive outcomes.

Key Performance in 2021

- Announced the implementation of the Ecosystem and Biodiversity Protection Policy.
- Attended the UN Biodiversity Conference (COP15) in Kunming, China.
- Increased conservation and restoration of forest resources both in Thailand and abroad.

Outcomes and Benefits

Progress towards C.P. Group 2030 Sustainability Goals

- 100% of business units having or participating in projects with a relevant national or international partner to establish biodiversity management and monitoring programs in their operations.
Collaborating with Stakeholders and External Organizations to Protect Ecosystems and Biodiversity

The Group is committed to operate a business that generates benefits in the economic, social and environmental dimensions while collaborating with the public, private and civil sectors. We have also built a network to protect ecosystems and biodiversity in an effort to sustainably achieve goals. Accordingly, the Group attended a side meeting of the 15th Meeting of the Parties to the Convention on Biological Diversity (CBD COP15) in Kunming, China. A senior executive in China shared the Group’s vision to operate based on the principle of ecosystem protection at the "Business and Biodiversity Forum", co-organized by the UN Convention on Biological Diversity and the Chinese Ministry of Ecology and Environment (MEE).

Examples of Projects with External Partners

- CPF Grow-Share Protect Mangrove Reforestation Project
- CPF Rak Ni-Ves Project at Pasak Watershed, Khao Phraya Doen Thong
- Terrestrial Ecosystenm Protection and Restoration Project
- Collaboration Project in Mueang Chang Subdistrict
- Public-Private Collaboration Project for Development and Restoration for Nan Watershed Forests
- Collaboration Project for Learning Community Center Foundation (Pong Kham Temple)
- Kla Saen Dee Project
- Sob Khun Model
- Yom River Basin Expansion Project
- Nam Phang Model
- Water Resources for Agricultural Development Project

More information available in Projects with External Partners
Conserving and Restoring Forest Resources

Biodiversity is pivotal to the lives of human beings and other living things in terms of creating a balance in ecosystems, promoting the way of life and slowing climate change due to greenhouse gas storage and absorption. However, more and more factors are negatively affecting ecosystems and biodiversity. The deterioration of ecosystems and biodiversity has become a cause for concern within the international community. Consequently, the United Nations has incorporated Biodiversity and Ecosystems as Goal 15 of the Sustainable Development Goals (SDGs) to encourage organizations around the world to join hands in decelerating and reversing this great loss. As a partner network of the United Nations Global Compact, Charoen Pokphand Group has continuously worked to implement and support projects that protect and restore ecosystems and biodiversity.

Forest Resources Conservation and Restoration Projects in Thailand

The monitoring and conservation of forest areas is usually carried out by surveying the number trees and their growth rate which requires a lot of manpower and an extensive period of time. Meanwhile, there are also various other limitations to this conventional method. Hence, the Group has initiated the development of drones and artificial intelligence to track and monitor the growth and carbon sequestration of trees using satellite data.

More information available in
Case Study on Forest Area Monitoring and Tree Conservation via Satellite

Ban Kongkai Multipurpose Forest under the King’s Philosophy

The Group initiated this project in 2016 and is currently working in collaboration with the government, the private sector, communities, Or Pha Ya Institute, Thai Conservation Forest Foundation, Sustainable Development Foundation, Hug Mae Chaem Foundation, GISMC, National Science and Technology Development Agency (NSTDA) and Chiang Mai University to develop and increase forest areas by modifying encroached forest areas into a multipurpose forest according to the philosophy of His Majesty King Bhumibol Adulyadej. Under the project, a seedling nursery center, reservoir, community development center, community enterprise were developed. At the same time, the project established marketing channels and continued to develop products to create sustainable livelihood for communities in tandem with restoring forests.

More information available in
Case Study on Forest Area Monitoring and Tree Conservation via Satellite

Charoen Pokphand Group Sustainability Report 2021
We Grow...Growing for Sustainability

The Group has promoted the planting of perennial trees both in Thailand and in countries where we have made investments. We have also encouraged partners and members of community networks to plant trees for sustainability. The Group has set the goal to become a carbon neutral organization by 2030 and to plant 20 million trees by 2025.

Establish goal to plant
20 million trees
by 2025

Accumulated number of trees
planted and conserved by
C.P. Group worldwide
6.39 million trees

More information available in
Case Study: "We Grow...Growing for Sustainability"
Conserving and Restoring Marine Resources

Charoen Pokphand Group gives priority to taking part in marine resources conservation and restoration as well as supporting sustainable coastal fisheries through the "SEACOSYSTEM for Sustainable Thai Seas" concept which integrates economic, social and environmental aspects. Currently, the Group has collaborated with 66 fishing communities in adopting technology, promoting and researching marine environmental management to help communities, utilize marine resources in a sustainable way.

More information on SEACOSYSTEM for Sustainable Thai Seas

Marine Resources Conservation and Restoration Project

Resources Conservation and Restoration

Increase in aquatic animal harvest

155%

Number of juvenile aquatic animals released into seas

6 Billion

Number of new aquatic animal species found near artificial reefs

42 Species

Community Development

Area

Newly Planted Mangroves (rai)

Conservation and Restoration (rai)

Rayong

54

614

Samut Sakhon

370

14,604

Chumphon

132

890

Songkhla

25

200

Phang Nga

10

80

Trang

-1,000

Samut Songkram

-40

Total

591

17,428

Areas for Cultivation and Nursery of Aquatic Animals

5 areas in 4 provinces (Nakhon Si Thammarat, Songkhla, Pattani and Narathiwat) Total area of 4,620 sq.m.

The past year had been a difficult time for the livelihood of communities due to the COVID-19 outbreak which had widely affected the distribution of local products. Therefore, the Group has leveraged distribution channels for community fishery products through Makro and Lotus’s to support coastal fisheries and aquaculture by conserving and hatching juvenile aquatic animals and promote community-level researches. Currently, an online market for local fishery products is being developed under the “Aquaculture Management through Circular Economy” Project to enable communities to maintain a sufficiency way of living without destroying aquatic habitats and ecosystems in conjunction with breeding marine juveniles for marine resources conservation.

Case Study 33

Research on Biodegradable Packaging from Aquaculture Waste

The Group is mindful that the sustainable restoration of resources must be carried out in collaboration with communities whereby community member take care of the resources in their own surrounding areas. The University has researched and developed the use of aquaculture waste to produce an alternative material for biodegradable packaging for plant sprouts. This was carried out in an effort to reduce waste from aquaculture operating, and apply technology to help fishery communities manage marine environment in a sustainable way.
Our Way Forward

01 Increase conservation and restoration of forest and marine resources in Thailand and abroad.

02 Expand collaboration with stakeholders in protecting ecosystems and biodiversity.

03 Establish long-term ecosystem and biodiversity protection goals.

04 Develop guideline and database system for managing data on conservation and restoration of terrestrial and marine resources.
Responsible Supply Chain Management

Opportunities and Challenges

The continuing growth of the world population has accelerated the demand for natural resources, especially food, energy, and water for consumption. If these resources are not managed appropriately and sustainably, the severity and scale of impact may be beyond control. For example, insufficient water supply for the consumption of household, agricultural and industrial sectors lead to conflicts and disruption in the production process while also affecting the ability to deliver adequate products or services to meet the needs of customers and consumers. Without effective management, food shortage crises can occur in many countries.

Accordingly, Charoen Pokphand Group has always placed importance in responsible supply chain management. We have implemented careful and comprehensive supervision and management approaches to prevent potential impacts throughout the supply chain. However, our diversified business context involving various suppliers has called for more operation time, especially in the areas of environmental conservation, human rights and labor protection, and risk management, to create alignment in supply chain management direction and standard.

Supporting the SDGs

- Ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production
- Retrofit industries to make them sustainable with increased resource-use efficiency and greater adoption of technologies
- Promote policies that support decent job creation and entrepreneurship
- Promote public procurement practices that are sustainable
- Strengthen scientific and technological capacity to move towards more sustainable patterns of consumption and production

Outcome and Benefits

Progress towards C.P. Group 2030 Sustainability Goals

- 100% of high-risk raw material are traceable
- 100% of high-risk suppliers are audited

Highlight Performances in 2021

- Revised Supplier Code of Conduct
- Expanded the scope of high risk raw material traceability
- Expanded the scope of sustainability integration in procurement
- Initiated capacity building for sustainability assessors to drive supplier capacity enhancement throughout the supply chain

Supplier Capacity Enhancement for Operational Excellence

Collaborating to Create a Sustainable Supply Chain

Key Performance Dashboard

Data on Supply Chain and Suppliers

- Critical Tier 1 Suppliers: 2,254 suppliers
- Tier 1 Suppliers with Sustainability Risks: 138 suppliers
- All Tier 1 Suppliers: 31,465 suppliers

Data on Supplier Risk Management

- 57.91% New suppliers that were screened using environmental, social and governance criteria
- 84.06% Supplier that have been assessed on sustainability

Supply Chain Spend Analysis

<table>
<thead>
<tr>
<th>Business Group</th>
<th>Expenditure (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crop Integration</td>
<td>0.37</td>
</tr>
<tr>
<td>Pet Food</td>
<td>0.40</td>
</tr>
<tr>
<td>Seeds, Fertilizers and Plant Protection</td>
<td>1.62</td>
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<td>Telecommunications</td>
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</table>

Critical Non-tier 1 Suppliers

- 72 suppliers
- Critical Non-tier 1 Suppliers with Sustainability Risks: 3 suppliers

Promoting Supplier Code of Conduct

Charoen Pokphand Group strives to build confidence in supply chain management by requiring all suppliers to strictly uphold and comply with the Group’s Supplier Code of Conduct and by establishing regular communications between the Group and suppliers to create understanding and increase their ability to comply. In order to reaffirm such commitment in 2021, the Group conducted a revision of the Supplier Code of Conduct to match the operational context of both the Group and our suppliers at present and in the future.

Governing and Promoting Suppliers towards Sustainable Business Practice

Charoen Pokphand Group has implemented a supplier risk management system across the entire supply chain. This system consists of pre-registration assessment and verification of supplier qualifications in various areas (e.g., technical capabilities, quality control, occupational health and safety, financial management, comprehensive care for the environment, social responsibility towards the society and corporate governance), supply chain spend analysis, identification of critical suppliers and annual performance evaluation. In addition, assessments of human rights and labor performance have been carried out to increase suppliers’ awareness on these issues as well as to reduce direct and indirect risks and impacts on the Group.

Case Study 34

Revision of the Supplier Code of Conduct

In 2021, Charoen Pokphand Group added the following amendments to the Supplier Code of Conduct:

- Cybersecurity that focuses on the protection of data, networks and online systems used in operations.
- Fair competition that emphasizes on treating suppliers with fairness and equality.
- Labor protection that covers youth workers, female workers and pregnant women, elderly workers, disabled workers and foreign workers.
Supply Chain Management Strategy

Charoen Pokphand Group has formulated the Supply Chain Management Strategy as a guideline for responsible supply chain management. Its five approaches are in line with C.P. Group’s business strategies and 2030 Sustainability Goals.

1. Planning and Selection
   - Establish Supply Chain Management Strategy
   - Assess and verify supplier qualifications
   - Register vendor lists

2. Risk Management
   - Identify critical suppliers based on purchase value, importance of raw material, and replaceability.
   - Risk assessment throughout supply chain

3. Performance Evaluation
   - Evaluate performance on multiple criteria.
   - Follow up on implementation of corrective action plans.

| Tier 1 suppliers | 26,450 | 84.06% |
| Critical non-tier 1 suppliers | 56 | 77.78% |

High Sustainability Risk Suppliers

Besides critical suppliers, Charoen Pokphand Group has also identified high sustainability risk suppliers or suppliers whose operations/activities have high tendency to cause adverse social, environmental and governance impacts. In addition, we have conducted assessments of suppliers’ sustainability performance.

Creating Supplier Audit Mechanism for Sustainable Development

Charoen Pokphand Group’s supply chain is highly diversified. It is challenging in terms of industrial diversity and the cultural difference of each geography where we operate. Therefore, the Group holds a key mission to expedite the systematic establishment of an auditing standard. For this reason, the Group has organized the CAPACITY BUILDING PROGRAM CPS Co-ordinated Sustainability Management System Compliance Audit training course for relevant employees to enhance the efficiency of responsible supply chain management. Conducted by experts from TÜV NORD Thailand Limited, the course’s objective centers on enhancing the efficiency of supplier auditing skills and incorporating sustainability materiality, such as products and services, labor, discrimination, labor welfare, freedom of association, occupational health and safety, environmental management, compliance with laws and regulations, risk management and ethical practices, etc. The training was attended by 143 people from all business groups in Thailand.

<p>| Number of suppliers assessed annually | Number of suppliers assessed every 3 years (no duplicates) |
| Critical suppliers | 6.84% | 7.01% |
| Suppliers with high sustainability risks | 63.83% | 28.37% |</p>
<table>
<thead>
<tr>
<th>Strategy</th>
<th>Action</th>
<th>Goal</th>
<th>Target</th>
</tr>
</thead>
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<tr>
<td>Strengthening Partners</td>
<td>• Encourage and support suppliers to establish their own procurement policies and implement them for tangible results.</td>
<td>• 100% of tier 1 suppliers sign acknowledgment and receive training on the Supplier Code of Conduct</td>
<td>50% within 2023</td>
</tr>
<tr>
<td></td>
<td>• Organize meetings with suppliers at least once a year to clarify directions and guidelines for sustainability including building a learning network.</td>
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<tr>
<td>Internal Process Improvement</td>
<td>• Encourage and support suppliers to upgrade management systems, e.g., quality management system, environmental management system, to meet universal sustainability standards by achieving certification from credible external agencies as well as undergo assessments on sustainability according to ESG indicators.</td>
<td>• 100% of critical tier 1 suppliers comply with laws and regulations on water and perform water-related risk assessments</td>
<td>50% within 2023</td>
</tr>
<tr>
<td></td>
<td>• Evaluate supplier performance at least once a year to assess their ability in complying with the terms of contracts regarding quality, price, delivery, sustainability and other areas as well as communicate the results to suppliers for improvement.</td>
<td>• 100% of spending procurement should suppliers with comprehensive environmental management</td>
<td>50% within 2023</td>
</tr>
<tr>
<td>Collaboration for Sustainable Growth</td>
<td>• Support enhancement of quality and competitiveness including sustainability performance of suppliers with appropriate approaches, such as knowledge training, joint investments and awards to provide incentive, etc.</td>
<td>• 50% of critical tier 1 suppliers join or collaborate with the company on environmental management</td>
<td>25% within 2023</td>
</tr>
<tr>
<td>Creating Sustainable Value for Consumers and Customers</td>
<td>• Apply and encourage enhancement of responsible procurement that highlights the reduction of social and environmental impacts to ensure that raw materials come from responsible sources using applicable approaches, such as traceability throughout the production chain, sustainability product certification, e.g., Marine Trust, Roundtable on Sustainable Palm Oil (RSPO), Forest Stewardship Council (FSC), etc.</td>
<td>• 100% of high-risk raw materials are traceable</td>
<td>50% within 2023</td>
</tr>
</tbody>
</table>

**Strategy**

**Action**

**Goal**

**Target**

**Assess sustainability risks across the supply chain at least once every three years using appropriate methods including 1) site visits, 2) self-assessments, 3) data from external sources or credible stakeholders, 4) news and 5) others, to identify high sustainability risk suppliers and define appropriate and adequate risk management measures covering environment, human rights and good governance.**

- 100% of tier 1 suppliers are assessed on human rights every three years
- 100% of critical tier 1 suppliers with high human rights risks have mitigation plans and resolve risks within 12 months
- 100% of high sustainability risk suppliers must be assessed every three years

Besides the cooperation between Charoen Pokphand Group and farmers or suppliers, the Group also encourages employees at all levels to engage in work process improvement to drive more sustainable supply chains worldwide.

**More Information available in Responsible Supply Chain Management**

**Our Way Forward**

In response to global trends and C.P. Group Sustainability Goals, the Group plans to uplift sustainability performance in the supply chain by:

01. Build networks and enhance competency of auditors.
02. Join forces to promote the quality of products and services and strengthen competitiveness for suppliers.
03. Encourage suppliers to upgrade management systems to meet universal sustainability standards.
04. Develop an effective traceability system.
Appendix
## Reporting Boundary 2021

Companies included in the scope of Charoen Pokphand Group’s Sustainability Report 2021

<table>
<thead>
<tr>
<th>Business Group / Company Name</th>
<th>Country / Economy</th>
<th>Economic</th>
<th>Environmental</th>
<th>Social</th>
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<td><strong>Agro-industry and Food Business Group</strong></td>
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**Business Group / Company Name**
- BELLISIO INVESTMENT LLC.
- CP-Meiji Co., Ltd
- AGRO INDUSTRY AND FOOD BUSINESS GROUP
- CHA TAI ENTERPRISES INTERNATIONAL LIMITED
- MYANMAR C.P. LIVESTOCK CO., LTD.
- C.P. BANGLADESH CO., LTD.
- CHAROEN POKPHAND PAKISTAN (PVT.) LTD.
- CHA TAI FEEDMILL PTE. LTD.
- CHINA ANIMAL HUSBANDRY BUSINESS
- Chia Tai Co., Ltd
- C.P. Intertrade Co., Ltd
- Khao C.P. Co., Ltd
- CHIA TAI FEEDMILL PTE. LTD.
- CHAROEN POKPHAND PAKISTAN (PVT.) LTD.
- CHAROEN POKPHAND PRODUCE CO., LTD.
- C.P. Starlanes Co., Ltd
- Charoen Pokphand Agriculture Co., Ltd
- C.P. Starlanes Co., Ltd
- Charoen Pokphand Engineering Co., Ltd
- Perfect Companion Group Co., Ltd
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<th>Business Group / Company Name</th>
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- Company performances that are covered in this 2021 Sustainability Report
- Company performances that are not covered in this 2021 Sustainability Report
* The Finance and Investment Business Group is not currently under the management of Charoen Pokphand Group
Charoen Pokphand Group Sustainability Report 2021

**LRQA Independent Assurance Statement**

**Relating to Charoen Pokphand Group Company Limited’s Sustainability Report for the calendar year 2021**

This Assurance Statement has been prepared for Charoen Pokphand Group Co., Ltd in accordance with our contract but is intended for the readers of this report.

**Terms of engagement**

**LRQA Thailand Ltd.** was commissioned by Charoen Pokphand Group Co., Ltd (CPG) to provide independent assurance on its Sustainability Report for the calendar year 2021 ("the report") against the assurance criteria in the context of a limited level of assurance and at the materiality of the professional judgement of the verifier using LRQA’s verification procedure. LRQA’s verification procedure is based on current best practice, is in accordance with ISAE 3000 and ISAE 3405 and uses the following principles of: inclusivity, materiality, responsiveness and reliability of performance data.

Our assurance engagement covered only CPG’s global operations and specifically the following requirements:

- **Confirming that the report is in accordance with:**
  - CPG’s Standard and core option
- **Reviewing the integrity of CPG’s Values, principles, standards and norms of behaviour (GRI 102-16), Mechanisms for advice and concerns about ethics, (GRI 102-17)**
- **Evaluating the quality of data and information for only the selected indicators listed below:**
  - GRI 302-1: Energy consumption within the organization: 2016, GRI 303-3: 5 Water withdrawal, discharge and consumption: 2018, GRI 305-1: Direct (Scope 1) GHG emissions: 2016; 2020 GRI 305-2: Energy (Scope 2) GHG emissions: 2016; GRI 305-3: Other indirect (Scope 3) GHG emissions: -(Cat. 1, Cat.3, Cat. 4 only freight services, Cat. 5.7, Cat. 9 – 13 and 15) and 2016, GRI 305-7: Significant air emissions – VOC only, GRI 306-3: 5 Water generated, diverted from and directed to disposal: 2020 included food waste, GRI 402-1-10 Work related injury and ill health 2018

Notes: (1) Reporting scope of Direct GHG emissions include emissions from sources of fuel combustion only but exclude direct GHG emissions from flaring of biogas and other sources of direct GHG emission.

The information for these selected indicators is available at https://www.charoenpokphand.com/sustainability/sustainability-report/

**LRQA’s responsibility is only to CPG. LRQA discloses any liability or responsibility to others as explained in the end footnote. CPG’s responsibility is for collecting, aggregating, analysing and presenting all the data and information within the report and for maintaining effective internal controls over the systems from which the report is derived. Ultimately, the report has been approved by, and remains the responsibility of CPG.**

**LRQA’s Opinion**

Based on LRQA’s approach nothing has come to our attention that would cause us to believe that CPG has not, in all material respects:

- **Met the requirements above**
- **Disclosed reliable performance data and information for the selected indicators as no errors or omissions were detected**
- **Covered all the issues that are important to the stakeholders and readers of this report.**

The opinion expressed is formed on the basis of a limited level of assurance and at the materiality of the professional judgement of the verifier.

**Note:** The extent of evidence gathering for a limited assurance engagement is less than for a reasonable assurance engagement. Limited assurance engagements focus on aggregated data rather than physically checking source data at sites. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

**LRQA’s approach**

LRQA’s assurance engagements are carried out in accordance with our verification procedure. The following tasks were undertaken as part of the evidence gathering process for this assurance engagement:

- **Assessing CPG’s approach to stakeholder engagement to confirm that issues raised by stakeholders were captured correctly.** We did this by reviewing documents and associated records.

1 GRI quantification is subject to inherent uncertainty.

- **Reviewing CPG’s process for identifying and determining material issues to confirm that the right issues were included in their Report and updated overtime.** We did this by benchmarking reports written by CPG and its peers to ensure that sector specific issues were included for comparability.
- **Auditing CPG’s data management systems to confirm that there were no significant errors, omissions or mis-statements in the Report.** We did this by reviewing the effectiveness of data handling processes and systems, including collaborating information from third party assurance engagements done for CPG subsidiaries included CFP (Thailand and Vietnam), CP, CPP, and True Corp.
- **Sampling evidence presented - remote verification to CPG’s subsidiaries included CFP and Lotus operations in India, People’s Republic of China, Thailand and within ASEAN countries to confirm the reliability of the selected indicators.** We also spoke with key people in various facilities responsible for completing the data and drafting the Report.

Note: LRQA did not verify the data back to its original sources, nor did it assess the accuracy and completeness of the data reported by individual locations.

**Observations**

Further observations and findings, made during the assurance engagement, are:

- **Stakeholder inclusivity:** We are not aware of any key stakeholder groups that have been excluded from CPG’s stakeholder engagement process.
- **Materiality:** We are not aware of any material aspects concerning CPG’s sustainability performance that have been excluded from the Report.
- **Responsiveness:** CPG has processes for responding to various stakeholder groups. We believe that future reports should further explain the actions being taken by CPG to manage impacts of business MGA to consumers.
- **Reliability:** CPG apply centralized systems to collect and calculate the data and information associated with the selected indicators listed above. CPG should maintain those subsidiary companies’ third-party verification as CPG has collaborated its data and information from subsidiaries level.

**LRQA’s standards, competence and independence**

LRQA ensures the selection of appropriately qualified individuals based on their qualifications, training and experience. The outcome of all verification and certification assessments is then internally reviewed by senior management to ensure that the approach applied is rigorous and transparent. This verification, together with verification for CPG subsidiaries are the only work undertaken by LRQA for CPG and as such does not compromise our independence or impartiality.

**Signed**

Oparl Charitaratana
LR Lead Verifier
Office: 8F of LRQA (Thailand) Limited
220 Floor, Sirinit Building, 3338/16 Rama 4 Road
Klongton, Krungtong, Bangkok 11220 THAILAND
LRQA Reference: 004K0000700A

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<table>
<thead>
<tr>
<th>Reduce using</th>
<th>CO₂ uptake</th>
<th>Water saving</th>
<th>Steam saving</th>
<th>Power saving</th>
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<tr>
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<td>81 Tons</td>
<td>22,956 Liters</td>
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<td>526 Units</td>
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