FORCE FOR A SUSTAINABLE



CHAROEN POKPHAND GROUP SUSTAINABILITY REPORT 2017

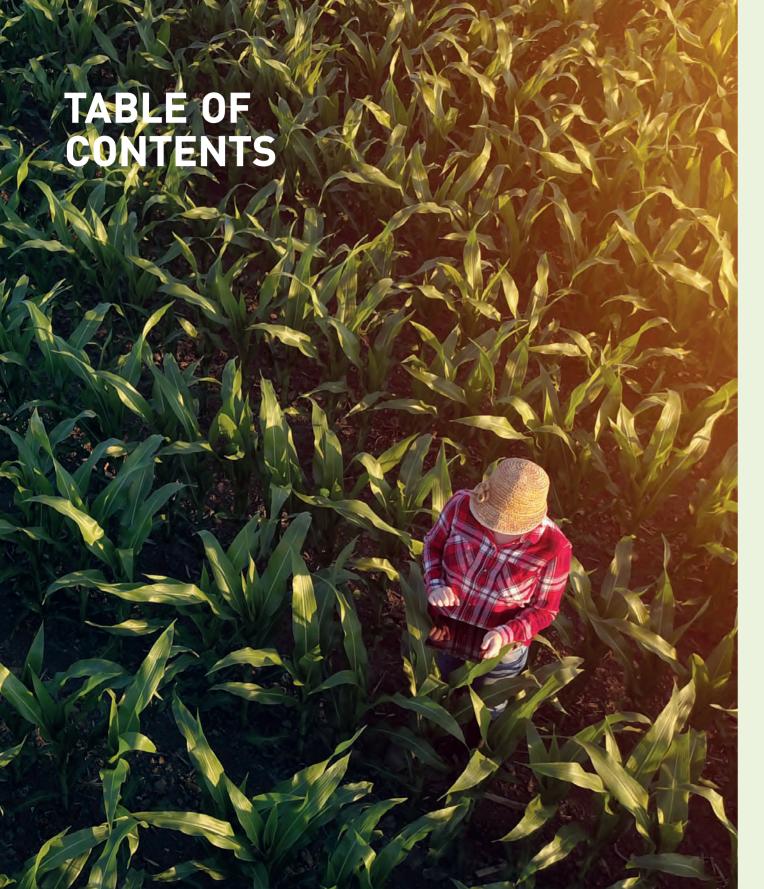




CHAROEN POKPHAND GROUP SUSTAINABILITY REPORT 2017







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MESSAGE FROM THE SENIOR CHAIRMAN

We remain committed to developing our businesses not only to respond to the changing needs of our consumers, but to create shared value for society in a sustainable manner as well.



Charoen Pokphand Group operates its business on the principles of sustainable development. We have always adhered to the "Three-Benefit Principle" which aims to create prosperity for the country, for people in all countries in which we invest, and ultimately for our own operation. We strongly believe that the heart of sustainability is defined by our operation and society growing together, and creating the foundation for national and global development. This belief is what will bring about sustainability in all dimensions – economic, social, and environmental, and most importantly, is what will carry C.P. Group proudly into the future as a 100-year-old organization.

technological and environmental. I believe that to remain up to businesses is not only beneficial to C.P. Group, but is also a them with the knowledge and capabilities that are commensurate Lastly, I hope that this second Sustainability Report will help with the qualities required of a leader who will transition the inform our readers of C.P. Group's commitment to sustainability organization into the new generation. Employees are the true and our efforts and collaboration to that end. I would like to a new generation of "good and competent" leaders who can around the world: employees, customers, business partners, become important forces in developing the business in time to shareholders, and business alliances, as well as to the public Institute is responsible for creating the curricula that will shape throughout our 98-year history. My promise to you is that C.P. global leaders, and the "Action Learning Program" training Group will uphold its commitment to operating a sustainable model - where participants learn by working on real projects business, first and foremost, for the benefit of the country and that this new generation of leaders will be the strength of C.P. Group, and that they will create benefits for the Thai people. Thailand, and for all the countries in which we invest.

coming this far, we owe it to the excellent support that we have but to create shared value for society in a sustainable manner

Dhanin Chearavanont

Senior Chairman Charoen Pokphand Group Co., Ltd.

MESSAGE FROM THE CHAIRMAN

Our purpose is to enhance quality of life, health and well-being of the people today for a better and sustainable future.



For more than 90 years, Charoen Pokphand Group has been committed to our core values founded on "Three-Benefit Principle"; benifiting the economic, social and environmental development of the countries we operate in, enhancing the people's health and well-being, as well as creating values for our corporation; including our employees and shareholders. We built our name on revolutionizing the food industry and providing generations of families with safe, wholesome, great-tasting food and high quality products and services globally. We are proud of our heritage and will continuously be guided by our purpose and core values that are rooted in respect.

our strategic instrument, will provide us quality workforce and and innovation. We will continue investing and adopting new technologies across all of our activities in order to increase our

Soopakij Chearavanont

Chairman Charoen Pokphand Group Co., Ltd.

MESSAGE FROM THE CEO

Our vision is to provide food for both body and mind that creates shared value and brings health and well-being for all.



C.P. Group aims to be part of sustainable development in all communities and societies of countries in which we operate through our vision "to provide food for both body and mind that creates shared value and brings health and well-being for all." The Group is committed to building a business that grows with our business partners and alliances, the economy, the people, and the country - according to our "Three-Benefit Principle" - while sustainably preserving and restoring the environment.

- 1. Promoting research and development to foster innovations for any expense.

- to sustainability, thereby enabling the mutual growth of the Council on Sustainable Development.

process to ensure alignment with international standards. We them not only with leadership skills, but also with those skills on "Health," the Group continued to promote learning and skill

To ensure that our business operations are implemented in line. We are proud to announce that one of our businesses. such that the farmers themselves do not have to be responsible

> In terms of the "Home" aspect of our strategy, the Group working to raise awareness of environmental protection and

generation of employees will have the opportunity to openly businesses within C.P. Group were recognized by international 4. Embedding the 6 core values within the organization to Sustainability Indices and the FTSE4Good Emerging Index, and encourage employees to consider business growth in relation by receiving positive assessments from the World Business

I would like to thank all of our employees and management, as committed to the 2020 sustainability goals under our strategy helped us drive our sustainable business policy in all dimensions "Heart-Health-Home," I would consider it a year of significant - economic, social, and environmental - in such a substantial progress. In terms of "Heart," the Group announced the adoption way. It is because of this support that C.P. Group can continue

Suphachai Chearavanont

Chief Executive Officer Charoen Pokphand Group Co., Ltd.

2017 Highlights

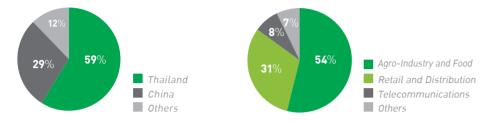
Business Performance

Total Sales Revenue

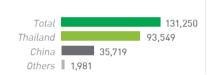
1,745,897 million Baht







Employees' Benefits (million Baht)







Community and **Social Contribution** (million Baht)



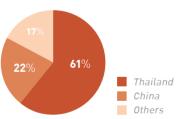
HEART: LIVING RIGHT

Number of **Employees**

306,695 persons



Percentage of Employees by Country



Employee Ratio

52% Male

48% Female

New employees

60,172 persons

Safety



Lost Time Injury Rate (case per 200,000 hours worked) Drafted group-wide business Code of Conduct and other relevant policies "C.P. Group Code of Conduct -Our Practices"

Leadership Development

Persons who attended leadership development

Assessed and identified group-wide human right salient issues

5 issues

Human Capital Development

16.07

of all employees (hour)



HEALTH: LIVING WELL

Supported farmers. SMEs, and people in vulnerable groups

165,294 persons

INTRODUCTION



92,378 persons 57,646 persons 15,245 persons





People in vulnerable groups



168

Number of products which help promote health and well-being



Supported access to education and knowledge to

2,568,762 persons



Number of R&D personnel

5.388 persons

R&D spending

12,223 million Baht People in vulnerable groups

866 persons

GHG Emissions

Reduction

CO e

HOME: LIVING TOGETHER

GHG Emissions

(Scope 1+2)

5.22 million tons CO_e

million GJ



Percentage of GHG Emission by Country

52% Thailand China Others

Energy Consumption

Water Consumption

million cubic meters

Waste Generated

thousand tons



Water

ratio of recycled waste

9.05%

ratio of renewable energy

Operational ECO-EFFICIENCY (unit per 1 million Baht revenue)

Energy Consumption

25.41 GJ

GHG **Emissions**

2.99 tons CO e Consumption

177.03 cubic meters

Remarks: Information as of 31 December 2017

Awards and Recognitions











Subsidiaries of C.P. Group were listed in the Dow Jones Sustainability Indices or DJSI (Emerging Market) 2017 and also

CDP Hong Kong and South East Asia Awards 2017 listed in the Sustainability Yearbook 2018 as follows:

RobecoSAM Bronze Class

- Charoen Pokphand Foods Public Company Limited
- True Corporation Public Company Limited

Sustainability Yearbook Members

• CP All Public Company Limited

Charoen Pokphand Foods Public Company Limited

• Member for 3 consecutive years in the Food Products industry

CP All Public Company Limited

• First-time member in the Food & Staples Retailing

True Corporation Public Company Limited

• First-time member, and the only member from Thailand, in the Telecommunications industry



Charoen Pokphand Foods Public Company Limited

- under Best Performance Across Programs
- Leadership (A-) level for CDP Water
- Management (B) level for CDP Climate
- Management (B) level for CDP Forest

True Corporation Public Company Limited

Awareness (C) level for CDP Climate



Global World's Best Employers Award

• Charoen Pokphand Foods Public Company Limited

Ranked 191st of 2,000 employers worldwide

CP All Public Company Limited Ranked 212th of 2,000 employers

The World's Most Innovative Companies

• CP All Public Company Limited Ranked 21st of 100 companies worldwide



Charoen Pokphand Foods Public Company Limited and True Corporation Public Company Limited

 Selected, for the first time, as a member of FTSE4Good Emerging Index









Sustainability Report Awards from CSR Club and Thaipat Institute, in collaboration with the Securities and Exchange Commission Thailand and the Thai Listed Companies Association

Outstanding Award 2017

INTRODUCTION

 Charoen Pokphand Group Company Limited Charoen Pokphand Foods Public Company Limited True Corporation Public Company Limited

Outstanding New Comer Award

Charoen Pokphand Group Company Limited

SR Recognition Award

CP All Public Company Limited





Charoen Pokphand Group Company Limited

 Asia's Best First Time Sustainability Report at Asia Sustainability Reporting Awards 2017 organized by CSR Works International and alliances





Charoen Pokphand Foods Public Company Limited and True Corporation Public Company Limited

• "Excellent CG Scoring" rating in 2017 from the Thai Institute of Directors (IOD) under the support of the Stock Exchange of Thailand (SET)





Chia Tai Tianging (CTTQ) Company Limited, a subsidiary of Sino Biopharmaceutical Group

 Ranked No.1 in the "Top 50 Chemical Drug R&D Companies Ranking in China 2017" from the 2nd China Pharmaceutical Innovation Summit & Release of Top 100 Pharmaceutical Companies R&D Ranking organized by China Pharmaceutical University, Chongqing Economic and Information Committee, China Association of Pharmaceutical Education Guide, YAOZH.COM and "China Pharmacy" Magazine Agency



Charoen Pokphand Group, China

• "Contribution Award of Outstanding Cases" and "Contribution to National Strategy Award" from 2017 "Best CSR Practices of Foreign-Invested Enterprises in China" organized by the China Association of Enterprises with Foreign Investment (CAEFI)





Charoen Pokphand Group Company Limited, CP All Public Company Limited, and True Corporation Public Company Limited

 Certified with membership status by Thailand's Private Sector Collection Action Coalition Against Corruption (CAC)



Broiler farms of Hubei CP Co., Ltd., China

"3 Star Good Chicken Production Award" from Good Farm Animal Welfare Awards



Charoen Pokphand Intertrade Singapore (PTE) Ltd.

 "The Singapore Packaging Agreement Award 2017 (Merit Category)" from the SPA 10th Anniversary Awards

Agro-Industry and Food Business Group

INTRODUCTION

• "Planting and Breeding Combination Demonstration Base Award" organized by The National Science and Technology Innovation Alliance for the Utilization of Livestock and Poultry Waste, Ministry of Agriculture, China





Dog food "Jerhigh" brand under the production of Charoen Pokphand Foods Public Company Limited

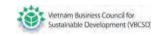
• "Brand of the Year 2017-2018" in Treats - Natural category from World Branding Awards hosted by World Branding Forum (WBF) in Vienna, Austria



CP Foods (UK) Limited

 "Medium Apprenticeship Employer of the Year" and "Worcestershire Apprenticeship Employer of the Year" at the Worcestershire Apprenticeship Awards 2017







Swine farm Loc Ninh and Food Processing plant Phu Nghia in Vietnam

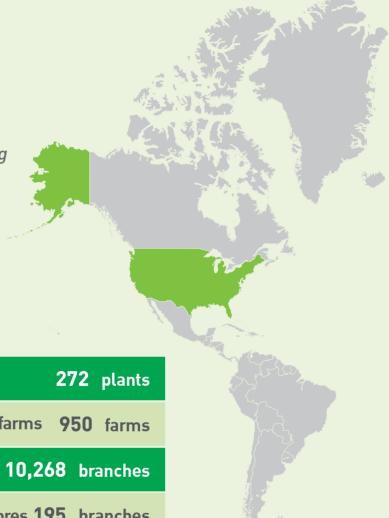
• "The Most Sustainable Business Award" by Vietnam Business Council for Sustainable Development (VBCSD) under the Programme on Benchmarking and Announcing Sustainable companies in Vietnam through the Corporate Sustainability Index (CSI) of 100 companies





OUR PORTFOLIO

C.P. Group's Vision "We are committed to providing food for both body and mind that creates shared value and brings health and well-being for all."





R&D centers / Research centers 52 centers

Total employees 306,695 persons

Countries and economies 21 countries

Population in operating countries 4.381 billion people

Symbol Index: Main Business Lines

Agro-Industry and Food Retail and Distribution

Media and Telecommunications

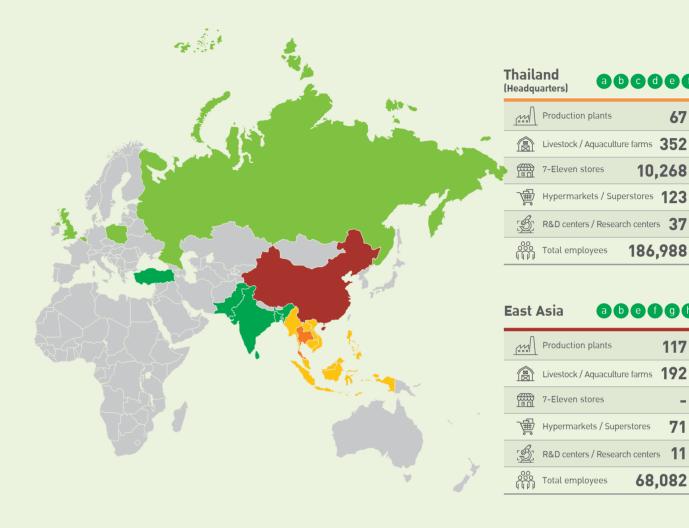
E-Commerce and Digital

Property Development

Automotive and Industrial Products

Pharmaceuticals

Finance and Investment



Southeast Asia (Excluding Thailand)	South Asia and West Asia a	Europe a
Production plants 49	Production plants 26	Prod
Livestock / Aquaculture farms 233	Livestock / Aquaculture farms 163	Lives
7-Eleven stores	7-Eleven stores	7-Ele
Hypermarkets / Superstores 1	Hypermarkets / Superstores	Нуре
R&D centers / Research centers =	R&D centers / Research centers 2	[<u>\$</u>] R&D
Total employees 33,748	Total employees 13,221	Total

Europ	e and America	a f
	Production plants	13
	Livestock / Aquaculture farms	10
	7-Eleven stores	-
	Hypermarkets / Superstores	-
[2]	R&D centers / Research centers	2
	Total employees 4,	656

abcdef

10,268

abengh

117

68,082

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OUR PORTFOLIO

			Ea As	ist sia						east ling Thail				So and	uth A West	sia Asia		Eur	ope	and	Ame	rica
Business Line	Business Group	Thailand	China	Taiwan-China	Cambodia	Indonesia	Laos	Malaysia	Myanmar	Philippines	Singapore	Vietnam	Bangladesh	India	Pakistan	Turkey	Sri Lanka	Belgium	Poland	Russia	United Kingdom	United States
Agro-Industry	Agro-Industry and Food	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
and Food	Seeds, Fertilizers and Plant Protection Products	•																				
	International Trading	•	•		•			•			•			•								•
	Crop Integration	•	•		•				•			•		•								
	Pet Food	•	•	•	•			•				•										
	Feed Ingredients Trading	•	•	•	•		•	•	•	•		•	•	•	•	•			•	•		
Retail and Distribution	Retail and Distribution	•	•		•																	
Media and Telecommunications	Telecommunications	•																				
E-Commerce and Digital	E-Commerce and Digital (In the process of establishment as a new Business Group)	•			•	•			•	•		•										
Property Development	Property Development	•	•																			
Automotive and	Automotive and Industrial Products	•	•																			
Industrial Products	Packaging	•	•									•										•
Pharmaceuticals	Pharmaceuticals		•																			
Finance and Investment	Finance and Banking		•																			
ÎM,	Population ^[1] (million people)	68.4	1,379.3	23.5	16.2	260.6	7.1	31.4	55.1	104.3	5.9	96.2	157.8	1,281.9	204.9	80.9	22.4	11.5	38.5	142.3	65.7	326.6
B	Gross National Product ^[1] [thousands USD]	17.8	16.6	49.8	4.0	12.4	7.4	28.9	6.3	8.2	90.5	6.9	4.2	7.2	5.4	26.5	13.0	46.3	29.3	27.9	43.6	59.5
P	Global Competitiveness Index ^[2] (ranking)	32	27	15	94	36	98	23	-	56	3	55	99	40	115	53	85	20	39	38	8	2
	Sustainable Development Goals (SDGs) Index ^[3] (ranking)	55	71	-	114	100	107	54	110	93	61	68	120	116	122	67	81	12	27	62	16	42



INTRODUCTION Our Businesses 021

OUR BUSINESSES

Charoen Pokphand Group Co., Ltd.



Main Companies

Charoen Pokphand Group Co., Ltd.

CPG Overseas Company Limited

Main Business

Charoen Pokphand Group Co., Ltd. serves as a parent company of C.P. Group. As a holding company, Charoen Pokphand Group Co., Ltd. holds shares of subsidiaries in Thailand and overseas. The Group operates across many industries ranging from industrial to service sectors, which are categorized into 8 Business Lines covering 13 Business Groups. Currently, the Group has investments in 21 countries and economies.

Business Opportunities and Challenges

Economic Dimension

- Governance and Business Ethics
- Risk and Crisis Management
- Information Security & Cybersecurity
- Customer Relationship Management
- Innovation Management

Social Dimension

- Corporate Citizenship and Philanthropy
- Social Inclusion in Education
- Social Impacts from Operations, Products, and Services
- Health and Nutrition
- Responsible Supply Chain Management
- Labor Practices and Human Rights
- Occupational Health & Safety
- Human Resource Management
- Stakeholder Engagement

- Climate Change Impact
- Energy Management
- Effluent and Waste Management
- Resource Efficiency
- Water Management
- Raw Material Sourcing/ Biodiversity and Ecosystems
- Packaging

Our Businesses 023



Main Companies

022 Charoen Pokphand Group Sustainability Report 2017

Charoen Pokphand Foods Public Company Limited
C.P. Pokphand Co., Ltd.

Charoen Pokphand Enterprise (Taiwan) Co., Ltd.

Myanmar C.P. Livestock Co., Ltd.

C.P. Bangladesh Co., Ltd.

Charoen Pokphand Pakistan (Pvt.) Ltd.

Main Business

The Agro-Industry and Food Business Group operates integrated businesses covering animal feeds, animal farming, foods, medical supplies, animal medicine, and agricultural equipment. The Business Group is committed to strengthening food security with high-quality and safe food, in a socially and environmentally-friendly manner. Furthermore, the Business Group applies various technologies creatively that are certified by international standards and traceable throughout the entire supply chain.

Business Opportunities and Challenges

Economic Dimension

- Governance and Business Ethics
- Customer Relationship Management
- Health & Well-Being
- Supply Chain Management
- Innovation Management
- Food Quality and Safety

Social Dimension

- Social Impact on Community
- Human Rights
- Occupational Health & Safety
- Human Capital Development
- Social Inclusion in Education

Environmental Dimension

- Operational Eco-Efficiency
- Climate Change Impact
- Water Management
- Waste Management
- Ecosystem and Biodiversity
- Packaging
- Product Labelling
- · Raw Material Sourcing
- Animal Welfare



INTRODUCTION

Seeds, Fertilizers and Plant Protection Products Business Group

Agro-Industry and Food Business Line



Main Companies

Chia Tai Co., Ltd.

Main Business

Led by Chia Tai Co., Ltd., the Seeds, Fertilizers and Plant Protection Products Business Group operates an agricultural input business, which consists of 3 main areas including seeds, fertilizers, and plant protection products. The Business Group emphasizes product research and development, and distributing products selected from world-leading sources to Thai and foreign markets. Moreover, the Business Group also distributes agricultural and housing equipment, and fresh fruits and vegetables. In terms of services, the Business Group has expert teams in place to promote and advise farmers and entrepreneurs across Thailand on seed cultivation, and appropriate use of fertilizers and plant protection products.

Business Opportunities and Challenges

Economic Dimension

- · Governance and Business Ethics
- Customer Relationship Management
- Health & Well-Being
- Supply Chain Management
- Innovation Management

Social Dimension

- Social Impact on Community
- Human Rights
- Occupational Health and Safety
- Human Capital Development

- Climate Change Impact
- Operational Eco-Efficiency
- Water-Related Risks
- Waste Management
- Ecosystem and Biodiversity
- Environmental Management Systems
- Chemical Residue Management

International Trading Business Group

Agro-Industry and Food Business Line



Main Companies

C.P. Intertrade Co., Ltd.

Khao C.P. Co., Ltd.

Ayutthaya Port & ICD Co., Ltd.

Dynamic Transport Co., Ltd.

Dynamic Intertransport Co., Ltd.

Main Business

Headed by C.P. Intertrade Co., Ltd., the International Trading Business Group comprises 2 main businesses, including rice and food, and integrated logistics. The first business focuses on rice integration, covering from rice cultivation, rice mills, rice processing plants, to rice manufacturing plants for domestic and international trading under the brand "Royal Umbrella." Other businesses include crop and general food export, domestic and international logistics services, and ship transport services of goods in containers.

Business Opportunities and Challenges

Economic Dimension

- Governance and Business Ethics
- Customer Relationship Management
- Health & Well-Being
- Supply Chain Management
- Risk Management

Social Dimension

- Human Rights
- Occupational Health and Safety
- Logistics Management
- Social Impact on Community
- Human Capital Development
- Talent Attraction and Retention

Environmental Dimension

- · Operational Eco-Efficiency
- Packaging
- Raw Material Sourcing
- Fuel Efficiency



INTRODUCTION

Crop Integration Business GroupAgro-Industry and Food Business Line



Main Companies

Charoen Pokphand Produce Co., Ltd.

Charoen Pokphand Agriculture Co., Ltd.

C.P. Starlanes Co., Ltd.

Charoen Pokphand Engineering Co., Ltd.

Main Business

The Crop Integration Business Group specializes in research and development of fruits, and production of rice and maize seeds. The Business Group also operates other businesses including plant nutrition, large-scale crop farming, rubber plantations, orchards, and service centers for industry term. Furthermore, the Business Group also produces and distributes agricultural machines to farmers within the country and overseas, and provides technological and engineering advice and innovation for sustainable business growth.

Business Opportunities and Challenges

Economic Dimension

- · Governance and Business Ethics
- Customer Relationship Management
- Health & Well-Being
- Supply Chain Management
- Innovation Management

Social Dimension

- Social Impact on Community
- Human Rights
- Occupational Health and Safety
- Human Capital Development
- Talent Attraction and Retention

- Operational Eco-Efficiency
- · Water-Related Risks
- Waste Management
- Ecosystem and Biodiversity
- · Raw Material Sourcing

Pet Food Business Group Agro-Industry and Food Business Line



Main Companies

Perfect Companion Group Co., Ltd.

Main Business

With Perfect Companion Group Co., Ltd., at the helm, the Pet Food Business Group is a leading pet food manufacturer, established to elevate the quality of life of pet owners and their pets by caring and constantly innovating new products. They can therefore be confident that the Business Group's products and services can help build a good relationship between pets and their owners. The products include pet foods for dogs, cats, fish, horses, birds, rabbits, mice and others. The pet foods are produced from production plants that have been certified with international standards, sourced from high-quality and nutritious raw materials, which enhances the quality of life of pets and helps them live a long and happy life.

Business Opportunities and Challenges

Economic Dimension

- Health & Well-Being
- Supply Chain Management
- Risk Management

Social Dimension

- Human Rights
- Occupational Health and Safety
- Human Capital Development

Environmental Dimension

- · Operational Eco-Efficiency
- Raw Material Sourcing
- Packaging
- · Water-Related Risks
- Waste Management



INTRODUCTION

Feed Ingredients Trading Business Group

Agro-Industry and Food Business Line



Main Companies

Bangkok Produce Merchandising Public Company Limited

Main Business

Feed ingredients are part of an important production chain for upstream businesses. Therefore, the Feed Ingredients Trading Business Group is responsible for sourcing the highest quality feed ingredients up to standard, and delivering the ingredients to customers as per their expectations. This is achieved through integrated logistics system building and development, an effective risk management, support after harvesting to maintain quality of feed ingredients, reduce waste, and reduce overall costs. The Business Group sources a variety of animal feed ingredients, including maize, soybean, wheat, rice bran, and fishmeal.

Business Opportunities and Challenges

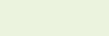
Economic Dimension

- Governance and Business Ethics
- Supply Chain Management
- · Risk Management

Social Dimension

- Human Rights
- Occupational Health and Safety
- Human Capital Development
- Talent Attraction and Retention

- · Operational Eco-Efficiency
- Raw Material Sourcing
- · Climate Change Impact





Retail and Distribution Business Group

Retail and Distribution Business Line



Main Companies

CP All Public Company Limited Siam Makro Public Company Limited C.P. Lotus Corporation

Main Business

Led by CP All Public Company Limited, the Retail and Distribution Business Group provides services for convenience of customers in communities through various product and service distribution channels. Currently, the operations in Thailand have 3 businesses including retail, wholesale, and related businesses which consist of 10,268 7-Eleven stores country-wide, 123 Makro cash and carry retail stores, and bakery and ready meal production and distribution. Other businesses in Thailand include financial services, education, logistics, information communication technology, and media marketing. In China, the Business Group is led by C.P. Lotus Corporation, a leading retailer in China who operates shopping malls under the name "Lotus."

Business Opportunities and Challenges

Economic Dimension

- Governance and Business Ethics
- Health & Well-Being
- Supply Chain Management
- Customer Relationship Management
- Health & Nutrition
- Risk & Crisis Management

Social Dimension

- Occupational Health and Safety
- Human Capital Development
- Talent Attraction and Retention
- Social Impact Management

Environmental Dimension

- Operational Eco-Efficiency
- · Food Waste Management
- Raw Material Sourcing
- Packaging
- · Climate Change Impact
- Air Emissions Management from Refrigeration Systems



INTRODUCTION

Telecommunications Business Group

Media and Telecommunications Business Line



Main Companies

True Corporation Public Company Limited

Main Business

Headed by True Corporation Public Company Limited, the Telecommunications Business Group is the first integrated telecommunication and digital technology provider in Thailand, and is also a leader in convergence business that responds to various lifestyles. The Business Group operates 3 main businesses. The first business is TrueMove H which is a mobile service provider covering 4.5G/4G, 3G and 2G frequencies. The second business is TrueOnline which provides broadband internet and WIFI services. The last business is TrueVisions which is a nationwide television subscription service provider.

Business Opportunities and Challenges

Economic Dimension

- Information Security & Cybersecurity
- Protection of Personal Information
- Network Reliability
- Risk Management
- Customer Relationship Management
- Brand Management
- Innovation Management
- · Disruptive Innovation and Technology

Social Dimension

- Human Capital Development
- Talent Attraction and Retention
- Responsible Media
- Digital Inclusion
- Occupational Health and Safety

- Operational Eco-Efficiency
- Climate Change Impact
- Environmental Management Systems



E-Commerce and Digital Business Group

E-Commerce and Digital Business Line



Main Companies

Ascend Group Co., Ltd.

Freewill Solutions Co., Ltd.

Main Business

The E-Commerce and Digital Business Group is a digital platform service provider in areas of FinTech, E-Commerce, and Digital Solutions, and is a software developer in information security and services, and Information Technogy (IT). The Business Group also provides business advisory services, a central platform for E-Procurement and E-Auction, knowledge sources, and cloud services. The Business Group aims to be an industry leader through system development to serve as a center for Thailand and Southeast Asia.

Business Opportunities and Challenges

Economic Dimension

- Governance and Business Ethics
- Cybersecurity and Network Availability
- · Protection of Personal Information
- Risk Management
- Innovation Management
- Supply Chain Management
- Stakeholder Engagement

Social Dimension

- Human Capital Development
- Talent Attraction and Retention
- Occupational Health and Safety

Environmental Dimension

· Climate Change Impact



INTRODUCTION

Property Development Business Group

Property Development Business Line



Main Companies

C.P. Land Public Company Limited

C.P. Property Co., Ltd.

Shanghai Kinghill Limited

Chia Tai Land Co., Ltd.

Main Business

The Property Development Business Group in Thailand is a property developer in rental and sales services, and real estate for hotels and international conventions and exhibition centers. In Thailand, the Business Group also provides facility and industrial estate management services. In China, the Business Group is represented by Shanghai Kinghill Limited, a developer of the Super Brand Mall in Shanghai, and Chia Tai Land Co., Ltd., which develops real estate, and provides consultation and property management services.

Business Opportunities and Challenges

Economic Dimension

- · Governance and Business Ethics
- Customer Relationship Management
- Risk and Crisis Management

Social Dimension

- Human Capital Development
- Occupational Health and Safety
- Labor Practices
- Social Impact on Community

- Operational Eco-Efficiency
- · Environmental Management Systems



Automotive Business Group

Automotive and Industrial Products Business Line



Main Companies

CP Motor Holding Co., Ltd.

Luoyang Northern Ek Chor Motorcycle Co., Ltd. ECI Metro Investment Co., Ltd.

Main Business

The Automotive Business Group focuses on investing in the industrial sector, and distribution and manufacturing of heavy equipment in China. The Business Group also specializes and is experienced in producing automobiles, motorcycles, and electric vehicles. This is achieved through using production technologies that meet the expectations of customers, are certified with international standards, and emphasize the importance of high-quality materials, resulting in internationally recognized products, such as MG automobile brand (Thailand), CHOK-Cross electric vehicles, CATERPILLAR heavy equipment and motors (9 Provinces in China) and Dayang motorcycles.

Business Opportunities and Challenges

Economic Dimension

- Governance and Business Ethics
- Innovation Management
- Supply Chain Management

Social Dimension

- Human Capital Development
- Talent Attraction and Retention
- Occupational Health and Safety

Environmental Dimension

- · Climate Change Impact
- · Operational Eco-Efficiency
- Product Stewardship



INTRODUCTION

Packaging Business Group

Automotive and Industrial Products Business Line



Main Companies

CPPC Public Company Limited

Main Business

Led by CPPC Public Company Limited, the Packaging Business Group manufactures and processes plastics with standards in systems of production quality, product safety systems, and environmental management in place. There are 6 main production groups in Thailand which include woven bags, food and beverage packaging, PVC sheet and coating, PVC pipe and fitting, paper core, and non-woven packaging products. In China and Vietnam, the Business Group produces ready-made clothes and woven bags, respectively.

Business Opportunities and Challenges

Economic Dimension

- · Governance and Business Ethics
- Customer Relationship Management
- Innovation Management
- · Risk Management
- Health & Well-Being

Social Dimension

- Human Capital Development
- Occupational Health and Safety

- Climate Change Impact
- Operational Eco-Efficiency
- Product Stewardship





Pharmaceuticals Business Group

Pharmaceuticals Business Line



Main Companies

Sino Biopharmaceutical Limited

Main Business

The Sino Biopharmaceutical Limited Group is a leading pharmaceutical and innovation organization in China. Businesses of the Group consist of centers for research, development, production, and distribution of medicine, chemical products, modern Chinese medicine, and other health products that are distributed across China and overseas. The Group employs the largest number of medical sales representatives in China who specialize in hepatitis, heart diseases, respiratory diseases, bones and joint diseases. Furthermore, the Group focuses on research and development, and has collaborated with other leading pharmaceutical organizations in China and abroad. The Group's businesses have been expanded to cover health and well-being developement.

Business Opportunities and Challenges

Economic Dimension

- Governance and Business Ethics
- Innovation Management
- Customer Relationship Management
- Responsible Marketing
- · Product Quality and Product Recall
- Service Quality
- Product Safety

Social Dimension

- Talent Attraction and Retention
- · Patients' Treatment
- Production Cost
- Occupational Health and Safety

Environmental Dimension

- · Climate Change Impact
- Operational Eco-Efficiency
- · Environmental Management Systems



INTRODUCTION

Finance and Banking Business Group

Finance and Investment Business Line



Main Companies

Zheng Xin Bank Company Limited Ping An Insurance (Group) Company of China, Ltd. **CITIC Group Corporation Ltd. ITOCHU** Corporation

Main Business

C.P. Group has collaborated with leading integrated banking, finance, and insurance companies at an international level covering China and Japan. In China, the Ping An Insurance (Group) provides integrated financial services in 3 main businesses including insurance, banking, and investment. CITIC Group Corporation focuses on investment whereas Zheng Xin Bank Company Limited provides financial services, such as short-term deposits for retail customers, and long-term loans. In Japan and overseas, ITOCHU Corporation manages finance and business investments.

Business Opportunities and Challenges

Economic Dimension

- · Governance and Business Ethics
- Customer Relationship Management
- Risk Management and Business Continuity
- Sustainable Insurance
- Information and Information System Security

Social Dimension

- Responsible Lending for Mega-projects
- Financial Inclusion
- Human Capital Development
- Talent Attraction and Retention
- Occupational Health and Safety

- · Environmental Business Risk and Opportunity Management
- Climate Change Strategy



OUR MILESTONES

"GROWING AND EXPANDING SUSTAINABLY"



The Two Founders of **Sustainable Growth**

The Chia Tai Chung seed shop was founded in 1921 by siblings Mr. Chia Ek Chor and Mr. Chia Seow Hui (Choncharoen Chiaravanont) in the Song Wat neighborhood of Bangkok. Since the founding, the Chia brothers have emphasized "integrity and honesty" as the foundation of their business model. This foundation has served as the groundwork for other businesses, and is best represented by clearly stating expiration dates on vegetable seed packaging, and offering to exchange expired seeds for new seeds to reduce the financial burden on farmers and their families.





In addition, the Chia brothers came up with other innovative ideas such as replacing paper-based packaging with metallic containers that are more durable and can maintain seed quality for a longer period. Another idea was using an airplane, the most modern technology at the time, as a symbol or a "trademark" under the name "Airplane Brand Chia Tai Chung." Today, the brand is known simply as "Airplane Brand."

From Thailand... to the World

INTRODUCTION

The elder brother, Mr. Chia Ek Chor, envisioned expanding the shop into neighboring countries to serve as vegetable seed production sites to cultivate various types of produce.

In 1939, prior to World War II. "Chia Tai" had successfully pioneered its vegetable seed business in Malaysia and Singapore, followed

by Myanmar (then Burma), Laos, Vietnam, and Cambodia. These operations served as quality seed selection and development centers for both tropical and cold-weather vegetables that were sold domestically and exported to Thailand. The seed markets were also expanded to other countries.

Learning New Technologies to Enter the Global Stage



While the seed production and distribution business progressed steadily, the second generation of the Chearavanont family, Mr. Jaran Chiaravanont and Mr. Montri Jiaravanont (the eldest and second sons of Mr. Chia Ek Chor), expanded the family business into the animal feed industry, supported by their uncle, Mr. Choncharoen Chiaravanont. The business began by using feed similar to the animal feed that foreign corporations were selling in Thailand at the time.

With the confidence in Thailand's fertility, diversity in grain types that could add value, and the ability of Thai farmers to cultivate produce and raise livestock, the brothers opened the "Charoen Pokphand" shop in the same neighborhood as the Chia Tai shop. In the beginning, the shop used small-sized machinery to grind and mix animal feed sold at the family residence on Chan Road.

The animal feed business was successful due to the business model that emphasized "integrity and honesty" and the commitment to product quality. This led Mr. Jaran Chiaravanont to increase the production capacity by investing in the most-cutting edge and productive large-sized machinery and equipment at the time from Germany. The grinding and mixing animal feed business was then expanded to the first full-scale animal feed mill of C.P. Group.

During that time, Mr. Montri Jiaravanont saw an opportunity to sell meat products to overseas markets such as Hong Kong. Through early attempts to export chicken and pork, he soon found out that some important barriers still existed, such as outdated technology in livestock farming, the lack of economies of scale in livestock farming in Thailand at the time, and the lack of appropriate meat processing technology for export. These barriers resulted in having to export live chickens by air and live swine by sea, which involved high levels of quality control risk. Seeing these issues, Mr. Montri Jiaravanont encouraged Mr. Dhanin Chearavanont, the fourth son of Mr. Chia Ek Chor, to travel abroad and study the successful broiler farming practices used in those businesses. Mr. Dhanin Chearavanont came back with 5 success factors of sustainable livestock farming, which eventually became the center of the Group's business and were applied to farmers in Thailand.

The 5 Success Factors of Sustainable Livestock Farming

The 5 success factors of sustainable livestock farming are:

- 1. Good livestock breeds are strong, tolerant to diseases, and can satisfy consumer demands.
- 2. Good animal feed is made from quality raw materials, contains the right nutrients for different ages, and promotes proper growth.
- 3. Good farming facilities are strong, well-ventilated, and do not pose dangers to the animals.
- 4. Good protection against contamination and disease requires proper separation between the facilities and the outside environment, so as to prevent contamination and disease.
- 5. Good management requires setting standards for the farm. These standards include providing the animals with adequate amounts of food and water in a timely manner, and an appropriate and stress-free raising environment.

In 1970, C.P. Group partnered with Arbor Acres, an American concentrations in the animal feed. poultry company, to set up a company to develop broiler breeds in Thailand, a higher quality alternative for Thai farmers at the time. This enabled the Group to export chicken successfully to



Japan for the first time in 1973, a historic moment for the Thai broiler industry. In that same year, the Group achieved another milestone. C.P. Group opened a new larger animal feed factory that had the highest production capacity in Southeast Asia, on the 21st Kilometer of Bangna-Trat Road. This factory was also the first to utilize a computer system to control ingredient

Investing in Accordance with the Three-Benefit Principle

expand the production capacity to meet domestic and international demand. This expansion resulted from the mutual commitment of businesses in a steady and sustainable manner, whereas consumers the Chearavanont siblings to the Three-Benefit Principle, which remains a strong commitment in every investment that the Group makes today. The Three-Benefit Principle states the following:

First, the country must benefit. Second, the people must also benefit. Only then should the company benefit.

The phrase "The country must benefit" means that investments government to develop the country.

The success of exporting chicken naturally created a need to "The people must also benefit" refers to the people in the Group's production and supply chains. They must be able to conduct their must continuously be able to receive high-quality products in an adequate amount at a fair price.

> "Only then should the company benefit" means the Group must be sustainable and make reasonable profits to be remunerated to investors and employees. At the same time, those profits must be used to develop and create innovative new technologies to stimulate long-term growth of the Group.

must constantly increase national income and taxes, enabling the In 1975, keeping the Principle in mind, C.P. Group increased the chicken production volume by transferring chicken farming technologies as well as contract farming model from the

United State of America. The model reduces price volatility risk for farmers. The first pilot project was the Broiler Project in Si Racha District, Chonburi Province.

The Project was later replicated across Thailand, increasing access to chicken as a source of protein for Thai people. This successful model was applied to other livestock farming as well, from layer, duck, swine, shrimp, and fish, to agricultural produce.

Investing Overseas

INTRODUCTION

Based on the success of the integrated livestock business in Thailand, Mr. Sumet Jiaravanon, the third son of Mr. Chia Ek Chor. pioneered the business in Indonesia, which became the first overseas agro-industry investment by the Group. This investment still followed the Three-Benefit Principle, which helped aather strong support from the Indonesian government. Investment was later expanded to other ASEAN (Association of Southeast Asian brand. Nations) countries such as Malaysia and Singapore, catering to the increasing demands for protein by the locals.

Following Mr. Dhanin Chearavanont's ascent into management, the Group continued to invest in the agro-industry sector and other related sectors overseas.

In 1979, China started allowing foreign businesses to operate in the country. C.P. Group was one of the earliest foreign businesses focusing on livestock farming, which catered to the Chinese people's demand for protein. Once again, relying on the Three-Benefit Principle, C.P. Group was able to build an amicable working relationship and foster trust with the Chinese government. When China officially opened its borders to foreign





investment in 1989, the Group was the first foreign business to investor, receiving Business License Number 0001.

Today, C.P. Group's Chinese business covers 29 of 31 provinces, and has since expanded into other sectors including motorcycle production, brewing, property development, machinery production, petrochemicals, television programming, shrimp farming, retail and wholesale, oolong tea production, wine production, and modern retail centers with the Lotus supercenter as the leading



In addition, many governments worldwide that are looking to raise living standards and create higher levels of food security for their people have entrusted the Group to make continual investments in the agro-industry sector, such as integrated livestock and aquaculture.

When investing overseas, not only the business regulations and standards of the local governments must be token into account but it is also necessary to strive in order to adhere to international standards at every level, including human rights, animal rights, food safety, food traceability, and environmental impacts. This ensures that the Group will not negatively affect stakeholders. This is the reason why C.P. Group has been able to expand its businesses to 21 countries and economies.

Our Milestones 041

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Branching out the Business

C.P. Group has continuously grown and expanded into other industries outside of agriculture, including retail and wholesale businesses, through partnerships with notable businesses overseas. In 1988, the retail and wholesale industry in Thailand was profoundly changed as the Group partnered with SHV Holdings of the Netherlands to found a new wholesaling center under the "Makro" brand. That same year, a partnership with the Southland Corporation of the United States resulted in the founding of C.P. 7-Eleven Co., Ltd., a retail business under the "7-Eleven" brand.





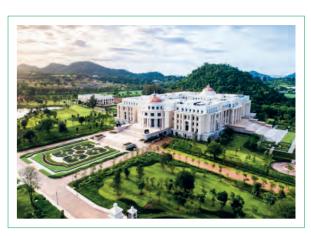
In 1990, the Group started a new business in the telecommunications industry by establishing C.P. Telecommunications Co., Ltd. which became Telecom Asia Corporation Public Company Limited. This company provided fixed-line services to 2.6 million telephone numbers. The company has now become True Corporation Public Company Limited, the only fully-integrated telecommunications conglomerate and digital technology service provider in Thailand that allows unlimited access to communication technologies for Thai people to fully support the digital economy.

Currently, C.P. Group is operating businesses in different Business Groups including:

Agro-Industry and Food	Telecommunications
Seeds, Fertilizers, and Plant Protection Products	Property Development
International Trading	Automotive
Crop Integration	Packaging
Pet Food	Pharmaceuticals
Feed Ingredients Trading	Finance and Banking
Retail and Distribution	E-Commerce and Digital

Growing Stably

The responsibility for the growth of C.P. Group is "people" and "technological innovation" by encouraging and supporting the Group employees across the globe to create innovation in production, marketing, and distribution to increase the efficiency of the organization and to benefit consumers and the country. An important element in stabilizing growth is developing leaders. Mr. Dhanin Chearavanont envisioned that all other successful businesses with stable growth globally should have a system to incubate and cultivate the next generation leaders with a long-term vision, which would also allow them to become competent business successors. This idea took shape at the C.P. Leadership Institute (CPLI), situated in Pak Chong District, Nakhon Ratchasima Province. The CPLI has served as a training ground and idea forum for employees from around the world through leadership development programs that are instructed by world-class experts in leadership development. The programs



enable participants to reach their full potential both academically and practically through the "Action-learning" model. The participants are equipped with the necessary skills required to complete their assigned tasks and drive C.P. Group forward in a steadfast manner.

Succeeding Sustainably



Currently, C.P. Group is led by Senior Chairman, Mr. Dhanin Chearavanont, who plays a key role in setting the business strategies and directions. Mr. Soopakij Chearavanont, who serves as the Chairman, assumes the responsibility of pursuing new projects and investments to continue the Group's growth internationally. Mr. Suphachai Chearavanont serves as the Chief Executive Officer (CEO) and is tasked with managing the operations of the Group and putting new business strategies, including sustainability strategies, into practice. Mr. Narong Chearavanont currently serves as Senior Vice Chairman.

INTRODUCTION Our Milestones 043

OUR MILESTONES

THAILAND

6 1921

Opened the "Chia Tai Chung" or the "Chia Tai" seed shop on Song Wat Road (now Song Sawat Road) by Mr. Chia Ek Chor and Mr. Chia Seow Hui, which was the start of the Airplane brand seeds, the first agricultural product that had a quality guarantee.



4 1953

Started the first animal feed mill using a 0 1975 grinding and mixing machine in the parking garage of the Chan Road house, which was later developed into a modernized animal feed mill

o 1967

Founded Charoen Pokphand Produce Co.. Ltd. to conduct research and development on integrated crops.

Pioneered the broiler breed developed by Arbor Acres, and began using broiler housing technologies for the first time in Thailand.

4 1973

Built the largest and most modern animal feed mill in Southeast Asia on the 21st Kilometer of Bangna-Trat Road.



Started the integrated chicken farming practice and product warranties for the first time in Thailand in Si Racha District, Chonburi Province.

o 1976

Registered Charoen Pokphand Group Co., Ltd. to serve as a management arm to oversee the different businesses in the Group, domestically and internationally.

0 1978

Registered Charoen Pokphand Animal Feed Co., Ltd. to produce and sell animal feed.

o 1979

Established C.P. Intertrade Co., Ltd. to produce, import, and export agricultural and food products.

o 1980

Started applying the contract farming model from the chicken farming business to the swine farming business.

o 1983

Founded C.P. Land Public Company Limited to conduct business in property development.



o 1985

Entered a joint venture with the Japanese Mitsubishi Group to develop aquaculture techniques for raising Tiger Prawns.

6 1987

Established the "Rural Lives Development" Project to implement development initiatives by HM King Bhumibol Adulyadej for people in remote areas, together with other sectors.

1988

Entered into the retail and distribution business by founding C.P. 7-Eleven Co., Ltd., to operate the retail business through 7-Eleven convenience stores and the wholesale business under the "Makro" brand.

o 1989

Founded Perfect Companion Group Co., Ltd. to produce pet food.

Entered into a joint venture with Japan-based Meiji Co., Ltd. to found CP-Meiji Co., Ltd. to produce and sell pasteurized dairy products in Thailand.



Entered the telecommunications business, expanding fixed line telephone services in Thailand, and growing into today's True Corporation Public Company Limited.

0 1994

6 1990

Founded Bangkok Produce Public Company Limited to source raw materials for animal feed production.

0 2000

Entered into e-commerce industry by founding Asia Freewill Co., Ltd., which was later known as Freewill Solutions Co., Ltd.

0 2004

Founded CPPC Public Company Limited to produce and process plastic packaging.

0 2006

Started to produce and sell ready-to-eat meals under the CP brand, both domestically and internationally.



Established Panyapiwat Institute of Management as a specialized higher education institute to provide work-based education.



Began the Nakhon Luang Rice Project, which comprised the largest and most modern rice quality improving facility in the world, and became a distribution port.



Entered a joint venture with SAIC Motor Co., Ltd., a Chinese automotive manufacturer to establish SAIC Motor-CP Co., Ltd. to produce MG branded cars in Thailand.

o 2015

Established Ascend Group Co., Ltd., as a digital platform service provider in fintech (financial technology), e-commerce, and digital solutions.

0 2016

Announced the joint venture partnership with Ant Financial, a subsidiary of Alibaba Group Holding Company, and founded Ascend Money Co., Ltd.

OUR MILESTONES

CHINA

o 1960

Charoen Pokphand Group Co., Ltd. in Hong Kong.

Continental Grain Company to establish Chia Tai Conti Co., Ltd., an animal feed business based in Shenzhen, Guangdong Province.

Chose the name "Chia Tai" (in Teochew dialect) or "Zheng Da" (in Mandarin), which means loyal, honest, fair, and accurate, a name that has since been used for all of the Group's investments in China.



o 1984

Entered into a joint venture with Ji Lin Chia Tai Co., Ltd., a local Chinese company, which was the first joint venture in the Chinese animal feed business involving local and international companies.



4 1985

Established an integrated agribusiness company in China called Shanghai Da Jiang Co., Ltd. Shanghai Da Jiang Co., Ltd.

INTRODUCTION

Started broadcasting the "Chia Tai Variety Show," on the CCTV channel, a new TV program format on Chinese television that had more than 500 million viewers every week.

6 1992

6 1990

Established Luoyang Northern Ek Chor Motorcycle Co., Ltd. in Henan Province, which manufactures motorcycles under the popular brand "Da Yang," with a production capacity of more than 640,000 motorcycles per year, and currently more than 100,000 low-speed vehicles per year.



6 1997

Set up the "Lotus Supercenter" in Pudong District, Shanghai, which was subsequently expanded across China and currently has 70 branches.



0 2000

The Group's Pharmaceuticals Business Group was listed on the Hong Kong Stock Exchange under the name China Biopharmaceutical Co., Ltd.

\$ 2002

Opened the "Super Brand Mall" in Pudong District, Shanghai, the first one-stop shopping mall in China.



6 2003

Set up Chia Tai Land Development Co., Ltd. in Pudong District, Shanghai, to invest in and develop property business.

Entered into the Chinese insurance business through investments in Ping An Insurance (Group) Company of China.

Initiated the "Pinggu" pilot project, a modern circular economy agriculture project based on the "Four-in-One" collaboration approach between the government, farmers, a bank, and the Group.



o 2015

Entered a joint venture with ITOCHU Corporation, to invest in CITIC Group Corporation Ltd. one of the largest conglomerates in China.



Our Milestones 047

OUR MILESTONES

INTERNATIONAL



Expanded investments to Indonesia as the first country in ASEAN, beginning with a small poultry farm, followed by setting up an animal feed mill that grew into an integrated agro-industry and food business, similar in size to the business in Thailand.

Not long afterwards, invested in Malaysia, beginning with a chicken breeding farm, and growing into a leader in the integrated chicken business of present day, and began expanding into the integrated aquaculture business in 1992.



Established the Chia Tai Feedmill Pte. Ltd. in Singapore, which manufactures premix animal feed.



Set up an animal feed business in Inegol, Turkey, by establishing C.P. Standart Gida Sanayi ve Ticaret A.S., and expanding to an integrated chicken business that continues today.



o 1988 🗪

Opened a trading office in Ho Chi Minh City, Vietnam, during the period of Vietnam's policy to welcome international investments.



Established C.P. Vietnam Livestock Co., Ltd. and a livestock feed mill in Dong Nai Province, Vietnam, the first in the country, which is one of the countries with high capacity and high growth rate.



o 1996 💿 🤷

Expanded the aquaculture business to India by building the first aquaculture feed mill in Chennai.



Established C.P. Cambodia Co., Ltd. to develop an integrated livestock business to respond to the demand for agricultural development in Cambodia.

o 1997 😝

Set up Mvanmar C.P. Livestock Co., Ltd. in Myanmar to carry out the animal feed and farming business.



Expanded to Bangladesh by starting with a hatchery in Dhaka, and eventually transforming into an integrated chicken business.



Established C.P. Packaging (Vietnam) Industry Co., Ltd., which produces plastic sacks to respond to the growing animal feed business.



Expanded the business in Vietnam to aguaculture business, beginning with a fishmeal production plant and shrimp processing plant at Dong Nai.



o 2002 **#**

Invested in the United Kingdom by setting up CP Foods (UK) Limited, which currently produces frozen food for sale in the Furopean Union.

Invested in Russia through livestock feed and swine farm businesses, and subsequently expanded to the integrated chicken business of today.

INTRODUCTION



Invested in an integrated livestock business in Laos PDR, starting with the capital of Vientiane and expanding to Champasak



o 2007 🔊

Expanded the animal feed and farming businesses in the Philippines, another country in ASEAN with a present population of more than 100 million people.



Q 2012 **Q**

Expanded investments in chicken farming and animal feed businesses in Pakistan, beginning with Punjab.

2000s — 2010s — 2015s — 2020s

0 2014 ()

Invested in Tops Foods NV, a listed company established in Belgium, which manufactures and sells both chilled and ambient ready-to-eat meals using a microwave system for the latter.



Pioneered international money transfer businesses within ASEAN through True Money, beginning with Myanmar.



Opened a modern rice mill in Cambodia to produce high quality rice for the global



o 2016 = =

Announced the purchase of 100% of ordinary shares in Bellisio Parent, LLC, which manufactures and sells single-serve dishes in the United States and Canada, allowing CPF to enter the largest food market in the world, and establishing another sales channel for CPF products in North America through its nationwide distribution network.



Entered a joint venture with SuperDrob Zalady Drobiarsko-Miesne S.A. in Poland, in a chicken meat processing business, to expand the manufacturing base for the European Union market.





SIX CORE VALUES



C.P. Group has nurtured relationships built on Our global operations and our approach to trust with stakeholders all around the world. business are deeply rooted in the Six Core We are committed to improving the quality Values, which provide a solid foundation on of life for people living in every country in which the Group can grow. They have been which we operate, supporting the growth of an intrinsic part of how we conduct business natural resources.

their economies, and the sustainability of their since our foundation and they have helped us to advance and grow our business sustainably with integrity.

INTRODUCTION SIX CORE VALUES 049

1. Three Benefits

2. Speed with Quality

3. Simplification

C.P. Group has always operated our Modern businesses must be fast-moving, C.P. Group holds investments in should benefit not just our Company and

Since our Company's foundation, this As a result, C.P. Group places great in Thailand and around the world benefit our employees. not just our business but society as a whole.

business by adhering to the Three-Benefit without compromising on quality. They Principle. This states that our business must be able to adapt to new circumstances, adopt the latest technologies, respond our employees but also the communities to changing consumer tastes and we engage with and the countries we preferences, all the while responding to evolving regulatory systems.

principle has guided how we have grown importance on the efficiency and and also ensured that our operations both effectiveness of our business and of and greater effectiveness.

21 countries and economies worldwide. operating through more than 200 subsidiaries and employing over 300,000 people.

We are therefore committed to implementing technology and innovation to streamline our systems and operations across the entire Group, which leads to improved efficiency

4. Accept Change

development.

This allows us to manage our response to evolving circumstances across all our markets. To ensure this, we encourage enable us to deliver the best products all our employees to stay informed about and services to our customers. new opportunities so that we can deliver more to our customers.

5. Innovate

Global businesses face circumstances Innovation is the force that drives every Since the day we were founded, we have that change daily, from political events aspect of a business from process and environmental issues through to through to products. Businesses must this applies to every action we take, consumer needs and technological constantly innovate to keep pace with a whether large or small. rapidly changing world.

Our key strategy is to embrace change. We actively encourage innovation in our employees and our goal is to foster innovation across all our businesses to

6. Integrity

operated our business with integrity, and

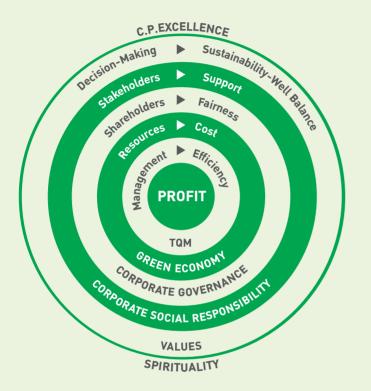
Even as we expand into new industries, integrity remains key pillars of our philosophy. We firmly believe that a business that focuses solely on enriching itself without regard to these values will ultimately erode the trust of all its stakeholders, and will not be able to operate in the long term.

C.P. EXCELLENCE 051

INTRODUCTION

C.P. EXCELLENCE **Management Approach**

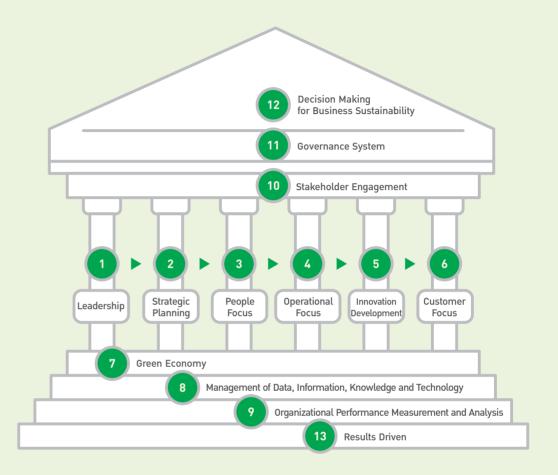
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C.P. Excellence

countries and economies worldwide. Over the years, C.P. Group has maintained its aspiration to grow in a sustainable manner. To summarize the Group's development, Dr. Ajva Taulananda, Senior Vice Chairman of C.P. Group has developed the C.P. Excellence Management Approach,

For more than 9 decades since its beginnings as a which states that a sustainable business cannot focus solely small shop in 1921, Charoen Pokphand Group has on short-term profit, it must strive to improve management grown into a multinational conglomerate, with effectiveness, resources and environmental management, while businesses in diverse industries, operating in 21 maintaining cost competitiveness. It must treat every shareholder and all categories of stakeholders fairly. Most importantly, the decision-making process of leaders should be guided by the principles of moderation, reasoning and resiliency. A sustainable core management philosophy that drives the business requires both business expertise and moral values, which are reflected in C.P. Group's six Core Values.



This unique management approach is referred to as "C.P. Excellence" and serves to align business operations throughout building synergies among different organizations within C.P. Group, whether on business, people or moral values.

(MBNQA) from the United States, combined with C.P. Group's development today and into the future.

own management style. It comprises 13 components, represented by the house above, including: 6 management the Group, facilitate collaborations and understanding among aspects that form the pillars supporting the house, 4 principles people from different group companies. It is a foundation for forming the foundation that connects all the management pillars together for sustainable business growth, and 3 areas of responsibility as the roof that protects the organization. With the C.P. Excellence Management Approach, we are confident The C.P. Excellence Management Approach is based on the that we can enhance employee happiness, strengthen our internationally-recognized management principles outlined in businesses, and maintain support and recognition from the criteria for the Malcolm Baldridge National Quality Award society, reinforcing our role as a strong contributor to the nation's

SUSTAINABILITY MANAGEMENT

In addition to delivering value through quality products Furthermore, the Group is committed to operating our businesses Principle, which aims to create benefits for the country, the Sustainable Development Goals (SDGs). people, and the company. We also apply the C.P. Excellence Management Approach to our business operations to consistently develop the Group's human resources.

and services that meet the expectations of customers and in a sustainable manner beyond compliance of rules and consumers, C.P. Group believes that for a business to operate regulations, and standards of the countries in which we operate. in a sustainable manner, it must be based upon social and This is achieved by complying with international sustainability environmental responsibility in accordance with the principle of guidelines, such as the UN Global Compact, UN Guiding Sufficiency Economy. This is illustrated through our Three-Benefit Principles on Business and Human Rights (UNGP), and UN



Sustainability Strategy



Sustainability Governance



Materiality **Assessment**



About This Report

SUSTAINABILITY MANAGEMENT

SUSTAINABILITY STRATEGY





C.P. Group operates our businesses in a sustainable manner, based on the "Three-Benefit Principle," which aims to create benefits for the country and the people, and the C.P. Excellence Management Approach. We are committed to operating our businesses based on good governance, social responsibility, and strict compliance of rules and regulations, and standards of the countries in which we operate. Our business operations are also in line with UN Sustainable Development Goals.

Three-Benefit Principle Sufficiency C.P. Excellence The Ten UN Global Compact Regulations Principles 17 UN SDGs & UNGP Economy Management Approach and Standards Heart Health Home Living Right Living Well Living Together Corporate Governance Capital Development Responsible Supply Chain

In 2016, C.P. Group developed the Sustainability Strategy and the 2020 Goals under the 3Hs Framework, which includes HEART - Commitment to Sustainable Business, HEALTH Human Rights (UNGP), and UN Sustainable Development Goals - Commitment to Sustainable Society, and HOME -Commitment to Sustainable Environment. The Sustainability Strategy is based on the 4 elements which are reflected from 17 SDGs. The last element is rules and regulations, and the "Three-Benefit Principle," the core of our businesses and our sustainability foundation. The Principle aims to create benefits toward the country, the people, and the company. The first fundamental to our businesses. element is Sufficiency Economy which can be integrated into our whole supply chain. It emphasizes that businesses must acknowledge and understand their own competency, and operate adequately and sufficiently. The second element is the C.P. Excellence Management Approach which aims at transitioning the organization through internal synergy between business, people, and mind. The third element refers to international

guidelines related to sustainable business operations, including UN Global Compact, UN Guiding Principles on Business and (SDGs). C.P Group is committed to operating in accordance with such international guidelines, and supporting all of the standards of the countries in which we operate. Strict compliance with such rules and regulations, and standards are

More importantly, the Group focuses on operating our businesses based on good governance, transparency, accountability, and social and environmental responsibility, which is demonstrated throughout our operations. The goal is for long-term sustainability, and the highest benefits for all stakeholders.

057

Process

Product and Service

STRATEGIC FRAMEWORK

H	E	A	R		•
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Material issue	2020 Goat (Inaltang)		Maliagell	lent Framework	
Corporate Governance	100% of businesses within C.P. Group publicly discloses their corporate governance and sustainability performance through the Group's Report.	Corporate Governance	Risk Management	Compliance Management	Anti-Corruption
Human Rights and Labor Practices	100% of businesses within C.P. Group conducts human rights due diligence.	Human Rights	Labor Practices	Diversity and Inclusion	Occupational Health and Safety
Leadership & Human Capital Development	All leaders and employees are provided with the training necessary to create business sustainability.	Leadership Development	Human Capital Development	Talent Attraction and Retention	
Stakeholder Engagement	100% of Business Groups within C.P. Group will develop a stakeholder engagement process.	Stakeholder Engagement			

SUSTAINABILITY MANAGEMENT



Social Impact	Improve employment prospects and quality of life for 100,000 farmers, SMEs, and vulnerable groups.	Local Community Development	Inclusive Businesses	Supporting Vulnerable Groups	Community Investments and Contributions
Health & Well-Being	30% of new products will help promote health and well-being.	Food Security	Health & Nutrition	Product Safety and Quality	Product Labelling
Education	4,350,000 children, youth, and adults will be provided with access to education and necessary skills development by 2020.	Access to Quality Education	Access to Knowledge		

Research and

Increase value of product and process innovation



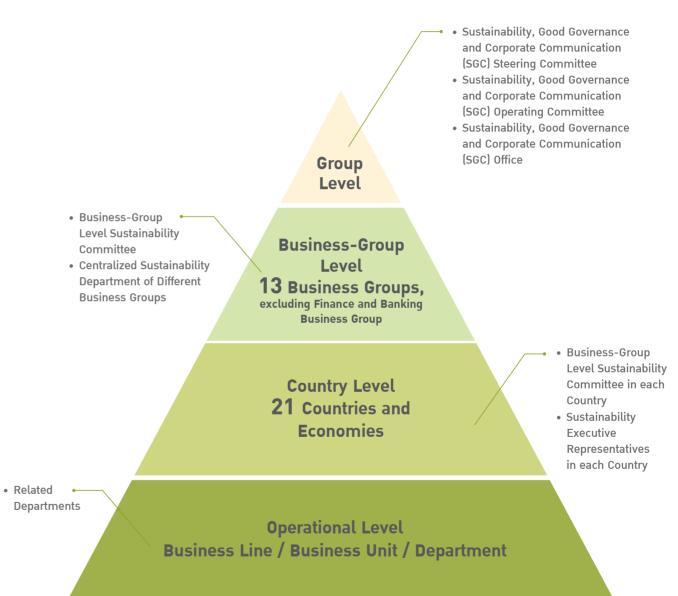
	Innovation	by 50%, compared to the 2016 baseline.	Development	Open Innovation	Product and S Innovation			Innovation
2	Climate Change Management	Reduce greenhouse gas emissions (Scopes 1 and 2) per unit of revenue by 10% by 2020, compared to the 2015 baseline.	Greenhouse Gas (GHG) Emissions Reduction	Energy Management and Efficiency	Renewable Energy	Climate-Si Agricultu		Waste Management
		Reduce water withdrawal per unit of revenue by 10%, compared to the 2015 baseline.	Water-Related Risks	Water Efficiency	Water Recyc and Circular Water N	-	٧	Water Quality
	Ecosystem & Biodiversity Protection	100% of key raw materials comes from responsible sources without contributing to the depletion of forests and marine resources.	Ecosystem & Biodiversity Impact Prevention	Raw Material Sourcing and Traceability	Ecosystem Pro and Restora			
	Responsible Supply Chain Management	100% of critical suppliers has been assessed for sustainability.	Ethical Supplier Code of Conduct Standards	Sustainable Supply Chain Management	Supplier Capacit	y Building		

SUSTAINABILITY ROADMAP

DETAIL	BUILD	INTE	GRATE	SCALE		
	2016	2017	2018	2019	2020	
Sustainability Strategy						
C.P. Group Sustainability Strategy and 2020 Goals						
• C.P. Group Sustainability Strategy and 2025 and 2030 Goals						
Sustainability Strategy Performance						
· C.P. Group Main Businesses in Thailand						
• C.P. Group Main Businesses in Thailand and Overseas						
Sustainability Reporting						
Reporting Boundary						
C.P. Group Main Businesses in Thailand						
C.P. Group Main Businesses in Thailand and Overseas						
Reporting Framework						
GRI G4 (Core Option)						
GRI Standards (Core Option)						
UN Global Compact Communication On Progress						
GC Active CoPs						
GC Advanced CoPs						
3 rd -Party Assurance Boundary						
Thailand						
Thailand and Overseas						
Data Verified by 3 rd -Party Assurer						
· Water Withdrawal (GRI 303-1)						
Indirect GHG Emissions (Scope 2) (GRI 305-2)						
Direct GHG Emissions (Scope1) (GRI 305-1)						
Occupational Health and Safety (GRI 403-2)						
Energy Consumption (GRI 302-1)						
Waste (GRI 306-2)						

SUSTAINABILITY GOVERNANCE

SUSTAINABILITY MANAGEMENT



SUSTAINABILITY MANAGEMENT



Mr. Noppadol Dej-Udom Chief Sustainability Officer, C.P. Group

"The Year 2017 marked an important one for C.P. Group to execute the Group's strategy on sustainability, as our operations were expanded to 20 countries and economies where we have invested in every Business Group. In each country, sustainability contexts, and economic, social, cultural and environmental surroundings are very diverse. Therefore, it is our challenge to create a collaboration between executives and employees in each country, enhance knowledge, develop necessary systems and processes, and especially, embed sustainability into our organizational values.

To drive such actions, the scope of this year's Sustainability Report is expanded to cover all operating countries, allowing us to concretely measure our performance, strategically communicate it to our stakeholders, and improve our stakeholder engagement. However, there is still room for continuous improvement for the Group. Thus, we developed the Sustainability Roadmap as disclosed in this Report. It serves as a guideline for every Business Group to operate in the same direction.



Commitments from Our Executives to Drive Sustainability in Every Country in which We Invest



Mr. Prasert Poongkumarn President and Chief Executive Officer, CPPC PCL

"The Packaging Business Group is committed to operating our business with sustainability, transparency and responsibility to our stakeholders. We focus on product research and development, and environmental conservation in line with the Group's sustainability practices."



Mr. Narong Chearavanont Senior Vice Chairman, Charoen Pokphand Group Co.. Ltd.

"One of the commitments of the Group is to promote a good quality of life for people and sustainability of global societies and the environment. In addition to sustainable food products, we are committed to promoting sustainability to communities through knowledge sharing and supporting career development using different tools. We also support communities to be able to live in harmony with nature through water conservation and forest protection, which is a part of the sustainability that we would like to pass on to the future generations."



Mr. Manas Chiaravanond Chief Executive Officer. Chia Tai Co., Ltd.

"We care about every customer's demand, from the basic to advanced needs. Therefore, Chia Tai has been producing quality and safe products in the most sustainable way, while at the same time uplifting the agricultural industry in every operating area."



Mrs. Suchada Ithiiarukul Chief Executive Officer, Siam Makro PCL

"Driving the Company toward sustainability is an important element which is embedded as part of our business operations in every country where we operate. We are determined to pass our knowledge and build the capacity of our employees, suppliers, farmers, and entrepreneurial customers, in order to reach the highest benefit for all stakeholders, that results in a strong and sustainable growth of society and the community as a whole."



Mr. Sooksunt Jiumiaiswanglerg Chief Executive Officer, Agro Industrial Business and Co-President. Charoen Pokphand Foods PCL

"To drive sustainability in every country that we have invested in, policies and strategic directions need to be communicated and cascaded down to executives. In addition, we have country representatives in place in each country to analyze the set target, push forward management, report the performance, and encourage knowledge sharing, to ensure coherent, strong and continuous drive toward sustainability."



Mr. Sukhawat Dansermsuk Chief Executive Officer. Food Business and Co-President, Charoen Pokphand Foods PCL

"We believe that growth that is founded on sustainable development means the enhancement of competitiveness in the long term, which will realize the Company's vision as "Kitchen of the World." Despite the challenges in managing sustainability in each country, the Company remains committed and has put in a great deal of effort to promote sustainability throughout the organization to ensure the same directions and standards."



Mr. Sumeth Laomoraphorn Chief Executive Officer, CP Intertrade Co., Ltd.

"Conducting business is similar to helping societies, creating better societies and environment. Under the Group's "Three-Benefit Principle," which states that the country must benefit, the people must benefit, and the Group should also benefit, we can create a common sustainable growth for all."



Mr. Sumeth Pinvosnit Chief Executive Officer, Charoen Pokphand Produce Co., Ltd.

"C.P. Group's businesses focus on food production, of which maize is the main raw material that can be traced back to its responsible sources. With our approach, stakeholders and the surrounding environment are ensured that they are taken care of. Moreover, we can say that our product traceability goes further than product sources to both chemical and physical genetic sequences."



SUSTAINABILITY MANAGEMENT

Mr. Xie Yi Senior Vice President. Agro-Industrial and Food Business Group.

"In China, C.P. Group has always placed importance on environment protection, workplace health and safety, and a traceable quality control system as part of our commitment to the coordinated developement of resources, environment and economy. Our aim is to integrate global science and new technologies, along with capital and talent to create China's most successful sustainability model for the whole food industry chain, which will ultimately benefit humankind."



Mr. Michael Ross Executive Vice Chairman. Chia Tai Di Jing (Shanghai) Investment Management Limited or Shanghai Kinghill Limited

"C.P. China Commercial Real Estate Business Group is fully alligned with C.P. Group's sustainability vision, strategy, and 2020 goals. We are committed to building a sustainable business by integrating corperate governance, progressive leadership and young talent development programs in our operations; creating a sustainable society by learning, adapting, and innovating to deliver tangible value propositions to stakeholders; and cultivating a sustainable environment through efficient use of natural resources with advanced equipment and technologies, all in accordance with the rules, regulations and standards of China."



Mr. Li Wen Hai Chief Executive Officer, C.P. Lotus Corporation

"In line with the Three-Benefit Principle, I believe that love and dedication to the country and the people will bear a sense of responsibility which in turn can lead to a concerted effort to create world prosperity, and subsequently proposperity for the company. Businesses that care and undertake social responsibiltiy are the most competitive and viable companies. My management philosophy combines social responsibility and economic development, and it is on this path that I will lead C.P. Lotus to excellence in accordance with the Three-Benefit Principle."



Miss Tse. Teresa Y.Y. Chairlady, Sino Biopharmaceutical Co., Ltd.

"We incorporate sustainable development and the "Three-Benefit Principle" into our overall organizational development strategies. This will help elevate C.P. Group as a leading organization, which is socially responsible and sustainable in the healthcare industry. Therefore, we can achieve our ambition to save lives and improve standard of living of the population in every country where we operate."

MATERIALITY ASSESSMENT

The objective of this Sustainability Report 2017 is to disclose C.P. Group's performance across economic. social and environmental dimensions in relation to issues that are material to our business and stakeholders. The Group takes into account material sustainability issues from internal and external factors in accordance with the Global Reporting Initiatives (GRI) and its 4 principles which include Sustainability Context, Materiality, Completeness and Stakeholder Inclusiveness. Our Materiality Assessment was conducted through the following 4 steps adapted from the GRI Standards:





2. Prioritization





1. Identification

Identify sustainability issues that are relevant to our business by taking into consideration the scope expansion of this Report to our global operations across different industries relevant to ours. The Identification process went through different stages as shown below.

- 1.1 Reviewing C.P. Group's 2016 key material issues;
- 1.2 Benchmarking material issues with peers that are involved in the same industries with the Group's 8 Business Lines;

- standards includina:
 - The United Nations Global Compact (UN Global Compact) - Advanced level:
 - UN Sustainable Development Goals (SDGs);
- Sustainability Accounting Standards Board (SASB);
- Dow Jones Sustainability Indices (DJSI):

1.3 Analyzing global sustainability 1.4 Consolidating material issues of our subsidiaries that have published sustainability reports (or equivalent);















1.5 Incorporating issues from the 3. Validation interviews with external stakeholders conducted during the sustainability Validated sustainability reporting process reporting process of our subsidiaries

SUSTAINABILITY MANAGEMENT

in Thailand:

2. Prioritization

shown below.

revenue:

- relevant to our subsidiaries and businesses within the same industries to screen material sustainability issues with the group;
 - issues from the previous stages, our business direction, and internal discussion within the Sustainability. Good Governance and Corporate Communication (SGC) Working Group.

2.1 Conducting the online Materiality

Prioritization Survey to seek opinions and views from executives across all

Business Groups and representatives

assessment in 2017 from our

subsidiaries and integrating them into

from various stakeholder groups;

2.2 Consolidating the results of materiality

the result of the online Survey;

2.3 Assigning weighting of our Business

2.4 Calculating scores of the material

2.5 Formulating Materiality Matrix.

Groups in accordance with their

issues prioritized according to

importance to business and stakeholders:

in line with the GRI Standards, and its 4 principles. The Validation process went 1.6 Analyzing news and reports that are through different stages as shown below.

- 3.1 Interviewing external stakeholders with regard to material issues of the Group, feedback and opinion to improve our sustainability reporting process;
- 1.7 Identifying our material sustainability 3.2 Considering and approving the prioritized materiality issues by executives
 - 3.3 Verifying and assuring the accuracy and completeness of our sustainability reporting process by an independent third party.

C.P. Group is open to feedback and suggestions from all, to continuously improve our future Sustainability Reports through various communication channels.

Contact Us



Office of Corporate Communications Affairs, Charoen Pokphand Group, True Tower 25th Floor, 18 Ratchadaphisek Road. Huai Khwang, Huai Khwang, Bangkok 10310



+66[0]-2858-3721-2



prcpgroup@cp.co.th



www.cpgroupglobal.com

4. Continuous Improvement

Prioritized our material issues that were identified in Step 1 by our internal and external stakeholders. The Prioritization process went through different stages as to meet the expectations of all stakeholders,

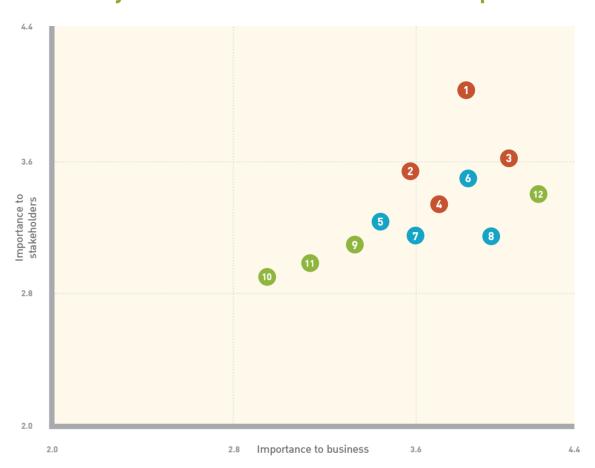
Material Issues and Topics relevant to Our Business Lines

				В	ısine	ss Liı	ne		
Material Issue	Торіс	Agro-Industry and Food	Retail and Distribution	Telecommu- nications	E-Commerce and Digital	Property Development	Automotive and Industrial Products	Pharmaceuti- cals	Finance and Banking
	Governance and Business Ethics	•	•	•	•	•	•	•	•
Corporate Governance	Risk and Crisis Management	•	•	•	•	•	•	•	•
	Information Security & Cybersecurity		•	•	•	•	•		•
Human Rights & Labor	Labor Practices and Human Rights (excluding Health & Safety)	•	•		•	•	•	•	•
Practices	Occupational Health and Safety and Well-being	•	•	•	•	•	•	•	•
Leadership & Human Capital Development	Human Resource Management	•	•		•		•		
Stakeholder	Stakeholder Engagement	•	•		•		•		•
Engagement	Customer Relationship Management	•	•	•	•	•	•		•
Social Impact	Corporate Citizenship and Philanthropy (excluding education activities)	•	•		•		•		•
	Social Impacts from Operations, Products, and Services	•			•	•	•	•	•
Health & Well-being	Health and Well-being						•		
	Animal Welfare	•	•					•	
Education	Social Inclusion in Education								
Innovation	Innovation Management	•	•		•	•	•		
	Climate Change Impact	•	•		•	•	•		•
Climate Change Management	Energy Management		•		•	•	•		•
3	Effluent and Waste Management	•	•			•	•	•	
	Resource Efficiency	•	•				•		
Water Stewardship	Water Management	•	•		•		•		
Ecosystem &	Raw Material Sourcing / Biodiversity and Ecosystems	•	•	•	•	•	•		•
Biodiversity Protection	Packaging	•	•		•		•		
Responsible Supply Chain Management	Responsible Supply Chain Management	•	•	•	•	•	•	•	•

Remarks: Topics relevant to our Finance and Banking Business Line have been benchmarked with material issues identified by peers and analyzed from international sustainability standards.

- None to low impact
- Low impact
- Medium to high impact High to very high impact
- Low to medium impact

Materiality Assessment Results of C.P. Group





SUSTAINABILITY MANAGEMENT

- 1. Corporate Governance
- 2. Human Rights and Labor Practices
- 3. Leadership and Human Capital Development
- 4. Stakeholder Engagement



- 5. Social Impact
 - 6. Health and Well-Being
 - 7. Education
 - 8. Innovation



- 9. Climate Change Management
- 10. Water Stewardship
- 11. Ecosystem & Biodiversity Protection
- 12. Responsible Supply Chain Management

ABOUT THIS REPORT

Sustainability Reporting

published our Sustainability Report for the second consecutive year, carrying on from the first Sustainability Report 2016 which was published in July 2017. The Sustainability Report will be published annually.

Objective of this Report

Charoen Pokphand Group Co., Ltd. has The objective of this report is to communicate the Group's commitments to driving our business toward economic, social and internationally, from 1st January to 31st environmental sustainability.

Reporting Scope

This report discloses overall performances of our 8 Business Lines domestically and December 2017.

Reporting Framework

This report has been prepared in accordance with the GRI Standards: Core option.

Third-party Assurance

this Sustainability Report was verified by Lloyd's Register Quality Assurance (LRQA), independent assurer. Data validated include GRI 303-1, GRI 305-1, GRI 305-2 and Global Compact at the Advanced level. GRI 403-2. (Details can be found on page 302-303.)

Communication On Progress (CoP)

Accuracy and completeness of our data in Communication on Progress to the United Nations Global Compact (UN Global Compact) has been reported consecutively since 2015. a reliable and internationally recognized In 2017, the Group enhanced our transparency by committing to the 21 Principles of the UN

UN Sustainable Develop- Reporting Boundary ment Goals (SDGs)

The Group is committed to consistently operating our business in accordance with the 17 Sustainable Development Goals

(Details can be found on page 301)

Human resources data cover 100% of all C.P. Group subsidiaries. Data on energy. water, waste, air quality, and occupational health and safety cover 11.662 departments across all subsidiaries under C.P. Group.

Contact Us

For more information of this Sustainability Report, please contact:

Office of Corporate Communications Affairs, True Tower 25th Floor.

18 Ratchadaphisek Road, Huai Khwang, Huai Khwang,

Banakok 10310

Tel: +66(0)-2858-3721-2 Email: prcpgroup@cp.co.th Website: www.cpgroupglobal.com In addition to the Group's Sustainability Report, some of our subsidiaries have published their own Sustainability Report 2017

- Charoen Pokphand Foods Public Company Limited
- C.P. All Public Company Limited
- Siam Makro Public Company Limited
- True Corporation Public Company Limited
- Charoen Pokphand Enterprise (Taiwan) Co., Ltd.
- C.P. Pokphand Co., Ltd.
- C.P. Lotus Corporation

(or equivalent) including:

SUSTAINABILITY MANAGEMENT

- Chia Tai Enterprises International Limited
- Sino Biopharmaceutical Limited

Furthermore, we have integrated material sustainability issues from Sustainability Reports below into our Materiality Assessment. Details on Materiality Assessment can be found on page 64-67.

Sustainability Reports (or equivalent) of our Subsidiaries

















LIVING RIGHT



Corporate governance is an important foundation for achieving sustainable growth in a business. C.P. Group has implemented a corporate governance system to promote and ensure compliance in the following areas: Corporate Governance Principles, Business Code of Conduct, policies and ethical best practices, and Supplie Code of Conduct, all of which are related to laws, social norms, and corporate regulations.

Furthermore, C.P. Group also has a system of corporate governance principles to ensure business practices that are socially responsible, ethical, and honest throughout the entire value chain. These principles also respect human rights and labor practices within our organization. We also focus on human capital and leadership development, as well as stakeholder engagement to promote efficiency within our organization. Such activities are crucial to our success and for continually building the level of trust in C.P. Group.



Corporate Governance



Human Rights and Labor Practices



Leadership and Human Capital Development



Stakeholder Engagement

CORPORATE E GOVERNANCE













HEART Corporate Governance 073

Key Performance in 2017



All businesses

within C.P. Group have publicly disclosed their corporate governance and sustainability performance through the Group's Report

C.P. Group has announced

the Anti-Bribery & Anti-Corruption Policy

and Guidelines at the group level

Challenges

The Board of Directors believes that good corporate governance is a significant aspect to increasing C.P. Group's competitiveness and to ensure long-term sustainable growth, as well as to add value for stakeholders over the long term. Having good corporate governance is reflective of an efficient, transparent, and accountable management system that has the ability to build stakeholder trust across the value chain. However, to achieve these substantial results, corporate governance ultimately relies on the determination and cooperation of employees at all levels, starting with the Board of Directors and executives who support implementing corporate governance initiatives.

The first challenge in our organization is to establish, among over 300,000 culturally and linguistically diverse employees of C.P. Group, a cohesive understanding regarding the importance of good corporate governance. This will help create and instill a workplace culture that promotes responsibility and standardized practices across the Group. Another challenge is the way disruptive technologies have raised corporate governance standards. C.P. Group's multinational corporation status makes it more imperative that the organization take responsibility throughout the entire value chain, ensuring that ethical standards are being met and that the Group's activities are transparent and accountable.

Performance against Goal

2020 Goal (Thailand)

All businesses within C.P. Group will publicly disclose their corporate governance and sustainability performance through the Group's Report.

Year-on-year Progress in Thailand			
	2016	2017	Goal 2020
Number of Business Groups	10	13	13
Number of countries and economies	1	21	21

Progress in 2017

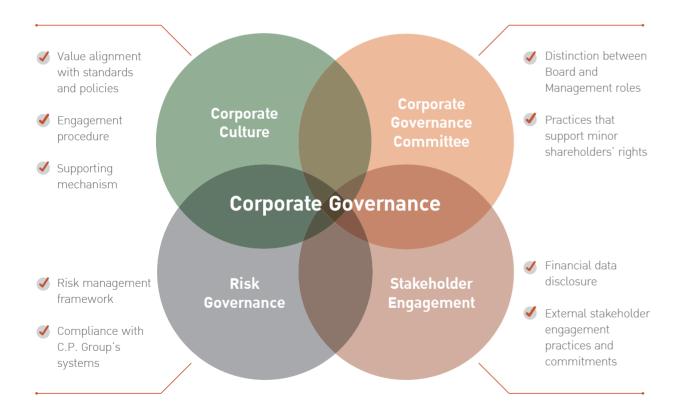
- Corporate governance
- Risk management
- Anti-corruption
- Compliance with rules and regulations
- Whistle-blowing system development

HEART

Management Approach

C.P. Group adheres to all of the 11 Corporate Governance In addition, regular communication with the organization's Principles and regards them as a management approach, implemented and directed by the Corporate Governance Committee. The Committee sets strategic goals and makes the consequences and legalities of their actions in accordance decisions that will have long-term benefits for the Group and with strict rules, regulations, and the Business Code of Conduct. every group of stakeholders. Risk management has also been We believe that following ethical practices will promote conducted through the division of responsibility and sustainable long-term growth. transparency to ensure that the Group adheres to and is accountable for its Business Code of Conduct.

stakeholders creates a level of trust and understanding. C.P. Group encourages all executives and employees to understand



C.P. Group's Corporate Governance Principles

C.P. Group's guiding principle in defining the responsibilities of our Board of Directors, from leading the business to engaging our stakeholders, and from balancing the needs of minority shareholders to managing risk, are as follows:



6. Up-to-date information and research is vital for our Boards to make sound business decisions:



1. Our strength lies in our ability to constantly evolve and adapt our businesses;



7. We compose our Boards carefully to ensure that they have the knowledge and experience to make informed decisions;



2. Our network of businesses creates synergies, which we maintain responsibly and in full compliance with all regulations;



8. We take a rigorous and transparent approach to evaluating and incentivizing performance at all levels;



3. We strive to ensure our entrepreneurial spirit is always balanced by responsible risk management;



9. We are committed to open, effective, and ongoing communications with all of our stakeholders:



4. Our Boards provide leadership, set strategic objectives, and make decisions to build real value for the Group and all its stakeholders;



10. We are committed to the rights of minority shareholders;



5. Our Directors provide informed opinions and advice on critical issues to guide the Board. To execute their duties, they must be independent and steadfast;



11. Integrity and honesty lie at the heart of who we are.

Corporate Governance

The governance policy at C.P. Group is driven continuously and systematically by the Corporate Governance Committee, which consists of professional experts including the Group's executives, Independent Directors from listed companies within the Group, and other domestically and internationally recognized and experienced corporate governance experts. The Committee has helped drive corporate governance in the Group's subsidiaries. Moreover, the Committee also meets every quarter to discuss, review, and recommend the revisions to the framework, policies and principles. The progress achieved in the 4 main areas of Corporate Governance are as follows:

- 1. Comparison and review process of the corporate governance in different aspects;
- 2. Leverage of guidelines into actionable Policies;
- 3. Development of C.P. Group's Corporate Governance Principles;
- 4. Training and promoting internal communications on corporate governance to ensure coordinated employee implementation of the policies set forth by C.P. Group



More information regarding the work and progress of the Corporate Governance Committee is available at www.cpgroupglobal.com/th/

HEART

Progress in Creating the Corporate Governance and Business Ethics Handbook

The Corporate Governance Principles of the Group is to follow moral guidelines and promote integrity in conducting business by adhering to the "Three-Benefit Principle." This is used to set the primary standard for members of the Corporate Governance Committee to direct the Group's governance, to show respect for the rights of minority shareholders, to conduct stakeholder engagement, and to manage risk and human resources within the organization.

In addition, the Group has developed the Corporate Governance and Business Ethics Handbook or C.P. Group Code of

The Corporate Governance Principles of Conduct to promote cohesion among the Group is to follow moral guidelines companies within C.P. Group, in order and promote integrity in conducting for them to move in the same direction business by adhering to the "Three-Benefit" in terms of ethical practices.

In 2018, we intend to announce the use of the Handbook to approve minor related policies such as Gifts and Benefits Policy and Guidelines. We also plan to hold regular meetings. The intention is to have the Handbook and its accompanying policies and guidelines be applicable to all companies within C.P. Group in every country by 2018.



The Corporate Governance and Business Ethics Handbook

	Component	Policy
Integrity	 Avoiding conflicts of interest Preventing fraud, bribery, and corruption Handling gifts and hospitality Upholding fair competition Maintaining transparency 	 Conflict of Interest Policy and Guidelines Anti-Bribery & Anti-Corruption Policy and Guidelines Gifts and Benefits Policy and Guidelines
Quality	Delivering quality products and services Using resources sustainably Sourcing ethically Selling and marketing responsibly	 Sustainability Policy and Guidelines Supplier Code of Conduct Supply Chain Management Policy and Guidelines
People	 Promoting respect and fair treatment Upholding equal opportunity, diversity and inclusion Protecting personal information Ensuring a safe and healthy workplace 	 Human Rights and Labor Practices Policy and Guidelines Whistle-blowing Policy and Guidelines Personal Data and Privacy Policy and Guidelines Safety, Occupational Health and Workplace Policy and Guidelines
Assets	Managing company information Trading securities Countering money-laundering	Information Management Policy and Guidelines Anti-money Laundering Policy and Guidelines



Corporate Governance Employee Training

In 2017, C.P. Group organized a Disclosure and Transparency (D&T) training program to educate executives regarding data disclosure and transparency in managerial responsibilities, both of which are an important component of good corporate governance. The seminar included such topics as conflicts of the Group. interest, connected transactions, buying and selling assets, internal information sharing, and price-sensitive information. Planned training programs for 2018 include: There were 73 top executives in attendance representing every Business Group, including representatives from listed subsidiaries, unlisted subsidiaries, and international companies.



Employee Training Plan for 2018

The Corporate Governance Committee continues to plan training programs to educate employees at all levels, with a focus on curricula that promote good corporate governance within C.P. Group, and that will likely have a positive and concrete impact on

- 1. The Importance of Corporate Governance
- 2. Business Code of Conduct
- 3. Anti-Bribery & Anti-Corruption
- 4. Risk Management

Furthermore, the Corporate Governance Committee has also set a goal that all employees participate in the Business Code of Conduct training program. All employees will be tested after the training program and must receive a score of 100% to pass - a corporate governance target that all employees must achieve by

Risk Management

HEART

C.P. Group continually assesses and manages risk through the Corporate Risk Management Committee that determines the risk management framework and organizes the management team that deals with risks within unlisted subsidiaries. In addition to developing a risk management framework at the group level, the Committee also communicates development strategies to different Business Groups, reviews the risk management techniques in use, and reports to the Corporate Governance Committee on the progress each company has made toward good corporate governance. The Corporate Risk Management Committee also organized a seminar for executives and employees tasked with risk management responsibilities titled "Risk Assessment and Crisis Management", which was held around year-end 2017.

C.P. Group realizes that risk management is a strategy to ensure sustainable growth over the long term. Thus, the Group has developed an internal risk management framework adapted from the COSO Enterprise Risk Management Framework, which is a recognized international standard that is integrated into the value of "C.P. Excellence" and the sustainable growth perspective. This framework is applied to all Business Groups and is divided into 8 distinct groups of risks. We have also established the governance structure, as well as strategies and clear goals, to promote effective and efficient risk management. However, this requires engagement with stakeholders to review and continually improve our performance, evaluate results, and prepare reports for involved parties.

The Risk Management Framework



8 Key Risk Factors for C.P. Group



1. Economic Risk



2. Social Risk



3. Environmental Risk



4. Reputational Risk



5. Strategic Risk



6. Operational Risk



7. Financial Risk



8. Legal and **Regulatory Risk**

HEART Corporate Governance 081

Anti-Corruption

Policy Development

The Corporate Governance Committee recognizes the importance and the determination of the Group to conduct business in an ethical manner by adhering to the Corporate Anti-Co Governance Principles. Such ethical practices, which are a reflection of C.P. Group's corporate values, are instilled within employees at all levels and serve as the foundation for their duties and responsibilities. The Committee has approved Anti-Bribery & Anti-Corruption Policy and Guidelines, as well as Policy and Guidelines on Gifts, Entertainment and Hospitality. These policies and guidelines are applicable to all Directors, Executives, and employees to promote compliance. The Committee has also encouraged reporting anti-corruption activities according to international transparency standards. The

Group's highest-level executives have announced Gifts and Benefits Policy and Guidelines as well as Anti-Bribery and Anti-Corruption Policy and Guidelines that forbids illegal payments to expedite formal processes and employment contracts with consultants and internal company representatives. These policies are meant to provide a framework to reduce corruption in all forms and have been formally announced to all of the Group's subsidiaries. Transparency is also emphasized among C.P. Group's business partners in order to establish a Supplier Code of Conduct. Compliance to such Code is specified in business agreements and required by joint-venture businesses, suppliers, contractors, subcontractors, distributors, and agents.

C.P. Group Rallying Against Corruption, Protecting From Fraud

Business Ethics Gifts and
Benefits Policy
and Guidelines

Anti-Money
Laundering
Policy and
Guideliness

Whistle-blowing
Policy and
Guidelines

Supplier Code of Conduct

Anti-Bribery & Anti-Corruption Policy and Guidelines







Anti-Bribery Song Competition – Chor Sa-ard Campaign

Anti-Corruption Employee Training

The Group has provided training for directors, executives, and employees at all levels regarding Anti-Bribery & Anti-Corruption Policy and Guidelines, as well as Gifts and Benefits Policy and Guidelines, in order to educate directors, executives, and employees at all levels on how to act in a responsible manner, should a bribery and corruption situation arise. The training also created a sense of participation in C.P. Group's collective fight against bribery and corruption in every form. The main topics covered included the explanation of the legal definitions and ramifications of corrupt practices and the Offenses Related to the Conflict of Interest between Individual and Public Interest Bill and means of complying with the Bill. The goal of the training was to instill a sense of recognition of corruption and to provide understanding for all employees of being ethical and responsible corporate citizens. These training programs will take place regularly.

Cooperating with Stakeholders

C.P. Group has a whistle-blowing channel for stakeholders to report corrupt practices in order to create a sense of cooperation between stakeholders and the Group. Moreover, we support the Anti-Corruption Foundation (the ACF) through the 'Anti-Fraud Bribery Song Competition - Chor Sa-ard Campaign'. This Campaign is a cooperation between the Group, students, and the general public to recognize corruption and bribery through music videos broadcasted on television and online media. The goal is to further foster cooperation between the general public to combat bribery in the Thai society. Listed companies in the Group have also joined in Thailand's Private Sector Collective Action Coalition Against Corruption (CAC), which was set up by the National Anti-Corruption Commission and the Royal Thai Government. This coalition aims to foster cooperation among stakeholders in the private sector to fix corruption and bribery-related issues.

Corporate Governance 083

Compliance

C.P. Group recognizes the constant changes that are taking place in the global landscape, regardless of whether the changes are societal, economic. political, technological, or in the consumption habits of consumers. From the 1.0 era where agriculture was a major focus, to the 4.0 era of modern day where technology is being pushed to further develop new business opportunities and improve upon older business models, changes have occurred with their own set of risks. They include the changing of local laws, human rights, and limited resources, as well as climate change and natural disasters stemming from changing weather patterns. We have managed those risks, prepared a crisis management plan, and developed our people to be aware of those risks in order to follow the policy framework, standards, and guidelines.

In 2017, the Group completed an online self-assessment on the sustainability framework of the UN Global Compact in all 4 areas of focus: Human Rights, Labor, action plan. Environment, and Anti-Corruption. We



Self-Assessment Framework adapted from the Global Compact Self-Assessment Tool

self-assessment. To date, every Business Trading, as well as from the Sustainability, Group in Thailand has completed the assessment. The results have been reviewed and will be used to devise an conducted a cross audit across the

invited representatives with different Moreover, the Group has set up an Audit Group. The cross audit of True Corporation including Human Resources, Operations, our main Business Groups: Agro-Industry Safety, and Environment to meet and and Food, Retail and Distribution, throughout 2018.

clarify their understanding of the Telecommunications, and International Good Governance and Corporate Communication Office (SGC). This Team various Business Lines, and cooperated with the different companies within the currently plans to continue cross auditing

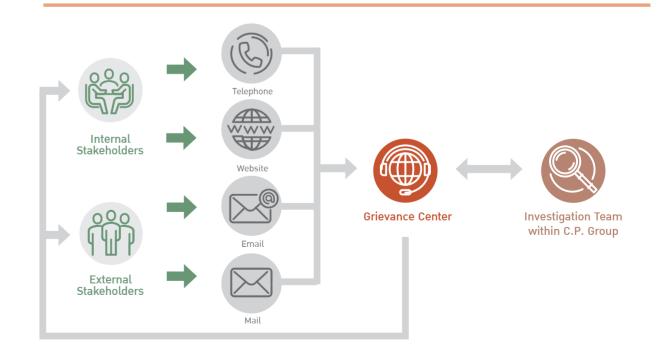
Review of Grievances

HEART

Provided that the Group has corporate governance policies that are rooted in integrity, fairness, transparency, and an avoidance of conflict of interest, we have provided a means for employees and external parties to report non-compliant behaviors through the following 4 channels: the C.P. Group website, email, mail, and telephone. The grievances will be recorded, investigated, and assessed by the Grievance Center and by a committee composed of internal staff from the Group's subsidiaries. Should a grievance require further action, there will be a report submitted via the C.P. Group Whistle-Blowing Dashboard. In addition, the committee will also compile a report with the results of the investigation, which will include an investigation of the cause of the grievance and a proposed corrective action plan, to submit to Management for their decision on the case.

In 2017, there were 21 grievances reported, 9 of which were related to corruption, 2 were related to environmental, 5 were related to labor, and the rest were related to other issues. These grievances came from 6 different countries, thus, exemplifying the efficiency and reach of the grievance system that C.P. Group has put in place. The reporting system has continued to protect the privacy of the whistle-blowers, allowing for more grievances to be submitted. This has been particularly enlightening to Management, and has allowed the Management team to see if there is room for improvement of the system and how it can be improved. These corrective actions and the protection of the whistle-blowers also promotes the organizational culture of C.P. Group, one that fosters integrity and morality, which is at the heart of running the Group as a sustainable business.

Whistle-Blowing System in the Group



HUMAN RIGHTS AND LABOR PRACTICES

























Key Performance from 2017



Identified salient

human rights issues at the Group level

Developed human rights risk mitigation plans at the Group level





Received safety audits in 103 areas of operations in Thailand

Challenges

Problems concerning human rights violations are significant causes of conflict in many areas including economic, social, and political. Such problems stem particularly from the fact that most of the population is considered low- to medium-income earners, and from the existing social inequalities and development imbalances in society. Therefore, sustainable development must integrate the principles of respect for human rights in order to be considered "sustainable," and must be driven by equal participation and inclusion of society as a whole. This commitment has been agreed upon by the global community through the agenda of the United Nations Sustainable Development Goals (SDGs) to "Leave No One Behind," and is a commitment to which Thailand is also a part.

As a leading organization with investment in over 20 countries worldwide covering more than 13 business groups including Agro-industry and Food, Packaging, Telecommunications, Finance and Banking, Property Development, and Pharmaceuticals, C.P. Group recognizes this challenge and the importance of our role in driving the human rights agenda.

We are also well aware that it is a challenge to manage human rights efficiently and in a way that encompasses all countries, economic areas, and industries across our entire supply chain. For this reason, the Group is determined to push forth measures and long-term plans to manage human rights risks covering the many aspects of human rights, in all areas where the Group has a presence in management or operations.

Performance against Goal

2020 Goal (Thailand)

100% of businesses within C.P. Group conduct human rights due diligence

	2016	2017	Goa 2020
Number of Business Groups assessed with human rights risks	5	10	13
Number of countries and economic areas assessed with human rights risks	1	1	21

Progress in 2018

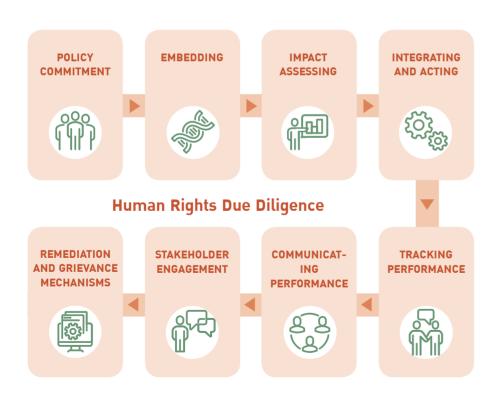
- Identified material human rights issues in Thailand
- Assessed human rights impacts
- Developed human rights risk management approaches and protection measures
- · Conducted safety audits
- Managed occupational health and

Human Rights

Management Approach

C.P. Group recognizes the importance of upholding philosophies and best practice guidelines in caring for our employees. At the same time, we are also committed to expanding the scope of our management around the issues of human rights, dignity, and equality for all, including customers, partners, or others in our supply chain. As per the United Nations' Universal Declaration of Human Rights (UDHR) and the Declaration on the Principles and Fundamental Rights at Work of the International Labour Organization (ILO), we have established a human rights due diligence process comprising 8 stages. We are in the process a remediation and grievance system.

of implementing the steps required at each stage starting with human rights policy commitment, and embedding human rights into the organization through internal communication channels. Moreover, the Group has initiated workshops to assess and review human rights impacts, consolidate salient human rights issues, and integrate salient human rights issues into actions to initiate human rights impact mitigation plans. We have also developed plans for tracking and communicating our human rights performance, engaged with stakeholders, and established



Performance

HEART

In 2017, the Group hosted executive and operational workshops for 10 Business Groups in Thailand on assessing human rights risks. The workshops focused on risks identified by management down to the operational level (top-down approach), and alternately, from operations up to the management level (bottom-up approach). Steps included:

✓ Analyzing and identifying rights-holders across the entire supply chain

- ✓ Evaluating the characteristics of each business group in comparison with peers in the international arena to identify human rights-related issues
- ✓ Evaluating salient human rights issues in each business
- ✓ Analyzing and prioritizing the salient human rights issues at the Group level for public communication, which are issues common to all business groups or those that occur most frequently

Salient Human Rights Issues and Rights-holders at Charoen Pokphand Group in 2017

Rights-holders						
Salient Human Rights Issue	Employees	Regular Contractors	Suppliers	Farmers and Workers	Consumers	Local Communities
1. Occupational Health and Safety	•	•	•	•		
2. Forced Labor	•		•	•		
3. Child Labor			•	•		
4. Discrimination	•					
5. Environmental Impacts						•

Management and Risk Protection Approach

Results from these C.P. Group workshops have been used to develop human rights impact mitigation plans and regular human rights performance tracking plans. This ensures that each business within C.P. Group can meet the 2020 goal that requires 100% of businesses within C.P. Group to conduct human rights due diligence. Such plans must be implemented in addition to existing and regular efforts to promote human rights during all stages of business operations, through various means.



Occupational Health and Safety

- Safety, Occupational Health and Workplace Policy and Guidelines (SHE) is implemented across C.P. Group operations, alongside the goal to become a "Zero Accident" organization by 2020.
- An audit program is carried out to improve SHE performance across
 the entire Group. More than 100 participants at the management
 level participated in the audit, which aimed to assess all Business
 Groups in Thailand in 2017-2018. The scope of the audit will be
 expanded overseas during the second quarter of 2018.
- A safe driver training and regular vehicle safety testing is established.



Forced Labor

- Labor standards are in place to ensure the entire workforce is equally protected.
- Certification and self-assessment according to the Thai Labor Standards (TLS 8001-2010) is conducted:
- √ 10 operations have been certified;
- √ 89 operations have conducted self-assessment.
- A Supply Chain Management Policy and Guildelines is implemented and our critical suppliers are encouraged to conduct sustainability self-assessment.
- A policy and guidelines are available on the sustainable sourcing of agricultural and fishing raw materials in Thailand.



HEART

Child Labor

- Human Rights and Labor Practices Policy and Guidelines is in place.
- Guidelines on supplier and delivery personnel selection are available, as well
 as ways to comply with the Corporate Governance and Business Ethics
 Handbook.
- A Supply Chain Management Policy and Guidelines is implemented and our critical suppliers are encouraged to conduct sustainability self-assessment.
- A policy and guidelines is available on the sustainable sourcing of agricultural and fishing raw materials in Thailand.
- Certification and self-assessment according to the Thai Labor Standards (TLS 8001-2010) is conducted.
- Labor audits on legal compliance are performed.



Discrimination

- A policy on discrimination and harassment is in place, developed based on the United Nations' Universal Declaration of Human Rights (UDHR) and the Declaration on the Principles and Fundamental Rights at Work of the International Labour Organization (ILO).
- Training is provided for employees on rights to equality and on guidelines for living together.



Environmental Impacts

- An Environmental Management System (EMS) is created.
- Environmental impact mitigation plans and measures are established.
- Education and awareness-building on the importance of the environment is implemented, including:
- ✓ Mitigating the environmental impacts of effluents and pollutants from factories, for example, by installing an odor protection system in animal feed factories;
- Implementing logistics and distribution measures for the Retail and Distribution Business Group;
- Improving processes for stock checking at all stores across the country, and
 using the 'Trust' system at stores to reduce the stalling time for trucks during
 product deliveries at convenience stores.

30-50

Labor Practices

Promoting Equal Opportunity, Diversity, and Living Together

C.P. Group firmly upholds and promotes fundamental human rights within all of our businesses, in all contexts of employment, and across our entire value chain to create equal opportunities for all. The Group believes that employee diversity and living together is of paramount importance, and should be held as a standard in all aspects of employment. As a result, we are committed to building a work environment that accepts all aspects of diversity including socio-economic background, education, gender, nationality, ethnicity, nature of work, age, and more. According to our 2017 employee data, individuals were hired based on their qualifications, ethics, performance, and other indicators of professionalism. Such characteristics are specified in our "Code of Conduct - Our Ethics, Our Conduct" to ensure that all employees uphold the same guidelines across the organization.

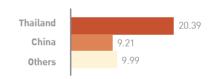
Employee Training

C.P. Group is committed to continuously promoting employee training and development. This will provide employees with opportunities to develop their knowledge, skills, and capabilities, and acquire experience in many areas. Training is offered through classroom, site visit, and on-the-job training formats, and is guided by the overarching commitment to creating "good and competent" individuals. We have a systematic approach to training that is divided into different stages, starting with a training need assessment, followed by a training plan, the actual training, and a record of employee training history. Primarily, participants are selected for training courses based on their work responsibilities and abilities. In this way, employees of all genders, ages, nationalities, and levels of work can have an equal opportunity to develop their professional career and receive additional regular training opportunities. Training data from 2017 shows that the average number of employee training hours at C.P. Group are 16 hours per person per year (GRI 404-1).

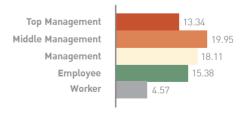
Average Training Hours for Employees by Gender (hour per person per year)



Average Training Hours for Employees by Country (hour per person per year)



Average Training Hours for Employees by Level (hour per person per year)

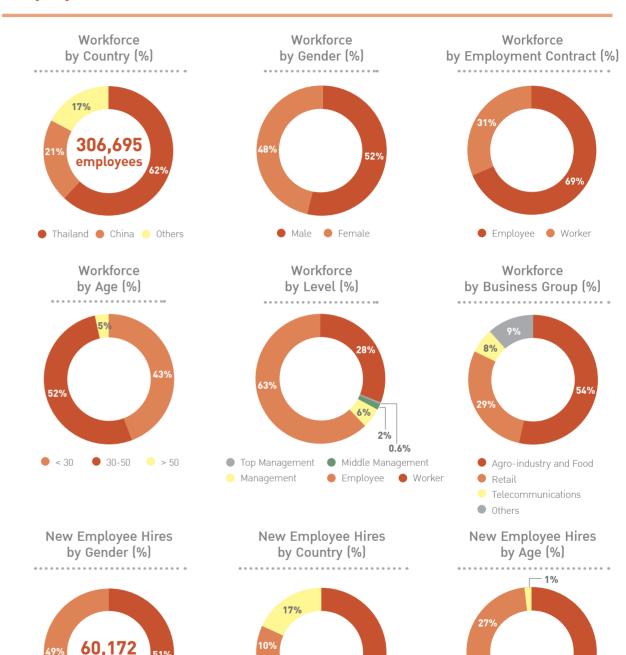


Employee Data in 2017

employees

Male Female

HEART



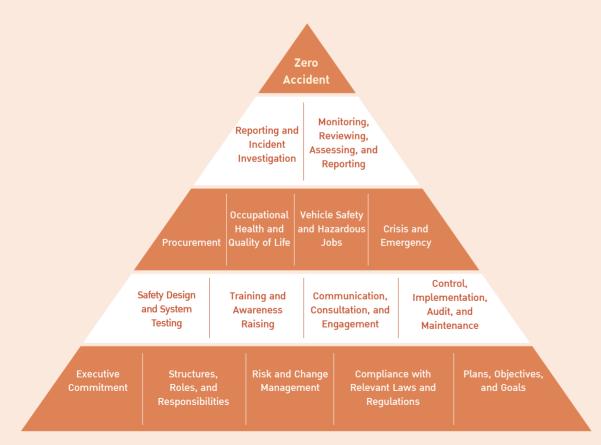
● Thailand ● China ● Others

^{*} Remarks: Average training hours for employees does not include workers.

Human Rights and Labor Practices 093

Occupational Health, Safety, and Working Environment at C.P. Group

At C.P. Group, the health and safety of our employees and the Group is continuously committed to improving our safety stakeholders is our number one priority. We recognize that good performance and building a corporate safety culture that is health and safety is a basic right to which everyone should be reflective of our "Zero Accident" goal. entitled. Not only that, investing in the safety and occupational health of all individuals involved in our operations is a significant. In light of this commitment, in 2017 we revised our way to protect against our risks, assuming that the number of Occupational Health, Safety, and Environment Standard to accidents occurring within the Group will impact the organization, advance our safety management in line with international regardless of whether it involves internal or external personnel. standards. Managers were reviewed by top management Such risks could involve employee and contractor trust, responsible for safety issues, and the newly revised standard damage to assets from accidents that occur in manufacturing and management approach was officially announced in April processes, or even impacts to corporate reputation. As a result,



Occupational Health and Safety Data in 2017



^{*} Remarks: In 2017 there were 8 fatalities (employees and workers).

HEART

Vehicle Safety Training and Testing at C.P. Group

Given the fact that C.P. Group uses a large fleet of vehicles to transport its products and has a regular rotation of employees who assume driving responsibilities, we have developed an approach to vehicle safety management. In particular, the Defense Driving course has been in place since 1992. In addition, the Group conducts regular physical examinations for drivers and implements measures for vehicle safety, accident investigation, analysis, and reporting. These vehicle safety procedures have been implemented consistently and have been extended to our overseas operations.

	2014	2015	2016	2017
Performance in Thailand				
Total Number of Vehicles	8,239	8,537	8,690	11,169
Safe Driving Training for New Drivers (person)	1,350	1,670	1,510	1,413
C.P. Group Driver's License Renewal (person)	2,200	2,150	2,150	2,535
Supplementary Training on Driving Attitude and Behavior (person)	570	600	460	1,210
Training for Business Partners and Contractors (person)	950	810	930	500
Performance Outside of Thailand (V	/ietnam, Car	nbodia, Laos)	
Total Number of Vehicles	253	380	450	743
Safe Driving Training for New Drivers (person)	385	280	460	496
C.P. Group Driver's License Renewal (person)	25	85	150	97

Improving Crisis Management Standards and Safety Management Audits at C.P. Group (Thailand)

In 2017, businesses within C.P. Group witnessed a number of fatalities. For this reason, we initiated an audit program to assess the effectiveness of safety, health and environment (SHE) management across the entire Group. The audit first focused on those managers responsible for departments with more than 100 employees across Thailand. Specifically, for high-risk departments, the program required knowledge-exchanges for improvements and problem-solving. The program will be

expanded overseas starting in mid-2018. Furthermore, the Group has developed a corporate and national level Crisis Management Handbook that covers crisis management processes. From this, all of our Business Groups worldwide can adapt the Handbook for use within their own departments and use it as an approach to protect the safety of our employees and contractors, and, therefore, increasing safety management





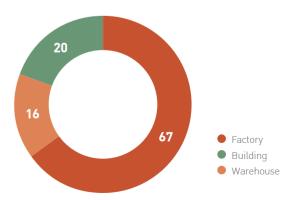
HEART





In auditing of the effectiveness of the Group's SHE standard, the Board of Directors applies criteria focusing on 5 key areas: Leadership, Prevention of Serious Accidents, Work Approval System, Response to Crisis and Emergencies, and Accident Investigation and Reporting. Once the results of an audit are available, they are established as a "Best Practice" to be shared between different businesses within the Group. On the other hand, any area of safety management found lacking is regularly improved upon to ensure that we achieve our goal as a "zero accident" organization by 2020.

Areas of operations receiving the 9th Annual Safety Audit in 2017



676 Shareer Forphana Group Sustainability Report 2517

CASE STUDY 1

Charoen Pokphand Group

Global Occupational Health and Safety Management at C.P. Group

Occupational health and safety management is the top priority at C.P. Group. Globally, our businesses implement projects that focus on safety in many different aspects including plant improvements, occupational health and safety process improvements, awareness raising, safety culture building, and people development, thus, embedding knowledge, skills and experiences related to safety into the workplace. Actions also include strict compliance with the safety laws and regulations of each country in order to meet the Group's commitment to prioritize safety and to achieve the zero-accident goal.

China







Russia







Philippines







Vietnam

HEART







Bangladesh







Myanmar







Turkey









CAPITAL DEVELOPMENT











Challenges

We are confronted with changes and challenges continuously while conducting business in the 4.0 industry era. Digital technology has played a significant role in changing the ways of doing business. As our business varies in multiple industries, and as we have invested in 21 countries across the globe, C.P. Group has highly emphasized attracting the best talent from every corner of the world. With the diversity of cultures and expertise among our employees, we strive to help them develop their capabilities and prepare them to be new generation leaders despite their differences. These new generation leaders will be good, competent, knowledgeable, and equipped with the skills necessary to drive the business forward and tackle changes efficiently. We emphasize top management participation in transferring their knowledge and experience to the new generation leaders at every level of the "Leader Developing Leader" model. This model encourages action learning to magnify our purpose of becoming the "Global Employer Brand." In turn, this builds sustainable business growth, contributes to Thailand and all other countries we have invested in, and covers the economic, social, and environmental dimensions according to our 'Three-Benefit Principle.'

Key Performance in 2017



4,054 employees

completed trainings at the C.P. Leadership Institute

Leadership and Human Capital Development 099



500 young leaders

participated in 3 batches of Future Leaders **Development Program** (FLP) Trainings in 2017

Performance against goals

2020 Goal (Thailand)

All leaders and employees are provided with the training necessary to create business sustainability.

To date, the C.P. Leadership Institute and our Business Groups have provided employees with continuous training to enhance their understanding of sustainability. We are in the process of developing basic sustainability curricula in the form of e-learning to evaluate and assess the system, which will be completed in 2018.

Progress in 2017

- · Leadership development for business sustainability
- · New generation leader development
- · Human resource development





Leadership Development Process under the C.P. Leadership Institute

C.P. Group founded the C.P. Leadership Institute with the programs that help flourish our human resources in different vision to "cultivate leaders, build synergies, and drive aspects. business forward" through meetings, seminars, trainings, and participation in various projects (Action Learning Program) throughout the year. This can be seen as an operational process to transfer visions and strategies, and exchange knowledge and experiences across expertise and Business Groups, both domestically and internationally. The C.P. Leadership Institute sets up leadership development training programs and other

The main goal of the Institute is to be at the center of promoting our culture, developing new generation leaders at every level, and establishing engagement between management and culturally and linguistically diverse employees. This network will eventually synergize our business and unify our people, establishing connections and long-lasting relationships.



HEART

Vision and Strategy



Promotion of Organizational Culture



Connection and Relationship **E**stablishment



Experience and Knowledge Exchange



Leadership and **Human Capital** Development



Succession **Planning**

C.P. Leadership Development for Sustainability

Global context has changed and society expects businesses to take the responsibility or participate in the welfare of the community. the overall environment, the working environment of the employees, and human rights throughout the supply chain. Accordingly, leaders in organizations are faced with increasingly high expectations from investors, customers, and employees to be socially responsible. Leaders must understand the variety of challenges occurring throughout society and the environment that may have an impact on the business, and use that information to develop strategies in response to those different challenges. Moreover, leaders must have the ability to manage expectations from civil society and non-governmental organizations that call for the more transparent corporations to increase disclosure of information to the public. Therefore, to prepare for handling these challenges and to successfully achieve sustainable business operations, today's leaders should possess explicit knowledge and be able to manage the aforementioned expectations.





Sustainable Thinking

The C.P. Leadership Institute develops programs for entrepreneurs and new generation leaders, both at the middle and senior levels, by focusing on Action Learning and brainstorming with leaders from various businesses in different regions. They explore problem solving approaches and innovations related to our businesses to respond to market demand. The programs widen opportunities in product development, invent new business models, and more importantly, generate benefits to society and to the world as much as possible. At the C.P. Leadership Institute, training participants will learn about design and creative thinking, with customer centricity in mind, to identify different characteristics of customer groups and community concerns. With this approach, the participants will have an opportunity to build relationships directly with customers to truly understand their lifestyles and life goals. Additionally, the participants will establish connections with other stakeholders such as government officers, community leaders, and scholars to solidify their ideas and innovate new product prototypes or business models.

Developing Caring Leaders

In addition to developing intelligent and emotional capacities through team engagements and group discussions, another benefit the program participant gains from the C.P. Leadership Institute is self-awareness. This is developed through self-evaluation and evaluations from their supervisors, colleagues, and subordinates. They also receive practice training from their teammates and experts at the Institute. Furthermore, the Institute envisages that a good leader also has to be more socially aware. Accordingly, it offers an opportunity for the participants to foster connections with custumers and stakeholders within their own projects, as well as to support fund raising to assist social organizations with limited budgets. This activity has taken the participants to different places such as schools, elderly care centers, and health care centers. The experience enables the participants to see and become more aware of our roles in helping society, and also benefits their emotional intelligence.

CASE STUDY 2

HΕΔRΤ

Leadership Institute

Action Learning for Sustainability

Our projects that focus on sustainability can be quite challenging for the participants in regard to attempting to increase revenues while reducing costs, and establishing cohesive relationships between projects and sustainability. Participant teams must be aware of the Environmental, Social, and Governance (ESG) aspects affecting their projects as well as ESG issues within the projects themselves; possible business, community, and social risks; and opportunities to benefit. All of these are components that should be analyzed and incorporated into operational plans.

ESG issues receive high attention among training participants at the C.P. Leadership Institute as they are pivotal in developing new product prototypes, new services, and practice testing. Examples of such developments and testing include traceability of meat and agricultural products throughout the supply chain, environmental-friendly operations within farms and food processing methods, collagen extractions from animals to improve product quality, and safety food production for healthy snacks sold at restaurants owned by the Group. These activities have promoted new ideas among the participants and have helped support the Group in becoming an organization of sustainability.

OTOP Sales Transformation from Online to Offline (020) **E-Commerce Project**

Goods from the One Tambol (sub-district). One Product project are products stemming from local resources and local ideas developed to present their own community identity and prominent features. While sales of other products have seen high growth from the online channel, selling OTOP products has failed to produce the same result. OTOP product sales online are faced with such challenges as access to technology, development of new ideas, and collaboration with different sectors. Thus, the O2O Project was initiated for the purpose of training participants to explore ways of reforming OTOP product sales from offline channels to online channels that are suitable for the Thailand market.

For over 5 months, the participants analyzed similar groups of entrepreneurs in other countries that have been successful. They also studied issues in OTOP markets presented by the stakeholders, as well as ESG issues that have affected the project or vice versa. They then used their findings and analysis to develop a practical business plan accordingly.



Future Leaders Development Program

new generation of well-rounded leaders (Future Leaders experience, and potentially capable new graduates, is because Development Program: FLP). These leaders are capable and people in these groups are often eager to learn and develop possess an entrepreneurial vision, regardless of their educational new skills. Many of them have not yet had a major success background. They are able to pioneer and take action in any and, therefore, are not afraid of failure. The FLP program situation, and more importantly, they have leadership skills. In established a platform for these young individuals to express 2017, we selected our employees from the under 28 age group themselves and experience trial and error learning. We believe who had outstanding performance records. Together, we also that adhering strictly to directions from textbooks does not selected new graduates to participate in our training program. promote innovation. On the other hand, making mistakes For the new graduates, we did not take their academic reports sometimes leads to new findings from which the organization as a main criterion for consideration, yet we placed emphasis can learn, further existing knowledge, build upon new business on the extra-curricular activities they participated in at their Institutions, such as being a student leader or head of a student human resources and well-rounded leaders. These outcomes club, as this reflects their leadership potential.

The C.P. Leadership Institute developed a program to seek a The reason we select talented young employees with limited experiences, modernize systems, and develop even better are the core focus of this program.

"New generation leaders should be well-rounded and know about work as well as about people"





The FLP program has been developed for participants to learn and actually establish a real business throughout the course of 6 months. Mr. Dhanin Chearavanont, Senior Chairman of C.P. Group, pays close attention to this program. Participants have to report their progress every 2 weeks by outlining issues they come across, new challenges and failures they face, and their approach to overcoming them. By being hands-on and taking action by themselves from the start, participants are able to see actual problems, find solutions, simplify complicated issues, and share their approach to others in the organization. The more up-to-date knowledge management system has also been developed.

HEART

Young leaders who have completed the training are evaluated and sent to work in different Business Groups. Their designation depends on suitability and the voluntariness of both the business and the participants. Even after the training, the participants are still monitored and their progress is recorded to guide future learning. To date, the program has provided 3 training sessions. Alumni of the first training have established their own businesses including FriedDays fried chicken, Papa Burger, and RamenHabu Japanese



Results and Benefits

500 young participants

came from 3 training sessions in 2017

Representatives from 6 countries

came from 3 training sessions in 2017

38 new restaurants

have been established from the program

Human Resources Development

With the vision "to provide food for both body and mind that" strategies place emphasis on close collaboration between the creates shared value and brings health and well-being for all," we believe every employee is the most valuable asset and significant force in achieving our goals. As we thrive to grow our businesses and expand our investments around the world, the need to develop "new generation leaders" has become more crucial. The new generation leaders have to maintain our organization's values, as well as to assist over 300,000 employees from various businesses by helping them to develop knowledge, necessary skills, and resilient attitude to work in a versatile environment and the 4.0 industry era. In addition, we are determined to become a "Global Employer Brand" by creating employee experiences in which they are proud to be a part of this success. In conjunction, we have modified our human resources development strategy or "Workforce 4.0" by incorporating 5 core strategies. These

human resources department of our different Business Groups, the Leadership Institute, and external experts. This collaboration creates a robust system of human resources management. The management system brought together the C.P. Group People Policy Committee, the C.P. Group People Management Committee, and external experts that specialize in driving policy implementation and development. As a result, this structure of committees and experts established the "Center of Excellences in Human Resources Management" that emphasizes good and competent people to strengthen the organization's image, digitization and data analysis, and performance evaluation and compensation, all of which will ultimately assist the organization to achieve its visionary goals.



CASE STUDY 3

Agro-Industrial and Food **Business Group**

Talent Attraction in Collaboration with Educational Institutes by Agro-Industrial and Food Business Group, China



Project Background:

The search for new employees equipped with knowledge, skills, and capabilities that will resonate with our organizational culture, and the qualifications required for positions, is both a challenge and an

opportunity. Mr. Dhanin Chearavanont, Senior Chairman of C.P. Group, initiated an attracting strategy to acquire great future leaders by organizing an innovation competition at universities in China.

Results and Benefits:

- Recruited 82 new highly talented employees and the competition helped increase sales by 1,887,887
- Provided an opportunity for Chinese students to learn and practice their thinking and presenting their innovations.
- Strengthened organization image as an employer and promoted our products.
- Added sales channels and increased sales of our products.



Performance:

The Group organized the competition and invited students from universities in China to participate. The purpose of this contest was to search and recruit highly talented new employees who could potentially become future leaders at our organization. The competition also helped strengthen C.P. Group's image as an employer and promoted our products. The first competition was organized in 2016. In 2017, we organized the competition again and covered 57 universities and 10,700 students across China. We plan to continue this activity in 2018.

Overseas Business Visit

CASE STUDY 4

Retail and Distribution **Business Group**

High-potential Employee Development through C.P. Corporate University by C.P. Lotus Corporation

Project Background:

A competitive market and a high turnover rate of employees are common issues among retail businesses. These issues can obstruct growth and the long-term development of the organization. In addition, the need to use information technology in business to analyze and accurately respond in a timely manner to the demand of customers, is the reason for us to attract, develop, and retain quality human resources in order to increase our own competitiveness.



Performance:

C.P. Corporate University (CPCU) was established under the management of C.P. Lotus Corporation in 2007. It has provided over 300 retail-related training programs covering management, quality, and skills. The programs focus on synergizing human resources at all levels in order to truly adjust to vocational demands. To undertake this, CPCU has collaborated with leading universities and colleges in China to design training structures and develop an e-learning system so that training participants can conveniently and quickly access the curriculum.



The 3 main courses that CPCU offers are Retail Business, Product Management, and Fresh Merchant Management. After completing the training, participants can take a practical approach to what they have learned in order to advance themselves in their own career.





Systematic Talent Training Structure





Knowledge



Ten-pioneer Projects

HEART

In 2017, **120,629** participants completed trainings

The average training hours were 16 hours per person

Trainings were conducted by

415 experts



Alternate-post



CASE STUDY 5

Charoen Pokphand Group

"C.P. Dream" Sponsorship of One **Young World Participants**

C.P. Group believes in the power of the new generation, and therefore has sponsored their participation in the "One Young World" summit for the 3rd consecutive year. We sponsored 15 new generation leaders from different Business Groups within C.P. Group and 5 external young leaders, 20 in total, to represent Thailand at the "One Young World 2017" summit in Bogota, Colombia. The theme of the 2017 summit was "peace and reconciliation." Many world leaders such as Muhammad Yunus, a Nobel Peace Prize Winner: Kofi Annan. the former Secretary-General of the United Nations; and other globally notable individuals from various industries attended the summit. These respected individuals have inspired young leaders from around the world to build youth and young leader networks to drive creative and sustainable global changes. Currently, there are over 8,000 young leader networks led or participated by former attendees of One Young World summits all over the world, one of which was hosted in Thailand in 2015. The lives of 8.5 million people have been positively affected by projects operated by the One Young World Ambassadors. As a part of their preparation, we provided training for the 20 young leaders that we sponsored from our Business Groups and external organizations. They have strengthened their capabilities and broadened their vision on various topics from the knowledge exchange platforms led by national leading speakers at the C.P. Leadership Institute. The young leaders also met with Mr. Veerasak Futrakul, Ministry of Foreign Affairs Deputy Minister, who provided them with some advice to prepare for their participation at the One Young World Summit 2017.



Ms. Kamolnan Chearavanont, representing young Thai leaders at the One Young World 2015 summit in Bangkok









One Young World 2017 Young Leader Representatives from C.P. Group

"'One Young World' is a platform to motivate and encourage young leaders to take part in making changes to 5 global critical issues. These are poverty, education, peace and reconciliation, leadership, and environment. Changes starting from oneself can contribute to lager impacts, extending to one's organization, society, and country."

HEART

"Learning from actual examples of solving global issues and making peace helped me to better understand that reconciliation for peace is not something distant. Everyone can stop mostly 20-30 years old, but they are a conflict, beginning with understanding, engaging, trusting, and then by forgiving one another. All of these can help alleviate conflicts in our we live."

"From this experience, I now understand that age cannot prevent someone from becoming a leader. Leaders who participated in "One Young World" are the power that motivates this world to become a better place. Young leaders thrive to move forward, start new experiences without fear, and face organization and our society in which head on any consequences that might



Ms. Chanisa Niljilda



Ms. Kanis Ounchanum



Mr. Damien Celestin Joan Durand

STAKEHOLDER 3 **ENGAGEMENT**















Stakeholder Engagement 113

Challenges

Stakeholder engagement is at the heart of our business. Companies within C.P. Group inclusively emphasize this value by continuously and passionately considering the stakeholders' needs in developing the organization's strategies. This ensures the balance between our operations and the expectations of our stakeholders. Furthermore, we always look to build close, substantial, and sustainable relationships with all our stakeholder groups through the C.P. Excellence Management Approach.

With the advantage of having our businesses located throughout Thailand and other countries, we are able to build comprehensive and holistic stakeholder engagement that covers a number of stakeholders. This has affected our business operations positively as we are constantly mindful of creating and delivering value from our products and services by complying with regulations and addressing the needs of different stakeholder

Key Performance in 2017



Compiled topics of stakeholders' needs from 13 Business **Groups**

in 18 countries

Conducted an in-depth engagement

survey with stakeholders within Thailand





Distributed the quarterly "Buaban Magazine: Seeds of Sustainability" to the public

Performance against Goal

2020 Goal (Thailand)

100% of Business Groups within C.P. Group will develop a stakeholder engagement process.

Year-on-year Progress in Thailand

	2016	2017	Goal 2020
Number of Business Groups	10	13	13
Number of countries and economies	1	18	21

Progress in 2017

- Extended the scope of stakeholder engagement to Business Groups
- Conducted an in-depth engagement survey with stakeholders within Thailand
- Collaborated with partners to drive sustainable development

Management **Approach**

engagement process according to the C.P. Excellence channels for engaging with stakeholders; 3) assessing stakeholders' expectations; 4) responding to stakeholders; and 5) assuring the stakeholders' engagement process. This enables the organization to respond to the needs and expectations of every stakeholder group and to integrate stakeholder engagement into our corporate governance, strategies, and work process.

In 2017, the Group expanded the scope of stakeholder engagement from Thailand to Business Groups in 17 other countries and economies areas. The expansion was undertakregarding the needs and expectations of stakeholders to use for our annual Materiality Assessment.

C.P. Group has reviewed and developed a stakeholder Using the aforementioned process, the Group was able to identify 10 stakeholders groups, similar to those identified in the Management Approach. The process includes 5 main 2016 report. The 10 groups include Employees and Their stages: 1) identifying stakeholder groups; 2) determining Families, Customers and Consumers, Business Partners, Shareholders and Investors. Communities and Societies. Governments, Creditors, Non-Governmental Organizations, Media, and Competitors.

In addition, from 2016 to 2017, an external consulting company conducted an in-depth stakeholder engagement survey that covered the main Business Groups in Thailand. The consultant held in-depth interviews and dialogues with target groups, and conducted a quantitative survey to understand accurately the needs and topics that each stakeholder group prioritizes. This was undertaken in addition to compiling the en to develop the process and systems of collecting information needs and expectations of stakeholders through our regular



Innn

Governments









Ion-Governmenta

Organizations











Stakeholder Engagement Framework

Stakeholder Group	Type of Engagement	Expectation and Issue	Response	Stakeholder Group	Type of Engagement	Expectation and Issue	Response
1) Employees and Families	Intranet and internal magazine Employee surveys Meeting with executives Open dialogues Presentation on innovation Volunteer programs Channels for voicing opinions	Employee engagement Occupational health and safety Professionalism Career advancement and stability Creating innovation within the organization	Treat employees fairly and respect for human rights Continuously develop and retain talent Improve HR system based on labor standards policy Require workplace to comply with Thai (or local) labor standards and ensure concrete and effective implementation Adhere to good labor practices Build a culture for innovation throughout the organization	3) Shareholders and Investors	 Quarterly meetings Annual general meeting Visits Office of Company Secretary Office of Investor Relations Other communication channels such as website 	Good corporate governance Accurate and timely information disclosure Performance and continuous growth Commitment to social and environmental responsibility	Comply with laws, good corporate governance principles, objectives and corporate rules, including shareholder resolutions Open to feedback from shareholders and investors to be incorporated into corporate strategy and management approach
2) Customers and Consumers	Customer surveys Customer visits Website and newsletters for consumers Meetings Consumer complaint center Consumer center	 Quality and safety Product labelling with complete product and service information Change in consumer behaviors Confidentiality measures 	 Develop high quality products and services and continuously improve the standards to meet the needs of consumers and customers Implement a system for quality assurance from raw material sources to points of sales Distribute products via country -wide distribution channels to ensure a thorough service coverage Deliver quality products and services in a timely manner Clearly communicate with customers and consumers on nutrition and product/service usage through product labelling Protect confidential customer information as if it were confidential business information 	4) Business Partners	 Meetings Visits and open dialogues Joint initiatives to create innovation Audits, and advisory and academic services Capacity-building programs 	Human rights in the supply chain Supply shortage Environmental impact in the supply chain Knowledge and technology transfers	 Treat all business partners equally and fairly by adhering to agreements and business ethics Clearly communicate with business partners on selection processes as well as performance evaluation Develop supplier audit protocols in accordance with Supply Chain Management Policy and Guidelines and Supplier Code of Conduct. Encourage business partners to be cognizant of product and service quality and safety

Stakeholder Engagement Framework

Stakeholder Group	Type of Engagement	Expectation and Issue	Response
5) Communities and Societies	 Public participation forums Ongoing dialogues and visits Complaint channels Initiatives to promote quality of life 	Community development and good environmental management Knowledge sharing and job creation Food access in the community and preservation of local culture	 Enhance employment prospects and improve quality of life for people through initiatives that have social impact Support small entrepreneurs in delivering quality and safe products Prepare an annual community relations plan by focusing on engagement of the Group, employees and communities
6) Governments	Joint initiatives, projects and activities Participation in public policy-making Meetings On-site visits	Compliance with relevant laws and regulations Setting examples for the business sector in social and environmental responsibility Using the Group's potential to create shared value	Comply with relevant laws and regulations Support the government and other sectors related to sustainable development in conducting preliminary assessments Stay informed and apply relevant laws and regulations to the business, and lend support and offer cooperation for the benefits to the country
7) Creditors	Letter to creditors Meetings Knowledge sharing	Strict adherence to creditors' conditions Punctual repayment Risk management	 Adequate information disclosure and transparent corporate governance Strictly comply with creditors' conditions to maintain corporate reputation

Stakeholder Group	Type of Engagement	Expectation and Issue	Response
8) Non- governmental Organizations	Open dialogues through various channels and meetings to facilitate collaboration Networking	Human rights in the supply chain Resource efficiency Natural resource restoration and environmental conservation	Listen and incorporate recommendations from non-governmental organizations into sustainability management Provide on-site coordination to jointly address problems Support research where communications technology is needed, such as video call devices with emergency physicians in ambulances
9) Media	Public relations activities through multiple communication channels Media tours Participation in media events Executive interviews	Accurate, precise and timely information disclosure	Emphasize accurate, useful, fact-based and timely information disclosure to the public Treat all media fairly and with professionalism
10) Competitors	Participation in industry organizations, such as the Federation of Thai Industries Obtain information from the media and public forums	Business direction and adaptation Fair and lawful competition Transparent, honest and ethical business operations	Compete within the boundary of rules and ethical principles Set up a control system to prevent any action from illegally obtaining a competitor's confidential trade information, and from imputing a competitor which may lead to their reputational damage

Prioritization of C.P. Group's Material Sustainability Issues by our Stakeholders

		Employees and Families	Customers and Consumers	Business Partners	Shareholders and Investors	Communities and Societies	Governments	Non-governmental Organizations	Media	Competitors	Creditors
	Governance and Business Ethics	•	•	•	•	•	•	•	•	•	•
Corporate Governance	Risk and Crisis Management	•		•		•	•	•	•	•	•
	Information Security & Cybersecurity	•	•	•		•			•	•	•
Human Rights & Labor	Labor Practices and Human Rights (excluding Health & Safety)	•				•		•	•	•	•
Practices	Occupational Health and Safety	•				•				•	•
Leadership & Human Capital Development	Human Resource Management	•				•				•	•
Stakeholder	Stakeholder Engagement	•			•	•	•	•	•		•
Engagement	Customer Relationship Management	•	•		•	•	•	•	•	•	•
Cocial Immedi	Corporate Citizenship and Philanthropy [excluding education activities]	•			•	•		•	•	•	•
Social Impact	Social Impacts from Operations, Products, and Services				•	•		•		•	•
Health &	Health and Nutrition	•	•		•	•		•	•	•	•
Well-being	Animal Welfare	•	•	•		•		•	•	•	•
Education	Social Inclusion in Education	•		•		•		•	•	•	•
Innovation	Innovation Management	•		•	•	•		•	•	•	•
	Climate Change Impact	•		•		•		•		•	•
Climate Change	Energy Management	•			•	•		•		•	•
Management	Effluent and Waste Management	•			•	•		•		•	•
	Resource Efficiency	•				•				•	•
Water Stewardship	Water Management	•				•		•	•	•	•
Ecosystem &	Raw Material Sourcing / Biodiversity and Ecosystems	•				•				•	•
Biodiversity Protection	Packaging	•			•				•	•	•
Responsible Supply Chain Management	Responsible Supply Chain Management	•		•	•	•	•	•		•	•

No impact to low impact Low impact to medium impact
 High impact to extremely high impact

Medium impact to high impact

Listening to **Our Stakeholders**

Mr. Jacob Messina

Head of Sustainability Investing Research, RobecoSAM AG

Mr. Rafael Waldmeier

Sustainability Investing Associate, RobecoSAM AG

Challenges

One of the major challenges of our time is that resource allocation and consumption is not efficient or equitable. This issue is particularly applicable to food as in many developing markets and regions people have limited access to adequate nutrition, while in some developed countries or populations, there are increasing obesity rates that drive up social cost. Another overarching topic in sustainable development is climate change and environmental impact where the production of food products is important given the significant contribution of total global GHG emissions, water scarcity is an increasing risk, deforestation results from increasing food and consumer product production (e.g., beef and palm oil), and fish stocks in many areas are already at dangerously low levels.

As stakeholder expectations of large corporations increase, and social media and access to new information becomes almost immediate, businesses should adopt a shared value approach. Thinking long term requires active engagement with various stakeholders,

"As stakeholder expectations of large corporations increase, and social media and access to new information becomes almost immediate, businesses should adopt a shared value approach. Thinking long term requires active engagement with various stakeholders"

allowing companies to compile hands-on information from different perspectives which can benefit long-term decision making processes.

Expectations

As seen in its Sustainability Report 2016, C.P. Group can demonstrate its sustainability leadership by demonstrating the protection of human rights; a "commitment" is insufficient. Protection must be observed through best labor practices and the absence of human rights violations over long periods of time. C.P. Group can also improve animal welfare policies and adherence thereto, and provide evidence of these improvements, for instance achievement of BBFAW Tier 1 or 2 rating. Lastly, the Group should provide reasonable level of internationally accepted certifications for seafood supply, perhaps in the 30-50% range over the next 5 years.

HEART Stakeholder Engagement 123



"The business sector would have a key role in ensuring their successful implementation. Business expertise and innovation will be key, for example, to create decent jobs, limit greenhouse gas emissions, and promote sustainable consumption."

Ms. Deirdre Boyd

United Nations Resident Co-ordinator and United Nations Development Programme Resident Representative to Thailand

Challenges

The overall theme of the 17 Sustainable Development Goals is to "leave no-one behind," which confronts the world, the region and Thailand. While absolute poverty has been significantly reduced in the region, much more needs to be done to address disparities not just in income but also quality education and gender equity. They are particularly important to ensure that everyone has an equal opportunity to make a contribution to the progress of their country and community.

Sustainability of the impressive development gains of the region and of Thailand will be dependent on how well we respond to the issue of climate change, both adapting to the changes already here and to ensuring that we reduce carbon emissions. This is particularly relevant to Thailand, which is ranked among the 16 countries most vulnerable to the impact of climate change. Additionally as Thailand continues on its development path, it will face the fact that Thailand is rapidly becoming an aging population. While this presents challenges, it also provides Thailand with opportunities to pioneer innovative solutions to this demographic transition that will eventually impact the region as a whole.

Expectations

The business sector would have a key role in ensuring their successful implementation. Business expertise and innovation will be key, for example, to create decent jobs, limit greenhouse gas emissions, and promote sustainable consumption. The ingenuity and innovation of the private sector is critical to meet sustainable development challenges in the future.

Enabling everyone to have access to quality education and to good health, irrespective of income levels or where they live, is key not just to meeting people's basic needs but also to building a vibrant and innovative society. As Thailand's economic development progresses, attention to social impact and sustainable and equitable supply chains are important to ensure truly inclusive development and to meet the objectives of the Sufficiency Economy Philosophy.

In the context of "leave no one behind," the business sector has an important role to play in ensuring diversity in its workforce and equal employment opportunities, ensuring that women are appropriately represented at all levels, inclusion of LGBTI people, and increased job opportunities for people with disabilities.



"Participation of business organizations and other sectors is very crucial. The government alone will not be able to achieve sustainability for many reasons such as limitations in human resources. This is not only about the budget, but also about the lack of knowledge, capital, and technology. Therefore, collaboration in the so-called 4Ps, which are Public, Private, People, and Partnership, are strongly needed."

Dr. Bantoon Setthasiroj

Deputy Director of Prime Minister's Delivery Unit and Director of Good Governance for Social Development and the Environment Institute (GSEI)

Defining Sustainability

Sustainability involves a connection and balance of development goals between the economic, social, and environmental pillars. If a 40% increase in forest areas creates more conflict among people and leads to disputes between the state and the communities living in the forest, along with creating more negative social issues, then this is not sustainable development. Similarly, if the growing economy leaves us with limited resources for future generations, then this is also not sustainable development. Thus society, the economy, and the environment need to balance. Balance in this case does not mean being equal, but is rather defined as the equilibrium of peacefully living together. Therefore, development that only uses the economy or the environment as indicators is not sustainable. Sustainability is development that prioritizes the economy, society, and the environment without conflicts, and includes the ability to pass on resources to new generations. We must not create issues that the next generations will be required to solve.

Consumers are the Essential Foundation

The enthusiasm and power of green consumers is the essential foundation of sustainability. Regardless of their occupation, everyone is a consumer. Therefore, the power of consumers is so great that it can influence manufacturers and markets to change their purposes and needs. We see examples of this from the western world where the consumers' voice is very powerful. If consumers demand more environmentally-friendly products, they will choose to consume products that have a lower carbon footprint, greater energy efficiency, and a reduced-waste design. Today, consumers are swayed by market tactics and advertisements that shape their consuming behaviors. However, if one day consumers change their attitudes, this whole game will also change. Business sectors will have to respond accordingly and the change will generate sustainability for producers, government regulations, and the work of people that might lead to the establishment of a green political party that focuses on environmental policies rather than populist policies. This can lead to a political structural change as well, despite the fact that this kind of power will have to build on a foundation where consumer behaviors have truly changed.



"Capability in the 21st Century is beneficial when it is the ability to selectively access knowledge and the ability to apply, add on, and improve the knowledge and transform it into innovation."

Professor Emeritus Charas Suwanwela, M.D.

Chairman of the Independent Committee for Education Reform (ICER) Former President of Chulalongkorn University, and Chairperson of Chulalongkorn University Council

Education Reform

In the past, education management was the responsibility of the state. Today, we must conform to different sectors where everyone is a part of education management, including the private sector. With reform, the quality of education needs to be improved as there is a severe disparity of education quality. Knowledge will need to become easily accessible in the future; therefore, education in the present should shift its focus from increasing knowledge content to building capability. Capability in the 21st Century is beneficial when it is the ability to selectively access knowledge and the ability to apply, add on, and improve the knowledge and transform it into innovation. Moreover, in this digital 4.0 era, digital reform plays a vital role in taking knowledge across time and distance borders. This helps us narrow down the disparity and overcome the inequality. The digital platform is a mechanism that helps bring easily accessible knowledge to students and teachers in remote and rural areas, as this platform is simpler and users can choose to access information based on their skills and preferences. In the past, we followed set curricula.

However, education is more personalized today as we can choose the way we learn based on individual preference. In conclusion, with education reform, we need to improve education quality in order to meet international standards, even for small schools in remote areas. We used to emphasize economy and value, but with technology we can now improve education quality and at the same time create value. Individual learner's skills and aptitude can be addressed with digital technology.

Challenges

C.P. Group and True Corporation are much appreciated for pioneering many education opportunities, including capabilities and digitization. When combining the two, education reform can be achieved much more easily as children can sharpen their abilities from anywhere. In a corporate perspective, it is also a possibility for the organization to take advantage of this opportunity to contribute to national education and see the positive changes from all parties.



HEART

"Actions speak louder than words. What is crucial is that company leaders 'walk the talk' and that employees learn how to make sustainability an integral part of their everyday job."

Philip Mirvis, Ph.D.,

Senior Research Fellow, Global Network on Corporate Citizenship. Author of Beyond Good Company: Next Generation Corporate Citizenship.

Force for a Sustainable Life

Nearly 80% of executives worldwide say that sustainability is important to the financial success of their companies but only 40-50% are taking serious steps to embed it into their business. Why the significant gap? One reason is that these companies have not spoken to ideas like being "a force for sustainable life" when they answer 3 fundamental questions:

- 1. Vision: What kind of future do we seek?
- 2. Mission: Why do we exist—our purpose?
- 3. Values: How will we act to achieve that future?

As this report shows, C.P. Group is building a bridge between its 3 founding principles—benefits to countries where it does business, to people and to the company and its sustainable development goals, strategies, and operating agenda. Actions speak louder than words. What is crucial is that company leaders "walk the talk" and that employees learn how to make sustainability an integral part of their everyday job.

Expectations

Increasing numbers of young people worldwide aspire for "something more" from a job than just a paycheck or interesting work. Surveys find that 3 of 4 of the Millennial Generation (born 1978-1998) want to work for a company that "cares about how it impacts and contributes to society." Among those in the workforce, nearly 7 in 10 say that they are aware of their employer's social/environmental activities. Companies are doing many different things to engage their employees in sustainability, such as encouraging employees to use their technical and commercial know-how to help schools, human service organizations, farmers, and small businesses. How is C.P. Group doing on this front? Scan the report and look for data and stories on employee volunteering, sustainable supply chain and good environmental practices, support for farmers, villagers, and communities, and educational initiatives to "raise consciousness" about sustainability in the Group and equip managers and employees to "walk the talk."



"When forest restoration is connected to the quality of life of people in the community, they have to change the way they do farming. The issue of not having a market for the farmers' agricultural products then arises, which the private sector can help resolve."

Mr. Somkiat Metham

Director of Orphya Institute (Non-profit Organization), and Director of Geo-Information Center for Mae Chaem District Management of Natural Resources and the Environment, Mae Chaem, Chiang Mai

Community Development in Partnership with the Government

For a long time, Orphya Institute (Non-profit Organization) has been working with communities on conservation and restoration of natural resources, the environment, the arts, traditions, and social work. Conserving and restoring natural resources and the environment has become more complex nowadays as there are issues such as land rights, farmers' ability to adapt their production processes and mindsets, changing local beliefs, alternative jobs, and marketing.

There were multiple projects coming in to Mae Chaem, and people in the community grew skeptical. The farmers were also very used to traditional farming, which hindered their desire to change. The first thing we focused on was practical development of the area where all parties could use the same database. The Geo-Information Center for Mae Chaem District Management of Natural Resources and the Environment supported by C.P. Group has been the core of our development in multiple aspects, including conservation and restoration of natural resources and the environment, the arts, and culture. We had to learn to apply and develop each area based on its individual suitability. The Mae Chaem community in Chiang Mai Province, along with the private sector, participated in the process by helping them as a facilitator to drive the community forward as a group and

as a community enterprise. The community members now take pride in the transformation and have grown more connected with the area.

This process has helped strengthen farmers and the community by using information about community development in collaboration between government and the private sector. Likewise, support from the Group has included the use of a Geo-Information System in cultivated areas. This has also helped strengthen community groups so that they can develop into community enterprises, can produce their own products, and can capture a segment of the market.

Expectations

It would be great if C.P. Group could share their knowledge of development. This would add to community enterprises by helping them shift from "farming for selling" to "farming for processing and developing" agricultural products, and therefore, helping them develop markets that respond to the consumers' needs. This will enhance the community's strength. The Geo-Information system data on climate, geography, soil, and water will also provide information about differences between each area. It will help to select appropriate types of seeds to grow more efficiently for areas within each village. In addition, we need to work together to develop a Geo-Information System that monitors land use and apply it to other geo-information applications that monitor eco-tourism and the conservation of nature and culture.



HEART

"As a large conglomerate with businesses in Thailand and other countries, if C.P. Group places importance on eliminating corruption, it will really help the country solve these issues. If corruption ceases, Thai society and the quality of life of Thais will improve accordingly."

Mr. Utit Buasri Assistant Secretary-General of the National Anti-Corruption Commission (NACC)

Corruption Prevention and Elimination

To prevent and eliminate corruption, the Three-pronged Approach (Law Enforcement, Prevention, and Education) must be employed. An explanation of this approach, which Thailand has been using, has appeared in the 20-Year National Strategy, the 12th National Economic and Social Development Plan (2017-2021), and the National Anti-Corruption Strategy Phase 3 (2017-2021). The current government takes this issue seriously and has developed the Integration Plan for Prevention and Elimination of Corruption in budgeting, and has limited the national CPI (Corruption Perception Index) not to exceed 50% in 2021. In 2017, Thailand scored 37 out of 100 on the CPI.

Corruption is a consequence of actions that has involved every sector. Bribery, for example, occurs when there is a bribe provider and a bribe receiver. To eliminate this corruption, the private sector must stop offering bribes. This will lower the corruption rate in the country.

To create a solution to the corruption problem, in 2018 the National Anti-Corruption Commission will be working to develop a tool that assesses morality and transparency in the private sector. It is an expansion from the Integrity & Transparency Assessment tool that recognized the level of corruption risk of a particular organization within the public sector.

Expectations

The private sector should develop suitable internal control measures to prevent bribing national government officers, government officers of other countries, and officers of international organizations. The measures should comply with the Organic Act on Anti-Corruption (Third Amendment) B.E. 2557 Article 123/5, the highest law regarding bribery and corruption in Thailand.

As a large conglomerate with businesses in Thailand and other countries, if C.P. Group places importance on eliminating corruption, it will really help the country solve these issues. If corruption ceases, Thai society and the quality of life of Thais will improve accordingly.

Collaboration with the Global Compact Network Thailand

C.P. Group became a member of the United Nations Global Compact (UN Global Compact) since 2016 by committing to the 10 Principles covering human rights, labor practices, environment, and anti-corruption aspects. We are also one of the 15 founding members of the Global Compact Network Thailand. The vision of the Network is to "build a sustainable global economy and welcome all to take part in the balanced social, economic, and environmental development." Currently, Mr. Suphachai Chearavanont, CEO of Charoen Pokphand Group Co., Ltd., serves as Chairman of the Network.

The Network is aware that human rights is a complex issue and requires collaboration from all sectors. This will enable an understanding of human rights protections, human rights violations among different businesses, and how to remediate the violation within the supply chain. Therefore, the Network has worked with its network of public and private organizations since 2017 to bring the UN Guiding Principles on Business and Human Rights (UNGP) in Thailand into practice. Examples that show where C.P. Group has collaborated with the Network are discussed here.



September 2017

The Network helped prepare the event prior to the announcement of the National Agenda on "Human Rights as a Driving Force of Thailand 4.0 toward Sustainable Development" organized by the Rights and Liberties Protection Department, Ministry of Justice.



February 2018

The Network in collaboration with the National Human Rights Commission of Thailand, Rights and Liberties Protection Department, and Faculty of Law, Thammasat University, organized a seminar about guiding principles on remediation and control of conflicts in the Thai business sector.



February 2018

The Network engaged in a discussion with the United Nations Working Group on Business and Human Rights (WG on BHR) to rapidly improve the human rights practice in the Thai business sector to meet international standards.



March 2018

The Network attended the announcement event of the National Agenda on "Human Rights as a Driving Force of Thailand 4.0 towards Sustainable Development."

Participation in International Organizations

The Group has become a member of multiple global organizations to motivate the Sustainable Development Goals and to promote our management of key sustainability issues, as shown in the following examples:

		HE	ART			HEAL	JН			но	ME	
	Corporate Governance	Human Rights & Labor Practices	Leadership & Human Capital Development	Stakeholder Engagement	Social Impact	Health & Well-Being	Education	Innovation	Climate Change Management	Water Stewardship	Ecosystem & Biodiversity Protection	Responsible Supply Chain Management
1. UN Global Compact	•	•		•								
2. Caring for Climate				•					•			
3. World Business Council for Sustainable Development (WBCSD)				•		•			•	•		
4. Food Reform for Sustainability and Health (FReSH)				•		•						
5. United Nations Development Program (UNDP)				•				•				
6. Harvard University				•				•				
7. World Economic Forum (WEF)				•					•	•		

Participation in Driving Sustainable Development

SUSTAINABLE DEVELOPMENT IMPACT SUMMIT September 2017

HEART

Mr. Noppadol Dej-Udom, Vice Chairman of Sustainability, Corporate Governance and Corporate Communications of C.P. Group attended the Sustainable Development Summit organized by the World Economic Forum in New York in the United States to exchange experiences and knowledge about sustainable development with leaders of global organizations

2017 UN FORUM ON BUSINESS AND **HUMAN RIGHTS** November 2017

Representatives from C.P. Group attended the Annual UN Forum on Business and Human Rights 2017 under the theme "Realizing Access to Effective Remedy" at the United Nations, Geneva, Switzerland

2017 UN **CLIMATE CHANGE** CONFERENCE

November 2017

Representatives from C.P. Group participated as representatives from Thailand at the 23rd Session of the United Nations Climate Change Conference (COP23) in Bonn, Germany. The purpose of this conference was to follow-up with and achieve the principles of the Paris Agreement established at the COP21

LIVING WELL



C.P. Group is committed to driving society toward sustainabilit through innovations that help promote good health for consumers in addition, we implement projects aimed at improving the qualit of life and health of people through our shared experience and knowledge with a focus on comprehensive development

in economic, social and environmental aspects. We also joir forces with many organizations to push forward changes at the national level, in line with our core values founded on the "Three-Benefit Principle"



Social Impact



Health and Well-Being



Education



Innovation

SOCIAL **IMPACT**

















HEALTH Social Impact 133

Key Performance in 2017



92,378

farmers received support

57,646 Small and Medium-sized

Enterprises (SMEs)

employment prospects were improved







15,245

vulnerable persons' employment prospects and quality of life were improved

Challenges

Many organizations from the public and private sectors provide assistance toward alleviation of poverty, which remains a key global challenge. A significant amount of research, particularly in developing countries, has revealed that agricultural occupations are by far the most difficult to escape from poverty. The reason is that most farmers do not own land of their own; therefore, land must be rented, which often lead to debt, In addition. their financial difficulty is aggravated by the high volatility of agricultural produce prices, as well as the lack of knowledge and necessary skills in agricultural technology and marketing to create a competitive advantage.

Another key global challenge concerns the trend of aging population, requiring greater amount of assisted care and management, similar to people in other vulnerable groups such as children, the disabled, or the disadvantaged. These people may not be able to receive assistance and may lack opportunities to develop a sustainable livelihood along with people in other countries. This is a challenge to achieving the Sustainable Development Goals which promote inclusive development and well-being

Much of the world's population may not be able to adapt to the rapidly changing world; therefore, the vision of both the United Nations and Thailand for development is to "not leave anyone behind." This vision emphasizes helping everyone learn to live together, overcoming barriers posed by socio-economic differences. Moreover, support of opportunities for small business enterprises is needed to establish self-reliance and to further promote economic development in local communities so that they can grow and improve their quality of life.

Every sector should be able to utilize their knowledge, ability, and experience to create a positive impact on society without abandoning farmers, small entrepreneurs, and people in vulnerable groups. C.P. Group is committed to doing its part in supporting the effort to achieve the United Nations' Sustainable Development Goals to eliminate all forms of poverty.

Performance against Goal

2020 Goal (Thailand)

Improve employment prospects and quality of life for 100,000 farmers, SMEs, and vulnerable groups.

	2016	2017	2020
Farmers	26,800	58,333	-
SMEs	18,900	48,739	-
Vulnerable Groups	860	14,174	-

Progress in 2017

- Improved the livelihood of farmers in developing countries and emerging economies
- Supported small entrepreneurs
- Integrated people with disabilities into society
- · Improved the quality of life for the elderly

Management **Approach**

a large impact on business operations. As a result, we actively society by improving the employment prospects and incomes of farmers, small farmers, and SMEs so that they can make a fair living and become self-sufficient. This also involves improving of those around them.

"C.P. Group Projects for Sustainability" have been in existence since 2016 to support the Group in achieving Sustainable Development Goals, particularly in social context and with stakeholders. Along with the promotion and encouragement of ognize outstanding projects is held every 2 years. C.P. Volunteers to support the collective effort of the Group,

C.P. Group is aware that social and economic issues can have these projects seek solutions to overcome difficulties within society. They also improve the quality of life for people who live seek to address social issues and create shared value to on subsistence level, thus leading to social and community support for self-reliance and sustainable development. Furthermore, the Group has appointed a working group consisting of representatives from each Business Group to oversee the the quality of life of people in vulnerable groups and the lives projects, formulate strategies, prepare plans and budgets, and carry out the projects as planned in cooperation with every Business Group. In addition, activities are conducted to motivate participation and to nominate projects for recognition. There is a clear plan to conduct the projects or social activities in every country that the Group invests in. Moreover, an event to rec-

Corporation **Creating Value** Providing employment • Enhancing knowledge and skills opportunities to generate Providing training income Providing consultation Performing marketing Performing technology and customer reach transfer Developing basic learning infrastructure Capital Collaboration Accessing financial capital · Community investment • Exchanging knowledge and Grants experience • Enhancing value towards innovation



PATHWAY TOWARD CREATING SOCIAL IMPACT ALONG WITH CHAROEN POKPHAND GROUP

INTERNATIONAL

1975

Initiated an integrated poultry business and income guarantees - the first to offer in Thailand, in Sri Racha District, Chonburi Province.



1977

 Chearavanont Uthit Schools Project to promote education in rural areas, with the first school in Sikhio District, Nakhon Ratchasima Province.



 Nongwa Agricultural Village Project to help poor farmers obtain land ownership. Farmers formed a group to found a company as "Nongwa Agricultural Village Co., Ltd." Incomes have surged to an average of THB 80,000 per month and grown to become one of the most modern swine farming communities in Thailand.



1978

Founded the Kamphaengphet Agricultural Village Project as a prototype to help increase farmers' potential. Today, the average monthly income for each family is THB 50,000.



1980

Began supporting swine farmers by offering income guarantees similar to chicken farmers.



1987

Founded the "Rural Lives Development Foundation" to commemorate His Majesty King Bhumibol Adjulyadej's teaching on improving the quality of life of people in remote communities. C.P. Group, along with other sectors, implemented initiatives developed by His Majesty for the benefit of society. The Foundation's aim is to create good people, good citizens, and good jobs.



1989

Founded the Raising Layer for Student's Lunch Project to provide children in remote areas with continuous access to essential proteins.



Founded the C.P. Do Good Blood Donation Project in collaboration with the Thai Red Cross Society, which has more than 400,000 units of donated blood to date.



2000

Supported local farmers at Phufa Pattana Center, Nan Province, with the Oolong Tea Plantation Project and constructed an instant tea



0 2001

Founded the Foster Family Project to seek volunteer families to raise children in the orphanage, caring for thier providing, physical and mental health, as well as age-appropriate development activities.



2004

HEALTH

Founded the Polyculture Farming System Project that included 7 occupations and 7 income sources under the Royal Initiative of His Majesty the King to generate alternative occupations for farmers after the harvest season.



Founded the Kaset Santirat Village Project as a 4-way collaborative operation to provide support for retired police officers.



2007

Created opportunities for students and teachers to gain access to information, news, and educational content through the True Plookpanya Project.



2010

- Founded the New Agricultural Village Project in Jilin Province.
- Founded the New Agricultural Village Project in



. C.P. Vietnam supported medical volunteers to provide medical services, treatment, and its products



2011

Founded the CPF Funds for Happy Returns for the Elderly Project to provide continuous nutrition and health support for the elderly.



2012

- Founded the CP Pork Shop Project.
- Founded the Pinggu Modern Agricultural Rotation Project.



- Founded the Cixi Modern Agricultural Project.
- · Founded the Dongying-Charoen Pokphand Group Modern Agricultural Project.

2013

- Founded the Quality of Life Development for Children with Autism Project through Autistic Application.
- CPF Philippines began providing scholarships for children in seven schools, with a total of 125 students receiving the scholarship.



 SuperDrob in Poland began providing support in different sports for local children and adults.



2014

 Myanmar C.P. Livestock donated money from the village development fund (Local Village Fund [LVF]) to 50 rural village committee members.



 C.P. Vietnam joined the Annual Blood Donation Campaign, in cooperation with the National Institute of Hematology and other organizations, to collect blood for people in need during the summer.



- Founded the Career Development for People with Autism Project at True Coffee.
- C.P. Malaysia initiated a blood drive campaign for its employees and citizens to donate 1 million CCs of blood annually.



C.P. Vietnam, in cooperation with Ben Tre Orphanage, established a Raising Layer Project to teach poultry farming and how to cook with eggs to children at the orphanage.



Supporting Farmers in Developing Countries and Emerging Economies

of farmers, create stable occupations, and conduct sustainable agricultural sector.

Farmers in developing countries and emerging economies agricultural activities. We have established various projects to often need support to escape poverty, adapt to the lack of support farmers. For example, we pushed forward the legislation land, and gain knowledge and necessary skills to create a of Contract Farming, established research and training teams competitive advantage. C.P. Group aims to be part of agricultural to provide farmers with knowledge, and collaborated in public development in Thailand and in other countries where the Group and private partnership, with a goal to improve the quality of life has invested and operated, in order to develop the livelihood for farmers so that they may be self-reliant and sustainable in the

2017 Performance

92,378 farmers received support



Livestock Farmers

31,378



Field Crop Farmers Horticulture Farmers

Aqua Farmers 22,475

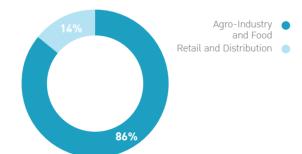
21,010 17,515











Examples of Projects to Support Thai Farmers

HEALTH





HEALTH Social Impact 141

CASE STUDY 6

Agro-Industry and Food **Business Group**

Supporting Contract Farmers

Farmers and small entrepreneurs are regarded as the economic and social foundation of the Group. Therefore, in order to promote employment and to support income generation in this important business partnership, we focus on providing information to them on agricultural innovations and on how to conduct business efficiently.

CPF has continuously supported and pushed forward the legislation of Contract Farming to be used as a guideline to develop contracts between entrepreneurs and farmers. This ensures fair business practices between both parties. In 2017, CPF provided a lecture on the Management of Contract Farming according to the UNIDROIT/FAO/IFADD* international guidelines, which were recognized as the World's most wellknown independent intergovernmental organizations on international law and the farmers. agricultural development.

Participants were from 7 countries including Japan, Venezuela, Pakistan, Philippines, Cambodia, Myanmar, and Thailand. The lecture focused on how to include farmers as "business partners" in contracts in order to ensure fair business practices for mutual growth. The details include farmers' role in risk management, provision of financial incentives, and establishing a centralized call center for the business and farmers to access data.

Furthermore, the Group was the first business in Thailand to adopt the UNIDROIT/FAO/IFAD international guidelines for income-guarantee and price-guarantee systems. We also provided support with production technology, knowledge transfer from our experts, financial resources through collaboration with financial institutions and alliances, and purchasing produce from

In addition, the Group helps insure its contract farmers to reduce their risks in situations such as the fire accidents at swine farms in Chiang Rai and Ubon Ratchathani Provinces in 2017. The incidents were a "force maieure" as stated in the insurance policy. Damage was covered by the insurance company and farmers did not have to carry any of the burden by themselves. The farmers were reimbursed for the damage and were able to continue the Contract.



Results and Benefits

98%

of farmers in the Contract Farming program were successful

Comparison between Insurance and Contract Farming

Type of Contract Farming









Result



- · UNIDROIT is referred to as the International Institute for the Unification of Private Law;
- FAO is referred to as the Food and Agriculture Organization of the United Nations
- · IFAD is referred to as the International Fund for Agricultural Development

Agro-Industry and Food Business Group

Joint Development in China's Agricultural Sector and Rural Reform

Climate change has a direct impact on people's way of life as well as the agricultural industry at a global level. Moreover, it is expected that the increasing population will lead to the conversion of agricultural land into urban areas. Meanwhile, the number of farmers will gradually decline resulting in the inability to produce enough food for the whole world.

Thus, the agricultural industry around the world must adapt and determine new strategies to secure food for society. It must aim for "higher productivity." Advanced science and technology, production factors such as raw materials and equipment, management approach, and relevant personnel need to be integrated to improve quality.

Although China is the most populous country and the second largest economy in the world, it is one of the first countries to start transforming its agricultural industry by adopting the "New Agriculture" policy, which is one of the national development policies according to the 12th 5-Year Plan (2011-2015) for Economic and Social Development. Modern technology and management were used to increase efficiency in production, emphasizing



quantity and quality.

An example of a project under the "New Agriculture" policy is the Modern Agricultural Village (Xinnongcun) Project, which was implemented through a "Four in One" collaboration between the public sector, private sector, financial institutions, and farmers.

The Chinese government has provided C.P. Group with the opportunity to imprement the project in several areas. The first project was the Pinggu Modern Agricultural Rotation Project in 2009 near



Results and Benefits

1,166 farmers participated in the project

Increased production efficiency through modern technology and management



HEALTH

Project	Project Characteristic	Main Component/Output		
Pinggu Modern Agricultural Rotation Project	✓ New Agricultural Village✓ Four-in-One Collaboration	 3 million layers producing 54,000 tons of eggs per year and integrated processed food Products from crocodiles Supporting farmers in growing peaches in 25,000 rai (approximately 9,884 acres) of land 		
2. New Agricultural Village in Jilin Province	✓ New Agricultural Village✓ Four-in-One Collaboration	100 million broilers per year and integrated processed food		
3. New Agricultural Village in Zhanjiang City, Guang dong Province	✓ New Agricultural Village	 15 million broilers per year and integrated processed food 1 million swine per year and integrated processed food 24,000 tons of shrimp per year 		
4. CP Cixi Agro-ecology Industrial Park Project, Zhejiang Province	✓ New Agricultural Village	Conditioning saline soil for growing rice Vegetables and fruits 100 million broilers and integrated processed food per year		
5. Dongying-Charoen Pokphand Group Modern Agricultural Project	✓ New Agricultural Village	Conditioning saline soil for growing rice I million swine per year and integrated processed food Research and Development Center for Advanced Technological Agriculture Seed and Seedling Production Center Center for Agricultural Ecotourism		

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CASE STUDY 8

Agro-Industry and Food **Business Group**

"Pinggu" Modern Agricultural Rotation Project following "Four-in-One" Collaboration Concept



The "Pinggu" Modern Agricultural Rotation Project reflects the innovation of agricultural development toward modernity and sustainability. The Group established the most modern layer farms, capable of raising 3 million layers. Moreover, farmers who participate in the project can join up as a cooperative, with the Chinese government as a sponsor. After 20 years, the property will be transferred to a cooperative that the farmers own, and C.P. Group will rent land and will manage the project to alleviate risks for the farmers. The goal is to produce safe food with high nutritious value for consumers, and more importantly, to help improve the quality of life of poor farmers.

Rather than directly subsidizing the farmers, the 'Four-in-One' Collaboration enables farmers to earn income from leasing the land without losing the land itself. The duty of the government, then, is to establish the funding sources and provide benefits to support the farmers' cooperation. This helps alleviate the risks for farmers that invest in raising layers and distributing eggs.



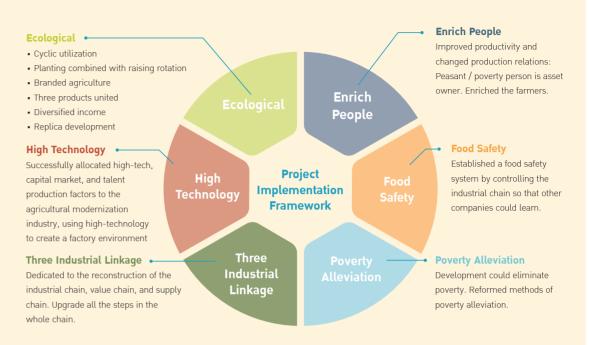
Results and Benefits

1,608 Chinese farmer families benefitted from this project, equivalent to

5,000 individuals

852 families earned rental from their land

756 families of disabled veterans earned money from the project instead of relying on subsidies from the Government





Local Public Sector:

The local public sector provides support regarding policies and project approval, determines the planting areas for the project, and pays the interest on loans from the Bank of Beijing. In contrast, the local public sector earns additional revenue from income tax and sales tax, increasing employment opportunities for local farmers and developing a higher standard for the local agriculture.

Bank of Beiiing:

The Bank of Beijing will provide loans with a leasing agreement of 69.89 million Yuan (11 million USD) annually as a guarantee, along with interest as financial return.

Farmers:

852 farmers families earn rent from their land. The cooperative earns property rental fee. There are dormitories provided for employees where expenses cover utilities, food and internet access, Farmers can work part-time at the factories in their free time.

Charoen Pokphand Group:

C.P. Group plays a role in the technological investment and knowledge management of poultry farming, marketing, distribution, and distribution channels. The Group also takes responsibility for the construction and sourcing of high-quality produce for the market, especially egg products.

Agro-Industry and Food Business Group

Supporting Dairy Farmers



Project Background:

CP Meiji is committed to strengthening and bringing stability to dairy farmers by providing knowledge on raising dairy cattle to improve the production of raw milk to the standard level, generating an increased profit for farmers.

Performance:

A Dairy Developer Team (DDT) visited the farmers at dairy farms. The team then provided training on dairy management, developed curricula for dairy farmers, advised them on how to improve raw milk quality, calculated food proportion for dairy cattle, and regularly monitored milking machines.



Results and Benefits

1,400 dairy farmers joined the program

Approximately 25% of farmers had an increase in monthly income

The amount of milk bought by the Company was

480 tons per day

CASE STUDY 10

HEALTH

Charoen Pokphand Group

Supporting Buffalo Farmers and Improving Buffalo Breeding

At present, buffalo farming in Thailand is affected by the poverty of farmers, and emigrantion of working-age groups to cities. The number of buffaloes continues to decline. In addition, there are small and underweight buffaloes, especially in rural areas such as in the northeastern boarders. Because of these issues, the Group established the Modern Buffalo Farm Project in 2013, which was developed from the Charoen Pokohand Foundation-Free the Lives of Cattle and Buffalos Charity Project dedicated to Their Majesties in 2002.

In addition, the Group, led by the Charoen Pokphand Foundation, established the Thai Buffalo Conservation and Development Center in Chonburi Province to house buffaloes that gained their fame from national contests sponsored by the Department of Livestock.

Since 2013, the Thai Buffalo Conservation and Development Center has promoted buffalo raising for the purpose of improving breeding. Farmers with outstanding performance received female buffaloes for breeding from the Charity Project for a period of 10 years. There is a nursery and sufficient grass to feed the buffaloes. C.P. Group has supported the farmers by supplying veterinarians who work closely with the Department of Livestock, as well as



district and provincial governmental agencies, to provide health check-ups and vaccinations for the buffaloes, and to use artificial insemination from healthy buffaloes at the Thai Buffalo Conservation and Development Center.



Results and Benefits

2,556 cattle and **buffaloes** were freed thanks to the project

2,276 farmer families received cattle and buffaloes from the project

The minimum income from raising buffaloes is THB 350,000 per year

The Center produces more than **26.000 tubes** of semen per year for breeding

Supporting Small Entrepreneurs

financial services, and opportunities are major challenges for entrepreneurs and store business partners to become business small entrepreneurs (SMEs).

C.P. Group recognizes the importance of nurturing the promotion and development of small entrepreneurs to maintain

At present, the lack of knowledge, funds and access to their businesses. Our projects have continuously assisted owners. Our support includes consultation on product development, services and distribution channels.

2017 Performance

57,646 SMEs received support



CP Pork Shop

Five Star Business



CP ALL, and MAKRO

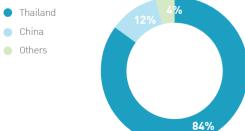


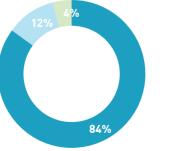
Business partners, SMEs, Coffee for Profession Project and Others

7,276 5,876 individuals individuals 34,280 individuals

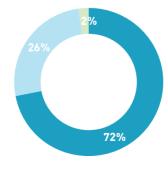
10,214* individuals

Distribution by Country





Distribution by Business Line



Agro-Industry and Food Retail and Distribution Others



^{*}Note: The Coffee for Profession Project consisted of 8,500 individuals

Retail and Distribution **Business Group**

Supporting Retailers





Project Background:

The Group is aware that the development of SMEs requires economic readiness from the SME entrepreneurs to mobilize the business toward an international level, which will ensure comprehensive growth in terms of stability and sustainability. Projects such as the "Makro Retailer Alliance Project," the "Sustainable Retailer Growth Project," and the "Supportive Partnerships for Business Expansion entrepreneurs. Project" were initiated to support experience as well as new retailers, to further their knowledge in management.

Performance:

All 3 projects were implemented in different styles. Where the 'Makro Retailer Alliance Project' is aimed at providing guidance and suggestions for entrepreneurs, the 'Sustainable Retailer Growth Project' focuses on knowledge transfer, and the 'Supportive Partnerships for Business Expansion Project' encourages students to provide training for

Topics covered in the projects consist of Retail and Shop Management, Capital Management, Stock Management, Human Resource Management, and Differentiation in Retail Business.



Results and Benefits

3,335 retail business owners

received support in managing retail businesses

6.393 students participated in knowledge transfer program

CASE STUDY 12

HEALTH

Agro-Industry and Food **Business Group**

Supporting Small Entrepreneurs





Project Background:

The Group is determined to support the roles of people in the communities to create and raise food safety standards by ensuring proper storage at a suitable temperature, standardizing manufacturing processes, and enhancing traceability system. Simultaneously, to support the young generation in becoming business owners, we have launched the "Five Star Business Project" and the "CP Pork Shop Project," and expanded internationally.

Performance:

The support provided to the entrepreneurs includes fridge lending and training on pork retailing and marketing, to ensure fresh, hygienic, safe, and quality products for



Results and Benefits

Encouraging people in the communities to have a role in **enhancing** food safety standards

13,152 individuals people in the Projects supported by the Group have a better quality of life

Supporting the Vulnerable Groups

The World Population Prospects (2017) conducted by the society. Therefore, these vulnerable groups require training and United Nations projects that longevity in life expectancy will increase from 70.8 to 77 years old in the next 30 years. This implies that the societies are aging, a critical global challenge we face today. This demographic shift requires care. The same self-reliance, and taking care of orphans, to improve the quality also applies to other vulnerable groups such as children, the of life and to promote equality in society. disabled, and the underprivileged who lack opportunities in

development in a sustainable livelihood. Thus, the Group has initiated different projects to continuously assist vulnerable people by offering employment opportunities, teaching

2017 Performance

15,245 vulnerable people received support



Employment of disabled people

> 1.811 individuals



for disabled people

3.954 individuals



Promoted employment Developed quality of life of elderly people

individuals



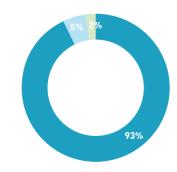
Care of orphans

570 individuals

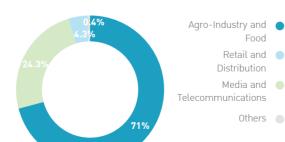
Distribution by Country







Distribution by Business Line



CASE STUDY 13

Charoen Pokphand Group

Integrating People with Disabilities into Society



Throughout the past 30 years, C.P. Group has placed great emphasis on vulnerable groups with the goal to promote their potential, build knowledge and competence in their profession, and promote and expand opportunities for a sustainable career. This is in accordance with the C.P. Group Sustainability Goals. We realize that establishing a strong business foundation requires creating a sufficient quality of life for people in society. Integrating and supporting collaboration between the Group, associations, employees, and people in the community is a vital driving force to empower the projects and activities that truly serve the needs of society.

C.P. Group and True are actively involved in promoting job creation with many associations for the disabled, including:

Universal Foundation for Persons with Disabilities

- Collaborated with the Foundation by opening the ASEAN Disability Training Center, Mae Rim Branch, Chiang Mai Province, to train and educate people with disabilities on occupational and income development.
- Established a marketing channel to sell products produced by the disabled, including hydroponics at Makro, Mae Rim Branch, Chiang Mai Province.
- · Assisted in designing the logo for the Yimsoo brand of products from the Foundation, as well as for the Yimsoo Cafe that is served by the disabled.

Thailand Association of the Blind

- Hired 10 blind people at the True's Call
- Supported the S2S: From Street to Stars Project to compose "Jai Hen Jai" and "Mai Jued Jang" songs for the blind



- artists, along with other artists from Academy Fantasia and The Voice.
- Initiated the Blind Sim Package, a special package that enables connectivity and communication for the blind.

National Association of the Deaf in Thailand

- Deaf Barista Project to promote equality: 3 deaf people were trained to become Baristas at True Coffee, Nitasrattanakosin Branch.
- Deaf Sim Package by TrueMove H inclusive communication for deaf people.



Results and Benefits

100%

of people with disabilities in the Projects do not need to leave their hometowns

The disabled participating in agricultural projects earned higher income by **27%**

3 out of 6 people at True Coffee, Nitasrattanakosin Branch are **Deaf Baristas**

HEALTH

CASE STUDY 14

Charoen Pokphand Group

Attentive Care for Orphans at Cultural Community by Rural Lives Development Foundation

(Supported by Charoen Pokphand Group)

Project Background:

Some orphans in orphanages often lack appropriate love and care from their family, causing problems within society. This aligns with what Dhanin Chearavanont, Senior Chairman, says that: "Without attentive love and care. how can an orphan grow up to be a successful adult?"

Foster families are an answer for these children. They will receive the love they deserve and will improve physically and mentally.

Performance:

For the past 15 years, the Rural Lives Development Foundation, in cooperation with public and private orphanages, have sought volunteer families to raise children from these orphanages. The foster families provide attentive care to the children. This results in positive emotional growth and an ability to lead a secure and happy life in society.



This concept also encourages public and private sectors to initiate concrete and widespread development of foster family services.



Results and Benefits

Support the Establishment of Foster Care Center by foster families in **Cultural Community**

Foster families in the Project have provided attentive care for

294 orphans

CASE STUDY 15

Charoen Pokphand Group

Project for the Elderly

Project Background:

Charoen Pokphand Group acknowledges the value and importance of developing the quality of life for elderly people and underprivileged elderly people for their health and well-being. In 2004, the "Charoen Pokphand Group for Underprivileged Elderly Project" was initiated to alleviate poverty of the underprivileged elderly in 76 Provinces in Thailand, Moreover, the "CP Gives Rice for the Elderly on Songkran and National Elderly Days" activity has been held continuously in Nong Nam Daeng Subdistrict for six years to encourage and show gratitude to the elderly. Later, CPF established the "CPF Funds for the Elderly Project" that has enabled executives and employees to take care of their surrounding communities for a better quality of life.





Performance:

1. In 2017, the Group provided necessities and consumer products for 1.140 underprivileged elderly people across Thailand under the Charoen Pokphand Group for Underprivileged Elderly Project. 2. Continuously for the past six years, the Group has hosted the "Gives Rice for the Elderly on Songkran and National Elderly Days 2017" activity for 700 elderly people at Nong Nam Daeng Subdistrict Administration Organization, Pak Chong District, Nakhon Ratchasima Province.

3. CPF established the CPF Funds for the Elderly Project to continuously provide support, share happiness, and take care of the underprivileged elderly. The Company has provided necessities and consumer products, along with an allowance while the Public health organizations have sent nurses to them for health check-ups to ensure improved nutrition and health.



Results and Benefits

7,190 elderly people were supported by Charoen Pokphand Group through the Underprivileged Elderly Project, which has been continuously carried out for the past 13 years

CPF Funds for the Elderly Project has helped a total of **534** elderly people to live happily

HEALTH AND WELL-BEING













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Challenges

Technological advancement and economic growth enable better public health, better access to hospitals, and more inclusive transportation. Globally, people have improved their quality of life by having better access to good nutrition, becoming more educated, and having good personal hygiene. At the same time, medical breakthroughs have resulted in better treatment and prevention of diseases. These factors have contributed tremendously to the decrease in illnesses and fatalities during the past few decades. However, there is still a small percentage of the population that is suffering from hunger and has no access to healthcare.

The United Nations "World Population Prospects Report 2017" estimates that world population will increase by 1 billion by 2030, while the average life expectancy will increase from 70.8 years old to 77 within the next 30 years. Societies around the world will include more elderly people. According to the Sustainable Development Goals 2 and 3 that focus on eradicating hunger and providing good health and well-being, these challenges will require collaboration from all sectors in order to enhance the health and well-being of society.

Key Performance in **2017**



168
products promote
better health and
well-being



Traceability system were developed for

1,467 products



32,650 children gained better access to food

Performance against Goal

2020 Goal (Thailand)

30% of new products will help promote health and well-being.

/ear-on-year Progress in Thailand			
	2016	2017	Goal 2020
Number of products aiming to promote better health and well-being	-	142	-
Percentage (of total products)	-	37%	30%

Progress in 2017

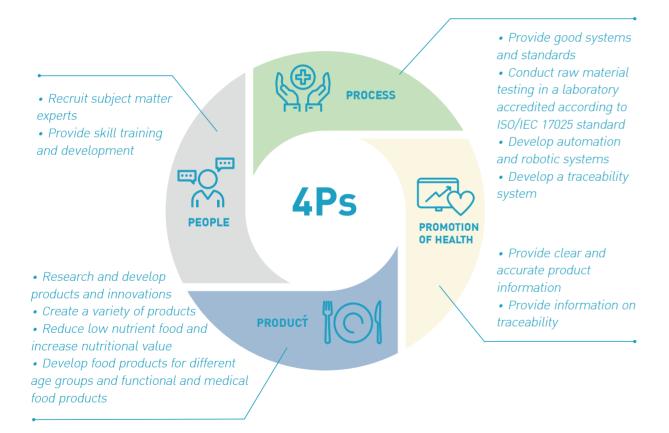
- Launched healthy products
- Focused on quality and safety of the production process
- Raised consumer awareness on food safety and traceability
- Promoted animal welfare
- Promoted health and well-being

Management Approach

Promoting health and well-being for all people is a common priority for all countries. C.P. Group views this as an opportunity to develop products and services using our expertise in agribusiness and food, retail and distribution, and developing processes based on international standards pharmaceuticals.

operating according to international standards, controlling and initiatives.

monitoring quality throughout the value chain, and promoting understanding of good nutrition for society as a whole. We focus on increasing the capacity of our employees (People), (Process), offering products for promote good health and well-being (Product), and promote understanding of health issues The Group is committed to investing in research and development, (Promotion of Health) by providing product information and



Developing Healthy Products

Our companies in the Agro-Industry and Food sector are committed to investing in research and development of products of consumers in different age groups. At the same time, our understanding of healthier products to the public. Pharmaceutical business is also committed to developing medicine for more effective treatment. Our ultimate goal is to In addition, Sino Biopharmaceutical Co., Ltd. has developed sustainably contribute to good health and well-being for all.

HEALTH

In 2017, CPF announced the CPF Healthier Choice Principles as the principles for developing products that help promote health and well-being. CPF's approach is to provide new

C.P. Group believes that good health starts with good nutrition. alternatives to consumers based on the production process that produces high standard, fresh, clean, safe, nutritious products that meet the needs of consumers in each group. that help enhance consumer well-being and address the needs CPF also aims to increase awareness and provide better

> more than 180 medical products, including medicine for cardio cerebral diseases and hepatitis. The Company is also in the process of researching and developing painkillers and medicine for tumors and respiratory-related illnesses and diseases.

Examples of Healthy Products around the World



Committing to Quality and Safe Production Processes

We believe that "good production processes" require good systems and standards. As a result, we are continually pharmaceutical products throughout the production processes. In the laboratory, our raw materials, automation and robotics, and traceability systems are tested with quality control that is third-party accredited according to international standards.

Our processes undergo both internal and external audits on a regular basis. In addition, we increase the efficiency of our improving quality and safety systems for our food and processes to ensure that people can get access to products and services, especially medicine, conveniently, and at affordable prices.

Compliance with International and Local Food Safety and Quality Standards

Quality

- ✓ CPF Food Standard
- ✓ ISO 9001: Quality management
- ✓ ISO 29990: Learning services for non-formal education and training – Basic requirements for service providers
- ✓ ISO 22000: Food safety management
- ✓ ISO/IEC 17025: Testing and calibration laboratories
- ✓ Global Manufacturing Practices (GMP)
- ✓ Hazard Analysis and Critical Control Point (HACCP)
- ✓ Good Agricultural Practices (GAP)
- ✓ Global Good Agricultural Practices (Global G.A.P.): Private sector standard for agricultural production of retailers in Europe
- ✓ British Retail Consortium (BRC)

- ✓ International Food Standard (IFS)
- ✓ QS Quality Scheme for Food (QS): German quality system for fresh food covering the whole production process
- ✓ CEN TS 16555: Innovation management
- ✓ Safe Quality Food (SQF Level 3)
- ✓ Halal
- ✓ Global Food Safety Initiative (GFSI)
- ✓ Quality Assurance International (QAI)
- ✓ International Food Safety Standards of FSSC 22000
- ✓ CAS (Taiwan Premium Agricultural Products)

Animal Welfare

- ✓ Animal Welfare Standard, the European Union
- ✓ Genesis Standards: the United Kingdom
- ✓ Agricultural Labelling Ordinance (ALO): Switzerland

CASE STUDY 16

HEALTH

Agro-Industry and Food Business Group

Enhancing Quality and Safety throughout the Supply Chain with QS Standards





Project Background:

To address consumer concerns about food safety, the Group prioritizes and commits to producing safe food and creating consumer confidence in our products. For better acceptance and transparency, we comply with widely-accepted international or local standards in all countries where we operate.

Performance:

The Group is committed to enhancing food quality and safety. In 2017, CPF enhanced production standards for chicken products and was accredited for German Quality System Scheme for Food (QS), which is the quality standard for fresh food covering the whole production process. CPF was the first Thai company and the only company outside of the European Union that was accredited for this high standard.



Results and Benefits

We are the only company outside of the European Union that was accredited for QS.



Covering the whole supply chain



Control of antibiotics use



Products free from salmonella



Regular inspection



Having Good Manufacturing and **Hygiene Practice** and HACCP

Raising Consumer Awareness on Food Safety and Traceability

safety and promotes access to product information through our product labelling. Labelling provides direct communication to consumers and create better understanding of the products they consume. In compliance with laws and regulations, we are committed to providing details on product ingredients, product use and storage, and nutritional information on all of our other useful information about the product. At present, the product labels. Our goal is to create confidence in our products and provide alternatives to our valued consumers.

The Group emphasizes the importance of food quality and In addition, we have developed a food traceability system that allows us to monitor and recall products accurately and effectively. The QR Codes on product labels, the system allows consumers to trace information such as production facilities, the farms, and the sources of raw materials. It also provides consumers with information on international standards and system has already been applied to 1,467 products. We plan to cover all product groups by 2020.













C.P. Group, through the Agro-Industry and Food, International Trading, and Retail and Distribution Business Groups, has developed modern traceability technology that allows consumers to trace product information throughout the supply chain by themselves.

CASE STUDY 17

HEALTH

International Trading **Business Group**

Traceability through QR Code for Royal Umbrella Rice



Supported rice field in Yasothon and Sisaket **Provinces**



Buriram Rice Mill in Buriram Province



Wangdang Rice Factory in Avutthava Province



Example of Royal Umbrella Jasmine Rice sold in Australia, China, Japan, and Singapore having QR code to trace back to the origin

International Trading Business Group places high emphasis on integrating effective rice management from planting to consuming. The Business Group is also committed to communicating product origin through QR codes on product packaging. We ensure consumers that our rice is from sources that follow Good Agricultural Practices (GAPs) certified by the Department of Agriculture and Rice Department. Consumers can rest assured that the processes are safe, pest-free, and up to the quality demanded by consumers.

The production process also helps mitigate the impact of climate change and reduce water intensity.

Water Footprint







Carbon Footprint









HEALTH

CASE STUDY 18

Agro-Industry and Food **Business Group**

Promoting Animal Welfare at Farms

C.P. Group is committed to animal welfare principles, which directly contributes to food quality and safety. We believe that ethical animal farming requires operations based on the principle that each individual animal is treated with appropriate care. All animals should be free from suffering throughout their lives. This is an important element of responsible farming and food production.

Committing to Animal Welfare throughout the Whole Production Chain of **Protein Products**



In 2017, C.P. Group, led by CPF from the Agro-Industry and Food Business Group, committed ourselves to animal welfare throughout the whole production chain of protein products. We established an Animal Welfare Committee comprising of executives from all farm businesses and from relevant supporting functions. The Committee is responsible for developing policies, targets, and a work plan, and governing and monitoring results. We launched our policy and vision, and operated our farm businesses based on the international standards of Five Freedom, which includes freedom from hunger and thirst; freedom from discomfort; freedom from pain, injury, and disease; freedom to express normal behavior; and freedom from fear and distress.

Our management of animal welfare covers: 1. research and development of animal breeds without using gene engineering or cloning; 2. farming in closed and airconditioned systems with close monitoring from veterinarians; 3. transportation that is limited to no more than 200 kilometers; 4. slaughtering only after animals are stunned and using well-accepted slaughtering procedures; and 5. auditing and certification by independent third parties.

In addition, we apply contract farming scheme and collaborate with the Livestock Department on improving farming practices and animal welfare in Thailand. We welcome site visits by customers, academia, non-governmental organizations and other interested parties to foster better understanding and awareness.

Animal Welfare Principles - The Five Freedoms



Freedom from hungei and thirst

Freedom from discomfort Freedom from pain, injury,

reedom to express normal behavior

Freedom from fear and distress.

Researching and developing animal breeds without using gene engineering or cloning

Completing auditing and certification by independent third parties

Committing to **Animal Welfare** throughout the **Supply Chain**

Farming in closed and air-conditioned systems with close monitoring from veterinarians

Slaughtering only after animals are stunned and using wellaccepted slaughtering procedures Limiting transportation to no more than 200 kilometers

Promoting Health and Well-being

In addition to our commitment to providing health-focused products, C.P. Group utilizes our strength as leader in the Agribusiness and Food, Retail and Distribution, and Pharmaceutical sectors to initiate projects and activities that promote hygienic and nutritious food consumption. Some of our initiatives also help consumers, communities, and society mitigate impacts from limited access to food, while other initiatives continue to promote overall health of the population.

CASE STUDY 19

Agro-Industry and Food **Business Group**

Distributing Milk by Myanmar C.P. Livestock



Project Background:

This program was initiated by our employees to help children and youth, gain access to fresh and nutritious milk. This is in line with the Group's policy to develop milk as the main high-quality protein source and to create employment prospects for farmers. In 2014, the Myanmar Government and the Group collaborated to establish communities and religious organizations. a dairy farm with the capacity to produce pasteurized milk in Naypyidaw. The farm has been used as the learning center to manage and develop quality milk.

Performance:

In 2016, employees at all levels began building networks with customers and suppliers, and collaborating in the purchase of pasteurized milk from the Naypyidaw farm. The milk was then donated to children and youth, in boarding temple schools managed by local



Results and Benefits

2,650 children novice Buddhist monks. and nuns received a total of 8,480 liters of milk from the program

6 educational institutions for disadvantaged children received milk donations HEALTH

CASE STUDY 20

Agro-Industry and Food Business Group

Promoting and Increasing Opportunity for Food Access

Project Background:

In 2017, in cooperation with the Office of the Basic Education Commission. Ministry of Education, National Electronics and Computer Technology Center, and Rural Lives Development Foundation, we escalated the implementation of the CPF Growing Happiness, Growing Futures Project by developing schools as learning centers in 5 components:

1. Management; 2. Food production; 3. Nutrition; 4. Health; and 5. Capability.

Performance:

We promote access to food for children and youth by focusing on learning and skill development. We also provide knowledge on nutritional and safe food consumption to children and youth with the aim to help mitigate the malnutrition problem. In addition to Thailand, the Group has also expanded similar projects to Bangladesh, Myanmar, and Vietnam.



Results and Benefits

222,000 children have access to knowledge and skills of food production and/or of consumption of safe and nutritious food

30,000 people participated in the CPF Growing Happiness, **Growing Futures Project in 2017**



Pharmaceutical Business Group

Supporting the Development of Medicine for Hepatitis in China

Project Background:

C.P. Group collaborates with the Chinese Government and various institutions in China on medical research and development to improve the quality of life for the Chinese has been growing exponentially, changing lifestyles and diet are inevitable resulting in higher demands for quality pharmaceutical and medical products, especially for chronic diseases.

Performance:

C.P. Group collaborates with the Chinese Government and various institutions in China to conduct medical research and development. promotes Hepatitis prevention in We also contribute financially to medical institutions to support medical research and development Research Fund, and the Hepatitis B through a variety of programs including medicine development for Platform in China Project, which gastrointestinal disorders, a Surgery Skill Program, and the Tianging Blood Zijijn Forum.



President of CT Tianging donated sRMB12.50 million to the Chinese Foundation for Hepatitis Prevention and Control

people. As the population in China In 2011 and 2016, the Group donated 10 and 12.5 million Yuan, respectively, to the Hepatitis Prevention Institute in China in support of research to develop medicine for Hepatitis and

> In 2017, CT Tianging Co., Ltd. a subsidiary of Sino Biopharmaceutical Co., Ltd. and the leader in the production of medicine for Hepatitis in China, launched new medicine for Hepatitis treatment. CT Tianging also China through programs and research funding that includes the CTTQ Liver Follow-up and Clinical Research continuously helps develop Hepatitis patient screening and treatment systems in China.



12.5 million

RMB were donated to the Hepatitis Prevention Institute in China

47 hospitals participated in the program

More than 135,000 patients benefited from the program



Charoen Pokphand Group

Promoting Blood Donation Globally

Project Background:

There is still a high demand for blood donations globally as Red Cross and other emergency medical service agencies have a constant need for blood to treat patients who suffer from accidents, need surgery, or have blood diseases. We value all lives and believe that blood donations can help many more people. This is why our subsidiaries have been active in promoting blood donation both in Thailand and overseas.



Performance:

C.P. Group, through the Special Project Management Department, has been supporting the operation of the variety of projects by promoting blood National Blood Center, Thai Red Cross Society since 1991 through a the "Do Good Easily through Blood variety of projects within and outside the organization nationwide. These projects include "C.P. Group towards 100 Years, Doing Good by Donating Blood" and "C.P. Blood Donation Dav."

creating future blood donors for a sustainable and secured blood bank in Thailand and abroad, and for Turkey.

ensuring a constant blood supply for patients. Therefore, we initiated a donation among Thai youth through Donation" Project and the "Spirit of Young Blood Donor" Project. We disseminate knowledge and support young people to become advocates for blood donation to benefit the country. We also expanded our efforts to other countries in which we We also recognize the importance of operate including China, Vietnam, Cambodia, Laos, Myanmar, Malaysia, the Philippines, India, Russia, and



Results and Benefits

150 million cc of blood were donated to the National Blood Center

More than 1 million patients benefited from the program

"Promoting blood donation will help raise awareness of young people on the importance of blood donation to help others. C.P. Group takes this very seriously as it is an important mission to help society. We have been continuously supporting the National Blood Center of the Thai Red Cross Society for more than 27 years and have also expanded our efforts to other countries.

HEALTH

Mr. Wallop Chiaravanont Vice Chairman, Charoen Pokphand Group Co., Ltd.



Let Them See Love "ABABO - the New Blood Project"



This is the project where we collaborated with the National Blood Center of the Thai Red Cross Society. Four short films, each one focusing on a different blood type, were produced by 4 young directors aimed at raising the awareness of the young generation on the importance of being "a giver" and to promote constant blood donation that would help address the blood supply issue.





Watch VD0 from ABABO Project HEALTH

CASE STUDY 23

Charoen Pokphand Group

Let Them See Love Project - Promoting **Organ and Cornea Donation**



Project Background:

We believe in the power of giving, others by donating organs and corneas. It is one of the greatest services a person can provide.

Project" in 2007, aimed at promoting Thai Red Cross Society. and raising awareness of the importance of organ donation (heart, liver, lung, kidney, and cornea), and to help patients with organ failure to live happy and healthy lives and regain their hope.

Performance:

In 2017, we produced an advertisement especially of giving a new life to under the "Let Them See Love Again" concept to raise public awareness of the importance of giving and promoting organ donation. In addition, True Corporation also C.P. Group and True Corporation provided a donation channel via SMS collaborated with the Organ Donation on the TrueMove H network to support Center and Comea Donation Center the organ and eye transplantation of the Thai Red Cross Society in process of the Organ Donation Center launching the "Let Them See Love" and Comea Donation Center of the



Results and Benefits

60%

increase in the number of individuals indicated their intent to donate their organs compared to 2016

13%

increase or 158 more patients received organ transplants compared to 2016

40%

increase or 304 more patients received cornea transplants compared to 2016



ชม VDO โครมการ Let Them See Love **CASE STUDY 24**

Charoen Pokphand Group



Health and Well-Being 173

Sport Promotion



Watch VD0 from SEA Games & ASEAN Para Games 2017 Proiect

SFA Games & ASFAN Para Games 2017

The Group was appointed by the National Olympic Committee of Thailand, Paralympic Committee of Thailand, and Sport Authority of Thailand as the official food and communication sponsor for more than 2,300 Thai athletes, officers, and media personnel during the SEA Games and ASEAN Para Games 2017 in Kuala Lumpur, Malaysia. The aim was to help support physical and emotional well-being of Thai athletes throughout the program.

CP Dream

The Group collaborated with our partners in the "CP Dream" Project to fulfill Thai children's dreams by selecting youth with good skills in football to participate in the training course provided by the professional football club, Bangkok United or BUFC Academy. We also provided scholarships for them to continue their study at Bangkok Christian College until they finished high school. Furthermore, the Project has been expanded to other countries through our overseas subsidiaries. Our other activities include participation in the Liverpool Football Clinic and the opportunity to watch a match between the Thai National Team and Liverpool during its Thailand visit.





Watch VD0 from "CP Dream" Project

EDUCATION













Education 175

Key Performance in

2017



2,560,426

children, youths and adults have been provided with access to education and necessary skills development



over **6,000** schools have been provided with Information Communication Technology (ICT) equipment and media



600 animals and agricultural farms have become action-learning

centers.

Challenges

Education is one of the main issues that needs to be addressed urgently and continuously to further develop world population and support societal change. In digital transformation era, multifaceted changes will have a significant impact on the lives of people, society, and the modern economy. As working conditions have now changed, universities and their graduates might have difficulty catching up with the business and industrial sectors. Therefore, developing people with the knowledge, abilities, and skills as required by the sectors has now become more challenging. These challenges, however, can be seen as opportunities as new technologies have emerged, the internet has become more accessible, technology has adapted to enhance effective learning, education expenses have decreased, and there is now more support for educational development. C.P. Group recognizes the challenges and opportunities to support and develop education, as well as the competitiveness of both domestic and international human capital.

Performance against Goal

2020 Goal (Thailand)

4,350,000 of children, youths, and adults will be provided with access to education and necessary skills development by 2020.

Year-on-Year Progress in Thailand

	2016	2017	Goal 2020
Number of children, youths, and adults provided with access to education and necessary skills development	2,021,352	2,559,677	4,350,000

Progress in 2017

- Promoted and developed a basic education structure
- Granted C.P. Group Scholarships and Scholarships for Employees' children
- Established Panyapiwat Institute of Management, and Panyapiwat Institute of Management Demonstration School
- Supported Nanjing Tech University
- Implemented the True Plookpanya Project
- Conducted the True Clicklife Project
- Co-founded the Connext ED: Leadership Program for Sustainable Education Development

Management Approach

C.P. Group is committed to creating opportunities for our target and skills, preparing them for the digital transformation era, and groups (early childhood, vocational, and adult) to have access to education and necessary skills development in Thailand and that encourages continuous learning. The objective is to other countries in which we operate by collaborating with networks and partnering with educational institutions. The Group that they can adapt to a range of challenges and help advance has implemented this by developing and transferring knowledge Thai and global societies in the future.

creating opportunities to access knowledge by forming a network develop the capabilities of youths and adults of all ages so

Collaborating with learning networks and educational institutions

Knowledge and Skills

- Develop knowledge. innovation, and new learning activities
- Transfer knowledge and impart a variety of necessary skills to learners and education providers

Access to Education and Knowledge

- Develop infrastructures and learning models
- Create digital knowledge channels and archives for widespread knowledge dissemination

Preparation for the Digital Era

- Provide equipment and technology
- Provide digital media to supplement integrative learning, and provide training and advice

HEALTH

Continuous Support and Development of Education

• 1977 the 1st

 Established Chearavanont Uthit Schools to provide children in remote areas with access to education. in Sikhio District. Nakhon Ratchasima Province



1978

• Founded Chearavanont Uthit School 2 to provide children in remote areas with access to education in Wang Nam Khiao District, Nakhon Ratchasima Province.

• 1979

- Developed Chearavanont Uthit School 3 to provide children in remote areas with access to education in Pha Khao District. Loei Province.
- Began to offer C.P. Group's educational scholarships for higher education levels.

1980

• Developed Chearavanont Uthit School 4 to provide children in remote areas with access to education in Wang Saphung District, Loei Province.



• 1992

• Developed Bann Pah Pai School, Si Sakhon District. Narathiwat Province under the Chearavanont Uthit School Development

1993

• Offered educational scholarships to employees' children for the first time.

• 1994

• Developed Chearavanont Uthit School 5 (Bann Ponephang School, Kusuman District, Sakon Nakhon Province).

1995

- Developed Mit Muan Chon School, Chiang Dao District, Chiang Mai Province under the Chearavanont Uthit School Development Project.
- · Cooperated with the Office of the Vocational Education Commission (VEC) to open a 7-Eleven store as a classroom for vocational students.
- · Donated USD 2.21 million and provided a CNY 10 million interest-free loan to Peking

2002

• Developed Ban Ang Ka Pong School, Khao Saming District, Trad Province under the Chearavanont Uthit School Development Project.

2003

• Donated CNY 2.21 million to Zhengda Gymnasium Fudan University.



2005

• Established Panyapiwat Technological College.

2006

• Founded 20 Panyapiwat Learning Centers.

2007

- Established Panyapiwat Institute of Management (PIM).
- Established True Plookpanya Project
- Planting Wisdom.

2008

• Launched True ClickLife Project.

2009

- Launched True Plookpanya Media.
- Developed www.trueplookpanya.com, the website of knowledge and ethics through education.

Education 177

2011 - 2016

• Donated CNY 200 million to Tsinghua University to establish the Chinese Rural Research Institute.

2012

• Launched the TV channel "True Plookpanya Channel" to promote knowledge and ethics through education.

2014

• Donated CNY 200 million to Nanjing Tech University to establish Pujiang Institute.



2016

• Established CONNEXT ED, Leadership Program for Sustainable Education under the Pracharat Initiative (Basic education and leadership development).

2017

- Established Panyapiwat Institute of Management Demonstration School (SATIT PIM).
- Signed MOU with Thammasat University to collaborate in research and development, train personnel and students, and apply academic achievements to develop the country.



HEALTH

CASE STUDY 25

Charoen Pokphand Group

Promoting and Developing a Basic Education Structure



future learning and career development:

- Raising Layer for Student's Lunch Project;
- School Lunch Fund:
- C.P. Volunteer for School Development Project;
- True Plookpanya Model School Project.

Project Background:

With the need for children in remote

areas to have the same opportunities as children in urban areas in order to stand on their own in the future, the first Chearavanont Uthit School was founded in Sikhio District, Nakhon Ratchasima Province. It is considered to be the beginning of C.P. Group's educational support. Later, our Senior Chairman realized that children and vouths in remote areas in Thailand still lacked access to equal education, and so the Chearavanont Uthit School 2 was founded. As of now. there are 8 Chearavanont Uthit Schools across the country, serving as educational institutions for children and young adults of farmers so that they can gain access to equal education and learn to value their own development. The Group aims to give

back to the country and to reduce disparity in educational opportunities between urban and rural areas. For more than 40 years, the Group has continuously supported the Chearavanont Uthit Schools.

Performance:

The Group has developed 8 Chearavanont Uthit Schools nationwide: 1 school from kindergarten to primary education, 5 schools from kindergarten to secondary education, and 2 schools from kindergarten to high school education. Moreover, we also search for land to build schools and residences for teachers, provide funding for teaching equipment, train teachers, and offer student scholarships. We also carry out the following initiatives for students to promote their



Results and Benefits

2,352 students have been provided with educational support

100 classrooms

have been equipped with internet facilities to help with teaching and learning

160

teachers and other personnel have participated in a Capacity-building program

CASE STUDY 26

Charoen Pokphand Group

C.P. Group Scholarships and Scholarships for Employees' Children





Project Background:

The Group is committed to supporting and helping students who have good performance records but lack the finances to complete a Bachelor's Degree. In 1979, the "C.P. Group Scholarship Program" was launched in collaboration with various state-owned universities to grant unconditional scholarships to students with good performance records.

In 1993, to commemorate the 72nd anniversary of the Group, we established the "Scholarships for Employees' Children Program" that focuses on funding education for the children and young adults of our employees, from primary education to Bachelor's Degree. Scholarships are granted based upon employee well-being, employee performance, and the academic performance of the employees' children.

Performance:

The Group truly aims to develop the youth of the nation; therefore, we grant scholarships to Junior University students who have good academic performance but lack the finances to attend universities. The Group and the universities work together to select the recipients. The students' academic performance is monitored, and they are provided with internship opportunities at one of our subsidiaries depending on their fields of study. In addition, the students participate in an "Action Learning" project where they can gain actual working experience. For the "Scholarships for Employees' Children Program", we have provided scholarships for employees' children, from primary education to Bachelor's degree, in order to funding education of for the children and young adults of our employees.

Results and Benefits

23 higher education institutions have been granted with our scholarships

THB 50.74 million worth of scholarships (4,336 scholarships) have been granted between 1979 and 2017

THB 23.32 million

(16,559 scholarships) have been granted employees' children

Retail and Distribution **Business Group**

Panyapiwat Institute of Management and Panyapiwat **Institute of Management Demonstration School**



"Work-based learning education provides students with theoretical knowledge and actual working experience. By the time they are graduated, they are able to understand the world of work and succeed in their careers, as they have been nurtured for maturity. Students from the first class to the present have always been the pride of CP All, as we play a role in helping to create good and skillful people in society."

Project Background:

Educational opportunities can open the door to career opportunities. Therefore, since 2005, CP ALL, under C.P. Group, has supported the education needed to meet the needs of the business sector. To accomplish this, Panyapiwat Technological College (PAT) and 20 Panyapiwat Educational Centers were established to apply academic studies to labor skills improvement. In 2007, Panyapiwat Institute of Management (PIM) was established as a higher education institution offering Bachelor's Degree and Master's Degree programs that focus on providing students with practical skills that can be used after graduation in real-world business experiences.

Performance:

At the Institute, students are taught the action-learning model, especially in the Bachelor of Science Program in the Farm Technology Management and Food industries. The Institute also provides an exchange program in collaboration with leading educational institutions in various countries. In addition, there are internship programs in the private sector that are related to the students' fields of study. In 2017, Panyapiwat Institute of Management Demonstration School (SATIT PIM) was established that models a distinctive teaching system used in Finland.



Mr. Korsak Chairasmisak Chief Executive Officer, CP All Public Company Limited



Results and Benefits

27,466 students graduated from Panyapiwat Institute between 2007 - 2017

THB 6.963 million (110,644 scholarships) were granted between 2007-2017

CASE STUDY 28

HEALTH

Retail and Distribution **Business Group**

Nanjing Tech University Pujiang Institute

Project Background:

In 2016, CP All and Nanjing Tech University established the "Nanjing Tech University Puijang Institute" to develop a professional education institution using a Management System. The Bachelor's Degree for each program is designed to respond to today's most advanced technology. Programs include the Mobile Networks Program, the International Hospitality and Dietary Culture Program, and the ZTE and CP Group BAR Program.



CP All has supported the development of lecturers at Panyapiwat Institute of Management through their visits at Nanjing Tech University Pujiang Institute, emphasizing a comprehensive education model. Through collaboration with Nanjing Tech University Pujiang Institute, Panyapiwat Institute of Management has also developed an education system that focuses on creating knowledge based on the actual experience learning model for the business and manufacturing sectors in order to meet the demand of the labor workforce, Likewise, Panyapiwat Institute of Management also believes that combining technical capabilities with rigorous academic studies will be successful in today's competitive job market.



- 1. International Hospitality & Dietary Culture College;
- 2. Porsche Apprentice Training Base;
- 3. ZTE and CP-Group BAR College.

Nanjing Tech University Pujiang Institute provides education for 8,500 students through 30 academic programs in 13 faculties. These outstanding faculties were founded through the cooperation between the business sector and Chinese and international universities. Part of learning is gaining access to cutting-edge technology and gaining valuable practical knowledge through the Internship Program, the Training Program, and the Applied Research Training Program. The Institute has modeled an education system from a successful applied science university in Germany



Results and Benefits

CNY 200 million was provided to promote cooperation with Nanjing University

in total have been supported





HEALTH Education 183

CASE STUDY 29

Telecommunications
Business Group



True Plookpanya Project



Project Background:

From the aspiration of Mr. Suphachai Chearavanont to create a sustainable society, the True Plookpanya Project was initiated in 2007 under the concept of "Cultivating knowledge, Cultivating Virtue, and Cultivating Love for the Environment." The Project aims to develop Thai society by providing knowledge and virtue for all. A variety of media and technologies from True have been used as tools to provide children, students, teachers, parents, and the nationwide public with equal opportunities to access knowledge.

Performance:

The True Plookpanya Project has been implemented in various forms such as initiatives and media. The following initiatives are part of the Project:

• True Plookpanya Schools

Raising education quality of schools in remote areas that lack teaching materials by supporting them with ICT equipment and digital teaching materials

True Plookpanya Channel

TV channel promoting knowledge and ethics through cable TV and satellite TV

• www.trueplookpanya.com

Online knowledge base with lessons, tests, teaching materials, and general knowledge

• True Plookpanya mobile application

A free mobile application with access to knowledge from all True Plookpanya media

Plook Magazine

A free magazine with career and higher education guidance

• True Little Monk Radio Broadcast dharma via radio channel

T 1301 M 1 D 1

• True Little Monk Project

A reality TV program broadcasting daily activities of 12 little monks for a period of 1 month.

Activities and Network

Focusing on networking to share knowledge, inspire and enable learning among children.



Results and Benefits

More than 6,000 schools have been provided with ICT equipment and digital teaching materials

www.trueplookpanya.com is the no. 1 educational website with

185,000,000 page views per year

The True Plookpanya application has been downloaded by

106,000 users

Telecommunications Business Group

True ClickLife Project

Project Background:

True Digital Plus Co. Ltd., a subsidiary of True, has continued its support for education. The "True ClickLife" project has been further developed from the True Plookpanya Project as an innovative, creative, and comprehensive educational curriculum based on the "Creative Learning Innovation" model. It is designed to help children and youths develop intelligence, morality, and ethics in order to adapt to new innovation.

A comprehensive learning and

teaching system that focuses on child centricity has been developed through the True ClickLife Project. In addition, curricula and innovative teaching materials have been developed for children and youths to promote integrated learning through the following courses:

Performance:



Computer Genius

Provides ICT equipment that combines teaching materials with the interaction of learners.



English Genius

Focuses on the use of English through learning and practicing in actual situations.



Chinese Genius

Emphasizes developing (Mandarin) Chinese language skills while inserting Chinese culture with an integrative thinking system.



Robotics Genius

Focuses on learning by doing, initiating work pieces, and developing skills and a systematic thinking process.



Emphasizes music skill through multimedia.



Music Genius

development and activities







Results and Benefits

78 schools have participated in the Project

59,106 students have benefited from the Project and are able to

apply their knowledge in schools

300

multimedia and software programs are available for learning development





Charoen Pokphand Group



CONNEXT ED: Leadership Program for Sustainable Education



In 2016, the CONNEXT ED: Leadership Program for Sustainable Education was founded and initiated by a group of 12 leading private organizations in Thailand, with efforts to create a system for developing new generation leaders (School Partners). The School Partners are selected among high potential and publicly-minded employees. Together with the management and teachers at Pracharat schools, these Partners have an opportunity to put their ideas into practice, based on the Action-learning model. This creates an educational ecosystem that facilitates learning focused on child centricity, so that children and youths are developed into good and competent people. This is in line with the 10 major strategies under the Pracharat Initiative (E5: basic education and leadership development) for enhancing the quality of

10 Strategies for Enhancing Quality of Education Management in Thailand in the 21st Century



Transparency

Educational institute information transparency



Market Mechanisms

Market mechanisms and inclusive culture



High Quality Principals &

Developing principals and



Child Centric & Curriculum Child centricity, and enhancing virtue and confidence

Digital Infrastructures Access to digital infrastructure

of educational infrastructures



Health & Heart

Promoting virtue, moral, public mind, and hygiene among students



English Language Capability Enhancing English language



Tax Incentive for Local & **International Educators**

Incentivizing and engaging with domestic and international educational experts



Young Leaders Development Developing and supporting young leaders

Technology HUB R&D Regional educational technology hubs of the future



Results and Benefits

785,746 teachers and students

have participated in the Program

School Partners

have participated in the Program

From the role of cooperation to create an "inclusive educational culture." in 2016 the CONNEXT FD expanded its cooperation network thanks to 417 new generation leaders (School Partners) from C.P. Group. They have inspired and opened up access to learning sources for over 785,746 children and youths in Thailand. This has improved education management through technology for over 36,397 teachers from 3,351 Pracharat schools in 77 provinces across the country.

HEALTH

Pracharat Schools supported by the Group

Company	New Generation Leader: School Partner (Person)	Pracharat School (Schools)
CPF	65	195
CP All	50	150
True	293	883
C.P. Group	9	27
Total	417	1,255

An in-depth school information system that can compare, contrast, and analyze quality between schools according to international standards has been initiated. The analyzed school grading results are transparently disclosed via www.pracharathschool.go.th.

Pracharat School Grading in 2016-2017 **Academic Year**



In addition, True recognizes the importance of technology for sustainable education. True initiated the "ICT Talents for Educational Technology" Project. The Project aims to seek new generation leaders in educational technology, or ICT Talents at Pracharat Schools. In 2017, 100 ICT Talents were sent to 100 Pracharat schools. The purpose of this was to promote, support, and apply ICT into teaching and learning in schools, and to connect ICT with occupational skill development for schools and communities in order to improve the quality of life in a sustainable way.

Roles of ICT Talents



"During one's life, everyone can spend their time and take opportunities to create something great. Do not let time and opportunity go wasted without making changes to the world. "



Mr. Suphachai Chearavanont Chief Executive Officer, Charoen Pokphand Group Co.,Ltd. Private Sector Lead, Basic Education and Leadership Development of the Pracharat Initiative

INNOVATION (*)













HEALTH

Key Performance in

2017



21 countries

have joined forces to drive innovation at a group level



Research and development spending accounted for

тнв 12,223 million



866 patents and petty patents have been granted

Challenges

For almost a century, C.P. Group has highly emphasized research and innovation development to ensure seamless consistency with rapid global changes. Particularly for business operations, continuous innovation is essential as it serves as a driving force for advancement at all levels of business operations, including concepts, methods, processes, products, and services. Further research and development in innovation and technology throughout the entire value chain will bring about the best-in-class products and services for both domestic and international consumers. Therefore, the Group will be able to keep up with global changes, and will become an innovative organization in response to the Thailand 4.0 Economic Strategy, where the economic structure has shifted its focus to be innovation-driven.

Along with the Group's vision to become an innovative organization that aims to provide economic, social, and environmental benefits to elevate the quality of lives of people around the world, we realize that employees at all levels must have the right attitude and mindset. They must also recognize the importance of driving forward, supporting, sharing, and synergizing toward innovation. Innovation is not only fostered by scientists, but also by our people. More importantly, innovation is not one singular issue. There needs to be a link between the different business processes, including human capital development and production. Therefore, it is crucial that development opportunities are substantially identified in every step of the production process in order to produce quality products that meet the expectations and needs of consumers.

Performance Against Goal

2020 Goal (Thailand)

Increase value of product and process innovation by 50%, compared to the 2016 baseline.

The Group estimates the innovation value at a group level every 2 year following our biannual C.P. Innovation Exposition, and will report our performance in our 2018 Sustainability Report.

Progress in 2017

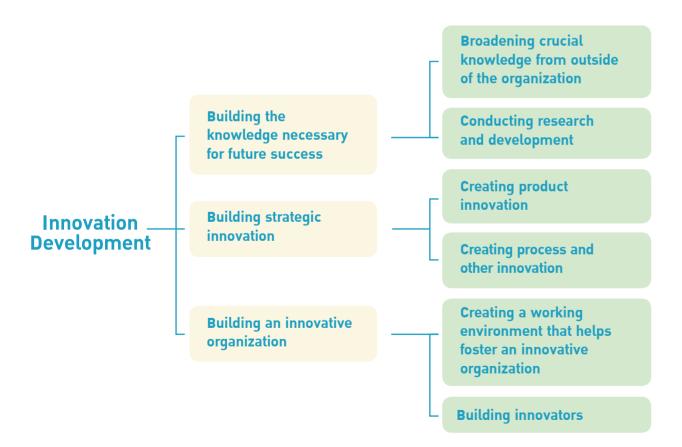
- Built an innovative organization
- Organized innovation expositions at a business-group level, both in Thailand and overseas, and a group level
- · Stimulated innovation domestically and internationally
- · Encouraged innovation through research and development
- · Promoted open innovation



Management Approach

C.P. Group continuously promotes innovative organization where all of our people are the main driving force and contributors to innovation. This is realized through our innovators' efforts to develop and create new things. To ensure that innovation is developed systematically, the Group has prioritized innovation as one of the primary pillars within the "C.P. Excellence" Management Approach. The objectives are to enhance knowledge for long-term organizational success and to create strategic innovation, allowing the Group to become an innovative organization.

Presently, the Group drives and supports innovation building through the C.P. Innovation Exposition, academic seminars, and research work. The goals are to promote knowledge and experience by sharing distinctive innovations from different business groups to generate new ideas, inspire innovation development, and increase organizational efficiency. This helps elevate the Group's competitiveness on the global stage. The C.P. Innovation Exposition Organizing Committee comprises executives from both national and international business groups.



Becoming an Innovative Organization

Becoming an Innovative Organization is the Group's fundamental strategy. We focus on establishing a working environment that encourages and supports all employees to learn and to be a part of innovation building. This provides incentive and enables employees to put tremendous effort into building practicable innovation that will be collected, shared, exchanged, improved, and developed for sustainability. More importantly, there must be a process for innovator development to enable continuous innovation.

Our Definition of an Innovative Organization

"To become an organization in which employees at all levels must have the right attitude and mindset. They must also recognize the importance of driving forward, supporting, sharing, and synergizing innovation."

Our Definition of Innovation

"Creating economic, social, and environmental value through modification, changes, development, application, or unique creation."

Our Definition of an Innovator

"An innovator is an innovation creator."



HEALTH

"Not only is innovation fostered by some individuals, but also by all of our people. It must be practiced throughout the organization. All employees must work together and treat it as a corporate culture.'

Dr. Ajva Taulananda Senior Vice Chairman Charoen Pokphand Group Co., Ltd.

in our growth and success. We strongly believe in innovation and treat it as part of the Group's fourth value "Accept Change". When everyone in the organization accepts change, they continue to strive for improvements, such as development, increasing productivity and quality of current work, and efficient budgeting, which can be achieved by identifying new approaches. Improvement also leads to the fifth value "Innovation." It is essential that our employees adhere to both values (Accept Change and Innovation).

Innovation is essential to C.P. Group and plays a major part Not only is innovation fostered by some individuals, but also by all of our people. It must be practiced throughout the organization. All employees must work together and treat it as a corporate culture. They need to realize that innovation drives the organization, and therefore, is part of their work and daily life. This starts with a change-accepting mindset, and a novelty-seeking attitude.

Business-Group and Group Level Innovation Expositions





C.P. INNOVATION EXPOSITION



CPALL





TRUE INNOVATION AWARDS



International Trading and Crop Integration (Maize) **Business Groups PD** Awards



Agro-Industry & **Food Business Group** Innovation Awards, China

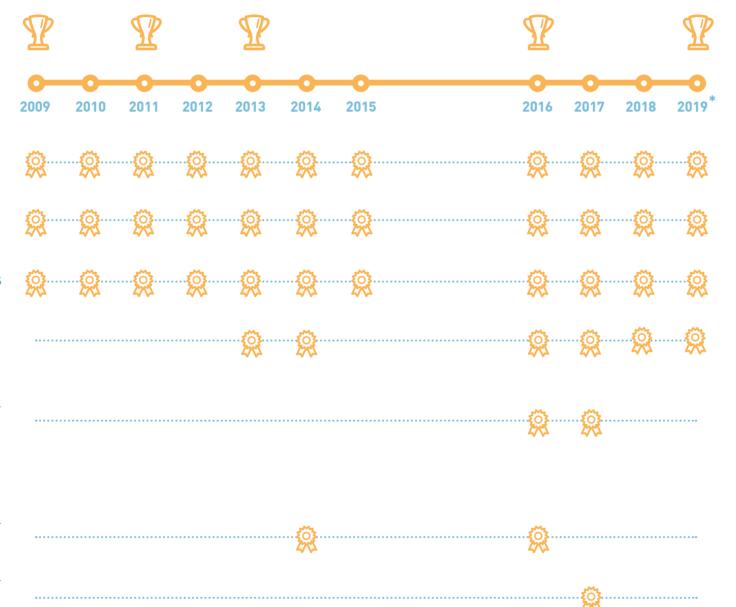
- Senior Vice Chairman Bai Shanlin
- Senior Vice Chairman Yu Jianping
- Senior Vice Chairman Bai Yufei
- Senior Vice Chairman Yao Minpu



CPV Innovation & SHE Awards



Myanmar C.P. Livestock **Innovation Awards**





C.P. INNOVATION EXPOSITION, THAILAND C.P. INNOVATION EXPOSITION, CHINA





CPF CEO AWARDS





TRUE INNOVATION AWARDS



International Trading and Crop Integration (Maize) Business Groups PD Awards



Innovation Awards, China



Agro-Industry & Food Business Group Innovation Awards, China



CPV Innovation & SHE Awards



Myanmar C.P. Livestock Innovation **Awards**

^{*} Preparation in progress

Innovation 195

CASE STUDY 32

Charoen Pokphand Group

Examples of Social and Environmental Innovation



Real-time Micro-organism Quality Control System

This is an instant product detecting approach using the Dye Reduction Method and Spectrophotometry technique. This shortens the period of micro-organism detecting to only 1 hour, compared to the original 48 hours. It allows consumers to have more confidence in products, increases our market's competitiveness, and reduces the need for equipment import.



KARE APPLICATION

True Corporation Public Co., Ltd. This research continued the development of a Tablet Application. This application strengthens integrative learning for individuals with autism. It the ability to help themselves and their parents so that they have fewer difficulties living with others in society. This was a collaboration with the Autistic Thai Foundation and design experts.



New Diagnosis of PRRS using Swine's Saliva

CPF (Thailand) Public Co., Ltd. This new approach to PRRS diagnosis is based on collecting swine saliva instead of drawing blood. This enables them to develop skills and helps reduce stress and pain for swine, in accordance with the Animal Welfare Principles, and reduces the risk for workers. The swine chews on a rope where the saliva is collected. This method helps detect PRRS, even with a small number of germs, within a shorter period of time with high accuracy.



Fresh Milling Rice

Khao C.P. Co., Ltd.

This research has created a product that was developed from the concept of differentiating it from normal packaged rice by maintaining a high nutrition value similar to brown rice. One distinguishing feature of the rice is its freshness, as it takes no more than 5 days from the production process to the selling point. Moreover, this milling process enables the rice to remain more than 80% rice germ, resulting in a sweet, fragrant, soft, sticky, and delicious taste.



Purple Sweet Corn with High Level of Anthocyanin

Chia Tai Co., Ltd.

HEALTH

The Company has invested in researching and developing purple sweet corn, the first breed in the world. It is as sweet, aromatic, and soft as ordinary sweet corn. The crucial substance is Anthocynanin, which is twice more effective in antioxidation than Vitamin C and E. It also helps prevent multiple types of cancers. Thus, consumers receive a good and nutritious product.



Cycle of Quality Human Capitals

Chia Tai (China) Investment Co., Ltd. This uses processes and tools to develop personnel in finance and accounting. It enables them to learn and practically work within 7 days, independently, away from mentors or colleagues. The Cycle allows them to rotate every 6 month productively developing them to become experts within 3 years. This helps build human capital to respond to rapid business growth.



Converting Wastes into Biochar for Sustainability

Charoen Pokphand Foods Co. Ltd (Turkey)

The Company has worked on the concept of mixing chicken manure with organic leftovers from the agricultural sector to create bio fuel or "biochar" for its manufacturing plants. The results help reduce environmental impacts for the chicken breeding industry in Turkey, in addition to reducing consumption of charcoal and lignite.



A Professional One-Stop-Service Tool for Retail Shop Management

Siam Makro Public Co. Ltd.

This research is a tool for professional retail shop management. It consolidates knowledge and good practices, serving as solutions for grocery shop owners and retailers. This enhances their productivity, supports their business, and increases income for SMEs in the country.

Promoting Innovation through Research and Development

products and services that can respond to customers' demands, amidst the economic, social, and environmental changes such as climate change, an aging society, and technological changes.

We have constantly invested in research and development In 2017, our overall R&D investments accounted for over 12,223 (R&D) in order to drive forward the Group's foundation into million Baht, with 5,388 personnel in R&D positions. Located becoming an innovative organization. It also allows us to develop around the world, our 52 R&D centers and research stations focus on different aspects of product development, ranging from seeds, animal breeds, animal feeds, and human foods, to medicine. The accumulated number of patents and petty patents as of 2017 was 866.

Key Performance in 2017



Research and development spending accounted for

> 12.223 million Baht



Research and Development positions accounted for

> 5.388 personnel



Accumulated number of patents and petty patents as of 2017 was

> 866 patents



Number of research and development centers/ research stations was

centers





CASE STUDY 33

Industrial Agriculture and Food Business Group

A Seminar to Promote Agri-Food Research of Charoen Pokphand Group

Following our strategy to excel in research and development, on February 9-10, 2017, and exchange knowledge and experience at the C.P. Leadership Institute, the Group launched our first seminar to promote research. There were over 200 participants, including 150 researchers from different Business Groups and 50 executives. The seminar's primary focus was on agri-food research. The objectives of this seminar were to:

- Allow the Group's researchers to meet, to create a community of researchers.
- Allow researchers and executives to be informed about the future research direction from globally renowned speakers.
- Allow participants to be informed about the research vision of Mr. Dhanin Chearavanont, Senior President, and other executives in order to brainstorm effective responses to our strategy.





Innovation 199

CASE STUDY 34

Seeds, Fertilizers, and Plant Protection Products Business Group

Horticulture Research and Development: The Start of Quality Food

Project Background:

Climate change has significantly impacted food crop plantation and effective crop development and a food security. Consequently, consumers plantation system to ensure quality have paid more attention to their health and well-being. On the other hand, there is the urgent issue of insufficient labor in the agricultural sector of the country.

identified preventive and corrective measures to substantially address this issue.

Performance:

Chia Tai has highly emphasized and sufficient produce in response to the constantly increasing global population. The focus is on developing good, quality, and chemical-free crop breeds with high nutrition. Furthermore, Chia Tai prioritizes increasing produce As a result, Chia Tai Co., Ltd. has value, and applies Precision Agriculture, Smart Farming, Artificial Intelligence (AI), and Robotic System models for sustainable food security.





Results and Benefits



Developed safe crop breeds



Increased food security



Improved the quality of life for farmers



Conserved the environment

"Genetic technology, Artificial Intelligence, and robots will change the future of agriculture. Everything is systematically controlled and managed, strengthening security and sustainability to the nation, people, and the Group. "



Mr. Manas Chiaravanond Chief Executive Officer, Chia Tai Co., Ltd.

CASE STUDY 35

HEALTH

Integrated Crop Business Group

Crop Research and Development Center



Crop Operation Room, Phra Nakhon Si Avutthava Province

Project Background:

Challenges in agricultural community vary, particularly maize farming for animal feed, from the quality of the seeds and concerns about Genetically Modified Organisms (GMOs), to the use of chemicals. These issues erode the trust of consumers and food security. Charoen Pokphand Produce Co., Ltd. focuses on research and development and enhancing farmers' knowledge in order to establish greater food security in Thailand and abroad.

Performance:

Charoen Pokphand Produce Co., Ltd. produces and distributes maize for animal feed. The Company emphasizes research and development to ensure food security, and also conducts R&D at Biotechnology Center and Bioinformatics Center. Furthermore, the Company is a knowledge center for crop and crop nutrition research in agricultural innovation that helps strengthen food security and improve farmers' quality of life.

"Create benefits for the agricultural community through building innovation. This will enhance advancement, and food crop and energy crop security."



Mr. Sayan Hongsa Chief Operating Offer, Charoen Pokphand Produce Co., Ltd.



Results and Benefits

0ver 680,000 farmer families

in 12 countries have had secure income by cultivating maize, using the seeds and nutrition information from the Company

Over 10 million tons of maize were cultivated

Agro-Industry and Food **Business Group**

Animal Feed Research and Development Center



Project Background:

One of the challenges that animal feed research has had to face is the effect of climate change on raw feed material, which in turn affects raw material quantity, quality, and price volatility. Another challenge is food security, where unsafe animal feed with chemical residues has a consequential effect on meat products, and ultimately consumers. This issue constantly draws much attention from consumers. Moreover, in various trade partner countries, related laws have been put in place including one that requires that food be free from toxins, germs, antibiotics, and other undesirable contaminants.

Performance:

Our Animal Feed Research Office has studied and conducted research on animals' nutritional needs appropriate for yields. This will be used to set a suitable value in different feed formulae. to use raw materials efficiently, and to estimate the benefits of using raw material with different animals in order to set the accurate amount of nutrition in different feed formulae. Moreover, the Office utilizes modern laboratories to monitor and screen quality raw materials, which are free from contaminants and toxins from fungi and germs. Research has been undertaken on the health of animals that do not use antibiotics. Efficient animal health-boosting supplements such as Prebiotics and Probiotics have been used to ensure safe produce.

"Presently, the animal feed production business must consider social and environmental responsibility, in addition to consumers' safety."



Mrs. Phatanee Leksrisompong Executive Vice President Animal Feed Research Office Charoen Pokphand Group Co., Ltd.



Results and Benefits



Obtained suitable animal feed with genetics



Increased production efficiency



Established as environmentally -friendly

CASE STUDY 37

HEALTH

Agro-Industry and Food Business Group

Research and Development Center for Animal Feed, Aquatic Animal Feed, Farming, and Health



Project Background:

As the global population grows, the demand for food grows accordingly, creating an opportunity for aquaculture businesses to expand to different countries around the world. Furthermore. businesses must recognize the importance of safe, quality, antibiotic-free, and traceable farming. Climate change is also a significant factor that affects the health of aguatic animals and the quantity of raw materials used for animal feed. Emerging diseases in aquatic animals, such as Early Mortality Syndrome (EMS) in whiteleg shrimp and microsporidia, can cause significant damage to the global shrimp industry, and there is always the likelihood of new diseases emerging.

Performance:

The Center has developed a shrimp farming method by combing technology and biology, resulting in a biofloc system that controls water quality and reduces the amount of water consumed. Other development includes shrimp farming in a closed and automatic system, vaccines and Probiotics for disease prevention, and molecular substances to enhance strength and growth. In addition to technology for disease detection, the Center has developed aquatic animal breeds, including black tiger shrimp, whiteleg shrimp, freshwater fish such as tilapia and red tilapia, and seawater fish such as seabass.

"The Company is determined to develop good and talented people to build innovation, which leads to sustainable profitability. Environmentally-friendly business operations must also be taken into consideration."



Dr. Sujint Thammasart, D.V.M. Chief Operating Officer - Aquaculture Business Charoen Pokphand Foods Public Co., Ltd.



Results and Benefits



Reduced water consumption



Developed biomolecular substance and production technology



Improved quality of aquaculture



HEALTH

CASE STUDY 38

Agro-Industry and Food **Business Group**

CPF Food Research and Development Center





Results and Benefits



Produced healthy food in accordance with CPF Healthier **Choice Principles** for a better quality of life



Produced food for elders and medical patients, ensuring a happy aging society

Project Background:

Countries around the world are becoming aging societies. This 2021 20% of population will be over likelihood of Non-Communicable Diseases (NCDs), leading to consumers tending to become more health health-conscious consumers are challenges that businesses must acknowledge. Therefore, they must create innovative food products that are safe and of high quality, and are life. also able to satisfy the changing consumers' needs.

Performance:

CPF focuses on food research and development through CPF Healthier includes Thailand, a society where in Choice Principles. The aim is to create food innovation for health-conscious 65 years old. Concurrently, present individuals by reducing sugar, salt, lifestyles may also increase the and fat to help reduce the risk of obesity and NCDs. Consumers can also enjoy food with excellent taste and great nutritional value. Simultaneously, conscious. An aging society and there is a collaboration effort with medical and nutritionist teams to produce food for elders and medical patients. This will be beneficial for health recovery and a good quality of

"Having food as medicine is better than having medicine as food."



Mr. Sukhawat Dansermsuk Chief Executive Officer - Food Business and Co-President Charoen Pokphand Foods Public Co., Ltd.

CASE STUDY 39

Retail and Distribution **Business Group**

CPRAM Food Research and Development Center



Project Background:

People's lifestyles and social norms change constantly around the globe. This means consumers' needs for food will change accordingly. Furthermore, climate change causes instability in agricultural raw materials, and has an ecological impact on food production. These challenges have established the need for even more in-depth research and development, as well as collaboration from all relevant sectors, including producers in upstream of the supply chain, and consumers in the downstream.

Performance:

Two different parties have carried out CPRAM research and development. The first party is the Center for Fundamental and Applied Bio-Technological Research where research is conducted by internal and external scientists. The second party involves the centers of innovative products that are located in different manufacturing plants across Thailand. These centers further develop knowledge and technology gained from the first party through collaboration between food scientists and chefs to create products that can accurately address the needs of consumers.

"Food is crucial to all lives. Quality food enables quality lives. Therefore, we continuously invest in food research and development to create technology and innovation."



Mr. Wisade Wisidwinyoo President CPRAM Company Limited



Results and Benefits



The Center for Fundamental and Applied Bio-Technological Research produced patented products



Collaborated with strategic business partners to produce products in response to consumers' needs



Pharmaceutical Business Group

Center for Research and Development of Medicine and Pharmaceuticals in China



Project Background:

To increase the level of competitiveness sustainably, the Business Group realizes the significance of R&D in medicine and pharmaceuticals that can meet the market demand and benefit humanity. The emphasis remains on results. It has devised strategies being certified as a Good Manufacturing Practice (GMP) from the Food and Drug Administration, as well as providing various types of healthy food under Intelligence, and Research and Financial the supervision and control of the Technology. This will consistently China Food and Drug Administration.



Performance:

The Business Group has collaborated with national and international leading pharmaceutical institutions and corporations to develop and commercialize various research regarding healthcare development using modern technology and innovation, including Big Data, Artificial increase production efficiency.



Results and Benefits

Worked with over **2,900**

researchers and developers

Ranked in the

Fabulous 50

of Forbes Asia

Developed over

592 patents







Innovation 207

Promoting Open Innovation

new knowledge and concepts from internal personnel, but it also acquires new knowledge and concepts from external parties. We also aim to create an ecosystem supportive of start-ups to enable innovative businesses

Not only does innovation development at C.P. Group involve In addition to our overall key performance, the Group is also determined to become an innovative organization at an international level. We have developed innovation both nationally and internationally. The key performance details are as follows

CASE STUDY 41

Telecommunications **Business Group**



True Incube: Ecosystem Supportive to Start-ups, to enable Innovative Businesses

Project Background:

Nowadays, technology plays a major role in our lives. Businesses can apply technology to differentiate themselves from others. True Corporation recognizes that if Thai entrepreneurs have technological knowledge and apply it to their businesses, the country's economy will advance. Therefore, the True Incube Project was founded in 2013.

Concept

Performance:

True Incube, an incubating program for Thai entrepreneurs working in the technology field, provides opportunities for individuals to realize their business dreams. True Incube aims to create an integrated ecosystem that supports start-ups, to enable innovative businesses at a regional level. The objective is to help Thailand become the lead integrated one-stop-service provider for ASEAN startups through activities under the 4I Concept.

• **Inspire** Activities to create inspiration

• **Innovate** Activities to promote innovation

Incube

Activities to incubate innovation

Invest

Activities to raise funds for innovation





Results and Benefits

Provided 29 training programs

over **5,000** individuals participated

35 startups entrepreneurs became partners with True

HEALTH

CASE STUDY 42

Agro-Industry and Food **Business Group**

Developing Solutions to Early Mortality Syndrome (EMS) in Whiteleg Shrimp through Micro-organism Research



Project Background:

Early Mortality Syndrome (EMS) is a disease that damages the liver and pancreas in shrimp, which likely to cause death within two to three days. The death rate is 100 percent. It is a well-known disease in the aquaculture sector in Asia, and has caused major damage since it was first spread throughout the region in 2010, and into Thailand in 2012. EMS halved Thailand's shrimp production from 500,000 Tons in 2012 to 230,000 Tons in 2014, impacting shrimp farmers significantly. Even though in the past 2-3 years the situation has improved due to farm adjustment and better farm management, the shrimp production as of 2017 remained at 300,000 Tons.

Performance:

The Group's researchers in the aquaculture business collaborated in fundamental research with the team of Prof. John Mekalanos. Head of Department of Microbiology and Immunobiology, Harvard Medical School. The in-depth research studied the genetic and molecular levels of Vibrio Parahaemolyticus disease, which is the cause of EMS. This led to the unprecedented discovery of a bacteriophage that can prevent EMS in the shrimp's natural habitat. The research itself will soon be published in a research journal.





Results and Benefits



Micro-organisms can prevent EMS in shrimp, and are safe to consumers



Exchanged knowledge and technology, and sent research teams to collaborate with Harvard Medical School



LIVING TOGETHER



A healthy environment, teeming with natural resources, is the source of all food and sustenance for all living beings, which allows them to co-exist in harmony. It is our responsibility to conserve and protect these natural resources for future generations. C.P. Group is deeply aware of the importance of environmental management and we invest a great deal of effort in managing the environmental impacts that may result from business operations across our supply chain. Examples of our dedication include climate change management, energy and

water resource use efficiency, waste reduction, and biodiversity and ecosystem protection. These endeavors ensure that the environment remain a home for all living beings, a source for learning, and ecosystem services. As a provider of ecosystem services, the environment provides raw materials for manufacturing, is the starting point of the food chain, and by embodying intangible benefits, is invaluable to society and culture.



Climate Change Management



Water Stewardship



Ecosystem & Biodiversity Protection



Responsible Supply Chain Management

CLIMATE CHANGE **MANAGEMENT**





























Key Performance in 2017



Reduced greenhouse gas emissions per unit of revenue

by **2.21%**



Increased share of renewable energy consumption to

9.05%



Reduced total waste per revenue

compared to the 2015 baseline

Challenges

During the past year, at the One Planet Summit in Paris that coincided with the second anniversary of the Paris Climate Change Agreement, parties revamped their climate approaches to align with the Paris Agreement and the Sustainable Development Goals. In addition, public and private financial institutions announced their commitment to providing financial support to mitigate climate change impacts. Institutional investors declared that they would expand measures to pressure more than 100 of the world's largest corporations to focus more of their attention on global warming, reducing their greenhouse gas emissions, revising their management approaches to encourage their board of directors to be more responsible for climate change, and disclosing their financial impacts from climate change as per the criteria of the Task Force on Climate-related Financial Disclosures (TCFD). C.P. Group, with 13 Business Groups in 21 countries and economies, is aware of the increasing expectations that are a result of this global challenge. At the same time, however, we realize that there are opportunities that arise from this challenge, and they serve as a constant incentive for organizational development and sustainable growth. Therefore, to meet this challenge, the Group is not only focused on improving operational efficiency, but is also focused on integrating climate change into our vision to create sustainable long-term value for the organization.

Performance against Goal

2020 Goal (Thailand)

Reduce greenhouse gas emissions (Scopes 1 and 2) per revenue by 10% by 2020, compared to the 2015 baseline.

	2016	2017	Goa 2020
Greenhouse gas emissions intensity (ton CO ₂ e per THB million of revenue)	2.67	2.58	2.39
Greenhouse gas emissions reduction per revenue	+2.58%	-3.37%	-10%

Progress in 2017

- Initiated a recommendation plan to reduce greenhouse gas emissions
- Assessed climate-related risks and opportunities according to the criteria of the Task Force on Climate-related Financial Disclosures (TCFD)
- Promoted renewable energy use
- Promoted the development and design of green building projects
- · Waste management

Management Approach

across our entire value chain. We achieve this through the analysis as specified by the Task Force on Climate-Related collaborative efforts and commitments of companies within C.P. Financial Disclosures (TCFD). Climate change management Group, and through external partnerships with business partners efforts at C.P. Group are guided by our prioritized focus on and suppliers in order to create synergy in our approach. The reducing greenhouse gas emissions from all work processes, Group adheres to the approach set out by the Caring for Climate in all businesses, and in all countries in which we invest. Our

C.P. Group is dedicated to managing climate change impacts climate-related risks and opportunities to conduct a scenario Initiative of the UN Global Compact, and has begun identifying approach to climate change management is illustrated below.

Climate Change Management Framework

- · Sustainability report
- Communication on Progress to the **UN Global Compact**
- CDP Climate Change Disclosure

• Responsible engagement to mitigate the impacts of climate change throughout the supply chain

- Energy consumption
- Greenhouse gas emissions (Scopes 1, 2, 3)
- · Amount of waste
- Results of collaborative initiatives with suppliers and partners



- Physical risks
- Technology
- Market Policy and legal
- Reputation
- Resource efficiency
- · Products and services
- · Energy source

IMPLEMENT

- Enhance energy efficiency
- Develop renewable energy
- Waste management
- Develop green logistics
- Protect, conserve, restore forests and green areas
- Promote sustainable agriculture
- Promote the protection against, and mitigation of climate change impacts

By 2020, reduce greenhouse gas emissions per unit of revenue by 10%, compared to the 2015 baseline.

- Green economy based on the C.P. Excellence
- Climate change management in alignment with C.P. Group's Policy on Environmental Sustainability

Climate Change Roadmap

Agriculture



Appropriate use of fertilizer on agricultural land

Carbon capture

Renewable Energy Development



Geothermal Wind power energy

Solar power

Biomass fuels

Alternative Energy Development



Biogas from swine manure

<u>† † † †</u>

HOME

Heat generation using biogas from waste treatment systems

Compressed

bio-methane gas

Biodiesel

Increasing Energy Efficiency



Heating systems



Electric motor systems

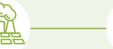


Air conditioning and cooling systems



Lighting systems

Managing Waste, Sewage, and Residual Waste



Combined electricity and heat generation system



Waste heat recovery



soil amendments from organic waste



Using methane generated from organic waste fermentation



Producing fertilizer/

Type

Climate-related Risks and Potential Financial Impacts

Climate-related Risk

Potential Financial Impact

Policy and Legal

Policies and regulations at the international and national levels, as well as various measures aimed at controlling overall greenhouse gas emissions in line with the requirements of the United Nations. Examples include carbon tax and emissions trading schemes.

Technology

Newly emerging technologies that support climate change management, and may impact current approaches to marketing.

Transition Risks

Physical

Risks

Market

Policies or investments in low-carbon businesses or products that could reduce the demand for products or commodities that produce high carbon emissions, and alternatively, increase the demand for low-carbon and environmentally-friendly products. Examples of market transitions include energy businesses that have increased their focus on renewable energy to replace fossil fuel-based energy.

Reputation

Increased expectations from stakeholders such as investors, financial lending institutions, and consumers, which could result in the risk of decreased confidence in the overall operations of the organization should it fail to have a robust climate change management approach in place.

- Increased operating costs resulting from mandatory climate change regulations
- Potential stall in operations due to pending license approvals or business interruptions resulting from regulations
- Maintaining operational licenses or social licenses to operate
- Concerns regarding roles and climate change liabilitie
- Decreased business opportunities
- · Decreased revenue
- Increased operational costs
- · Impacts on revenue

· Reduced revenue, reputation, and brand value

Acute

Natural disasters resulting from climate change, such as increased severity of extreme weather events, high levels of rainfall leading to flooding, drought and higher temperatures leading to wildfires, and the potential for the spread of epidemics across wider areas. All of these natural disasters could impact business operations.

Chronic

Examples include: rising sea levels, increased coastal erosion, and drought resulting from temperature rise, high temperatures impacting human mortality and the spread of infectious diseases among both plants and animals. These risks could potentially impact the business value chain by reducing the available arable land for agriculture, lowering yields, and impacting product manufacturing and consumption.

· Increased costs of raw materials, increased operating costs, decreased revenue, decreased asset value, and increased insurance premiums

• Business interruptions or damage - both in manufacturing processes and across the value chain - which may impact the value of assets and result in higher insurance premiums

Climate-related Opportunities and Potential Financial Impacts

Climate-related Opportunity Potential Financial Impact Type

Development of technologies for energy storage and increasing utilization of renewable energy

More efficient renewable energy use and the availability of diverse energy sources for manufacturing.

· Reduced energy costs

Changing markets and consumer behaviors that prioritize more environmentally-friendly products and services, and that respond to climate change adaptation needs

Opportunities in developing low-carbon products and services for the market in order to respond to the changing needs of the market and of consumers. Such opportunities align with climate change trends and will create and strengthen competitiveness.

 Reputational opportunities and increased brand value

"TCFD is a leading framework which has close relationship with existing standards or metrics such as CDP, CDSB, SASB and IRC etc. Therefore. it is a very important challenge for multi-national companies to fulfill the recommendations of the TCFD based on the company's unified policy.

The most critical point of the policy is to include the appropriate business plan considering how to hedge the risks and use the chance of climate change for the development of company's business as well as help understanding of the investors. In other words, the multi-national companies should make efficient use of the TCFD for the better business development and contribution to the sustainable development."



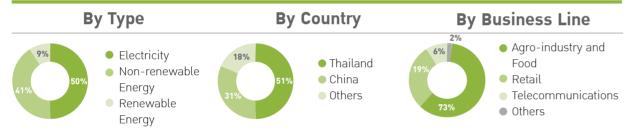
Dr. Kazuhito Yamada President, Green Pacific Co., Ltd. Expert of Climate Change and Task Force on Climate-related Financial Disclosures (TCFD)

Climate Change Management Data

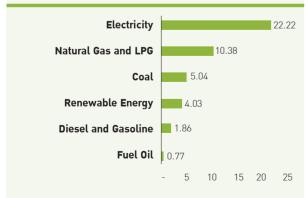
Total Energy Consumption

Performance Total Energy Consumption 2017 (million Gigajoules) million Gigajoules Gigajoule per THB million **Total Energy** 22.71 21.42 21.53 Consumption Energy Thailand 22.37 Intensity China Others 7.45 Share of Renewable **Energy Consumption** 2015 2016 2017 THAILAND

Energy Consumption in 2017

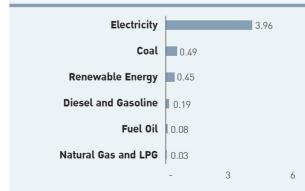


Energy Consumption by Source (million Gigajoules)



Greenhouse Gas Emissions by Source

(million tons carbon dioxide equivalent)



Greenhouse Gas Emissions

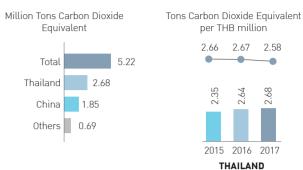
Performance 2017

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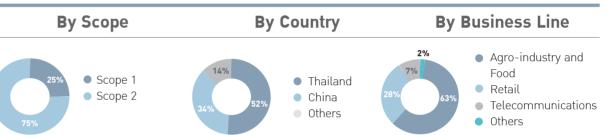
Total Greenhouse Gas Emissions

(million tons carbon dioxide equivalent)





Greenhouse Gas Emissions in 2017



Status of SDG Achievement as evaluated in the SDG Index and Dashboards Report, 2017

				Southeast Asia							South and West Asia					Europe and North America				
	Thailand	China	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Vietnam	Bangladesh	India	Pakistan	Turkey	Sri Lanka	Belgium	Poland	Russia	United Kingdom	United States
Access to electricity			•	•	•	•	•	•			•	•	•		•	•	•	•	•	•
Access to non-solid fuels	•	•	•	•	•		•	•		•	•	•	•		•					•
Share of renewable energy in final energy consumption		•				•	•		•		•	•	•	•	•	•	•	•	•	•
CO2 emissions from energy per capita	•	•				•	•		•		•	•	•	•	•	•	•	•	•	•
Climate Change Vulnerability Index	•	•	•		•		•	•		•	•	•	•		•	•	•	•	•	

Improving Energy Efficiency

including economic, social and environmental aspects. C.P. in Thailand and has also been expanded to overseas businesses. Group recognizes the importance of energy efficiency, and in We regularly maintain and update our machinery and equipment, 2004 we began to initiate energy efficiency improvement while developing more efficient work processes, resulting in projects. We have established a target to conserve energy by significant reduction in energy use. 20% at the Group level without impacting business operations.

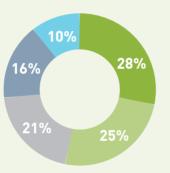
Energy is a critical factor in all aspects of a business operations, Energy conservation has been carried out in all Business Groups

CASE STUDY 43

Charoen Pokphand Group



High-efficiency water chiller systems have been installed at Bang Nam Prieo Distribution Center (DC) of Charoen Pokphand Foods PLC in Chachoengsao



- C.P. Group has focused on making production processes more efficient to reduce our energy use. In 2017, 215 energy projects were initiated by every Business Group, both in Thailand and overseas. The projects concentrated on electricity, thermal energy, and greenhouse gas emissions reduction to improve efficiency in our domestic and international manufacturing plants. The projects saved 450,795 Gigajoules (GJ) of energy or 234,789 tons carbon dioxide equivalent (tons CO_e).
- Heating systems
- Air conditioning and cooling systems
- Electricity and lighting systems
- Electric motor systems
- Others

Year	Number of Projects	Energy Saving (GJ)	Reduced GHG Emissions (ton CO ₂ e)	Cost Saving (THB)
2017	215	450,795	234,789	412,965,446

Promoting Renewable Energy Use

C.P. Group continues to promote renewable energy use to The Group promotes renewable energy use by implementing replace fossil fuels in our product processes, services, and renewable energy projects that are appropriate for each of our property management. Our principles on energy management follow the ISO 50001 Standard, which is an international energy world. standard on management systems.

HOME

operations in Thailand, as well as in other countries around the

Utilizing renewable energy to reduce fossil fuel-based energy consumption, and greenhouse gas emissions reduction in 2017



857,682 GJ 619,597 tons CO e **Biogas**



235 GJ 37 tons CO e **Electricity generated** from solar energy



3,155,437 GJ 257,429 tons CO e **Biomass**



6,480 GJ 1,733 tons CO e Water heated from solar energy



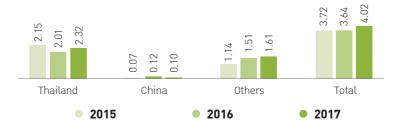
3,787 GJ 269 tons CO e **Biofuel**



879,065 tons CO_e **Total Renewable Energy Consumption**

4,023,621 GJ

Renewable Energy Consumption (million Gigajoules)



CASE STUDY 44

Agro-Industry and Food **Business Group**

Supporting Low-Carbon Businesses

Swine Farming and Integrated Crop Cultivation Project, Inner Mongolia

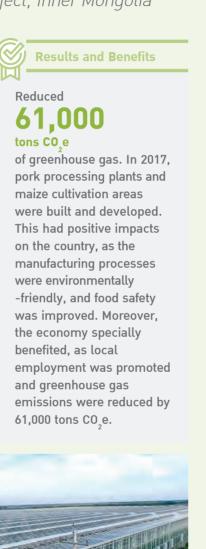


Project Background:

The People's Republic of China (PRC) has a policy to improve the quality of life for people living in remote areas by supporting sustainable agriculture. Meanwhile, swine farming has been expanded to Inner Mongolia Province, the northern region in China. Moreover, China's Ministry of Agriculture also has a policy to support organic fertilizer for cultivation and to increase taxation on traditional livestock. Following these policies, C.P. Group initiated a to consumers, materials left over after project for a pork processing plant in use and disposal will be reused/ Inner Mongolia aimed at processing pork from 1 million heads per year during the 2016 and 2020 pilot period.

Performance:

In developing such a project, the Group adheres to sustainability principles by implementing the project based on the "Fully Closed-Loop Eco-Recycling Model." The Model promotes zero waste, drives the economy through renewable energy, focuses on production efficiency, and reflects true raw material costs. When raw materials are entered into the manufacturing process and distributed redistributed or re-manufactured/ recycled. This is to replenish natural resources, reduce negative impacts, and increase positive impacts on the economy.

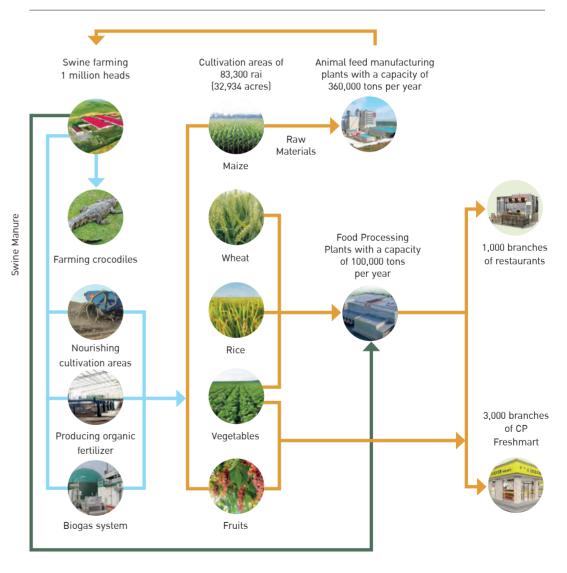






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Fully Closed-Loop Eco-Recycling Model in the Agro-industry and **Food Sector**



Promoting Green Building Development and Design

To promote energy savings in buildings, the Group emphasizes that they are appropriate to the surroundings; using natural on the following considerations: choosing a building location ventilation methods by positioning the building perpendicular to that aligns with the natural direction of the sun and prevailing wind directions; implementing energy conservation projects; winds; selecting building materials that conserve energy; and setting targets for employees to increase their awareness designing efficient roofs; using natural light in the building, of energy conservation and their support in achieving the

controlling air leakages, and planning land use patterns to ensure organization's energy consumption reduction target.

CASE STUDY 45

Charoen Pokphand Group C.P. Group pays particular attention to energy saving building design as shown by our achievement of being certified with the Leadership in Energy & Environmental Design (LEED) Program, the most credible international green building standard, by the U.S. Green Building Council (USGBC).



Charoen Pokphand Foods PLC

Bang Nam Prieo Distribution Center certified with Gold Class for New Construction on 28 August 2015.



CP All PLC

Mahachai Distribution Center certified with Gold Class for New Construction on 8 January 2015.



CP All PLC

Chonburi Distribution Center certified with Gold Class for New Construction on 26 December 2017.



Charoen Pokphand Co., Ltd. C.P. Leadership Institute

registered for New Construction certification on 13 December 2011.



True Corporation PLC Whizdom 101 Project

registered for New Construction certification on 10 October 2016.



CPRAM Co., Ltd.

Bo Ngen Plant

registered for New Construction certification on 12 May 2017.

HOME

Charoen Pokphand Group



Project Background:

The True Digital Park Project was developed by Magnolia Quality Development Corporation Limited (MQDC) in the area of the Whizdom 101 Project, in order to be Thailand's first and Asia's largest digital innovation center. The project involved designing an energy saving building. The design took into consideration many aspects including:

- utilization of a chilled-water-based district cooling system that helps reduce electrical transformer capacity requirement by 25-30%, as well as space requirement for electrical system components by 30%. This also helps lower greenhouse gas emissions, noise and heat pollution, and electricity consumption;
- using alternative energy such as energy generated from a solar roof;

- generating energy within the Pavagen area located by the entrance to the building, which produces electricity at 5 Watts per walking step walk; and
- promoting the use of environmentallyfriendly vehicles and non-motorized transportation.

Green areas allocation within the project area covered up to 32%. Environmentally-friendly building materials were also used in the project. Moreover, trees were planted around the project area to reduce heat, and water resources were carefully managed to reduce greenhouse gas emissions from municipal water production.



Results and Benefits

Saved energy up to

30%

Reduced CO emissions by

15,000 tons per year

equivalent to CO emissions from 3.000

vehicles

Waste Management

The Group prioritizes waste management across our entire value chain and across all of our businesses. Our approach centers on reducing the amount of waste at its sources, recycling waste, recovering and utilizing organic waste for other benefits, and encouraging customers to consider the importance of waste management.



- Using rice husks and leftover agricultural materials as flooring for chicken farms and as biomass for the industrial sector
- Using leftover agricultural waste products as organic fertilizer
- Using leftover corn pieces and corncobs as biomass for the industrial sector



Animal Feed

- · Reducing the amount of corncob dust disposed of by reducing dispersion, using supplementary raw materials to produce plastic packaging, and reusing lubricating oils as fuel
- · Using ash to produce organic fertilizer and flooring mats, and as material to grow plant seedlings
- Using raw material dust as fuel
- · Transporting raw materials using a bulk track model to reduce the use of big bags or sacks



- Reducing the volume of plastic bags in convenience stores and using biodegradable plastic packaging
- · Recycling plastic and paper packaging
- Reducing food waste by lowering prices and using the remaining waste to produce Effective Micro-organisms and soil amendments



Animal Husbandry

- Producing biogas from swine manure and wastewater from animal husbandry into biogas, producing organic fertilizer from treated sludge, and watering plants with treated wastewater
- Using chicken manure and egg shells to produce briquettes (fuel) and organic fertilizer
- · Using shrimp parts as raw materials in animal feed production
- · Reducing the amount of Styrofoam packaging and plastic bags used in transporting shrimp larvae



Food Production

- Reducing Poly Terephthalate (PET) packaging and replacing it with Polylactic Acid (PLA), which is produced from plants and is biodegradable
- · Reducing food loss from manufacturing processes by changing methods of product cutting
- Using sludge from wastewater treatment systems as fuel
- Using food waste from cafeterias to produce biogas for reuse in the cafeterias
- Adding value and reducing waste from animal blood by extracting protein for further us



- · Reducing paper use in offices and for customers (via e-Billing)
- · Changing food packaging to biodegradable alternatives
- Transforming waste from cafeterias and retail stores into Effective Micro-organisms

Waste

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Performance

2017

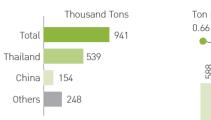
Total Waste

Waste Intensity



Share of Waste Recycled/Reused 10.26%

ton per THB million of revenue

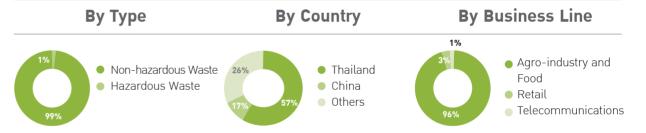




Total Waste

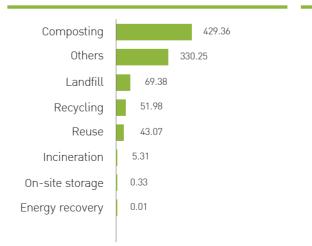
(thousand Tons)

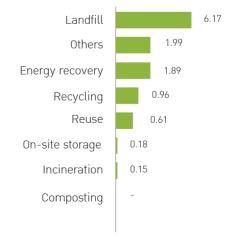




Non-hazardous Waste by Disposal Method (thousand tons)

Hazardous Waste by Disposal Method (thousand tons)





WATER STEWARDSHIP ()















Water Stewardship 227

Key Performance in 2017



Recycled / reused water

by 11.6%



Conducted water risk assessment in all water-stressed areas

[100%]



Reduced water withdrawal per unit of revenue by

23.07% compared to the 2015 baseline

Challenges

People's livelihood and business operations depend heavily on water resources. At present, water resource management problems can be seen around the world, due to intensifying impacts of climate change, including flood, drought, and access to clean water. These affect economic development capability and the quality of life for all people. Population growth, urbanization, and other factors also increase water consumption, especially in the agricultural sector where the water consumption rate accounts for 70% of the total water consumption. Moreover, the World Bank has projected that global population is likely to reach 9 billion by 2050, which will increase water consumption for agriculture and food production by 60%, and water withdrawals by 15%. Therefore, integrated water resource management is vital for enhancing the economic security of the nation.

C.P. Group, as a global conglomerate operating in over 21 countries and economic areas, and having agro-industrial business as one of the core businesses, realizes the challenges and importance of water resource management throughout the supply chain. We regard water stewardship as one of our sustainability strategies, and set a strategic goal to reduce water withdrawal per unit of revenue by 10% by 2020, compared to the 2015 baseline. In recent years, we have conducted a water risk assessment in Thailand and other places around the world where water shortages could impact the core businesses of the Group. We fully recognize our responsibility to society by increasing the efficiency of water consumption, supporting water stewardship throughout the entire supply chain, and substantially driving our business toward sustainability by considering the benefits to the organization, society, and country.

Performance against Goal

2020 Goal (Thailand)

Reduce water withdrawal per unit of revenue by 10%, compared to the 2015 baseline.

	2016	2017	Goal 2020
Water withdrawal per unit of revenue (cubic meter per THB million)	204	180	211
Amount of reduced water withdrawal	-13%	-23%	-10%

Progress in 2017

- Assessed integrated water risks
- Developed database for water resource management in all countries
- · Promoted access to clean water, sanitation, and hygiene for employees and communities
- Managed wastewater in a sustainable
- Promoted circular water management
- · Promoted community access to water
- Invested in natural infrastructure

Management **Approach**

C.P. Group has commenced water stewardship in accordance with the CEO Water Mandate guidelines that are a part of the UN Global Compact and the water stewardship policy that is aligned with the Group's Policy on Environmental Sustainability. In addition, we have developed the water stewardship management framework as a guideline for water management in order to achieve our strategic goal. This includes assessing

risks from water shortages, promoting circular water management, promoting Water-smart Agriculture, investing in natural infrastructure, and engaging responsibly with our stakeholders. We also pay attention to transparent disclosure of water management data and performance both in organizational management and in partnership with suppliers, communities, and other stakeholders.

Water Stewardship Management Framework

- Sustainability report
- . Communication on Progress (COP) to the UN Global Compact
- CDP Water Disclosure

· Increase the efficiency of water consumption, and support water resource conservation throughout the entire supply chain

- Amount of water withdrawn from external sources
- Amount of reused/recycled water
- Amount of water discharge
- Level of water-related risks from operations and suppliers
- Number of operations under the Water, Sanitation and Hygiene (WASH) project

Water Stewardship

- · Physical risks from both a quantitative and qualitative viewpoint
- Regulatory risks
- Reputational risks

IMPLEMENT

- · Provide employees with access to Water, Sanitation, and Hygiene (WASH)
- Promote circular water management in accordance with the 5Rs Principle (Reduce, Reuse, Recover, Recycle, and Restorel
- Support suppliers and other stakeholders in their water stewardship
- Promote community access to water resources

- · By 2020, reduce water withdrawal per unit of revenue by 10%, compared to the 2015 baseline
- Green economy management based on the approach of C.P. Excellence
- Water stewardship in alignment with C.P. Group's Policy on Environmental Sustainability

Integrated Water Risk Assessment



C.P. Group conducts water risk management by utilizing an internationally recognized tool to assess water-related risks and water management status of each Business Group. In 2017, the assessment was expanded to overseas operations in order to plan C.P. Group's water management throughout the supply chain.



HOME

We have utilized the WBCSD's Global Water Tool to assess the water scarcity risks within C.P. Group's operations and suppliers in order to identify the number of operations located in water stressed areas, the operations with high water scarcity risks, the amount of production potentially affected by water shortage, the number of suppliers and employees located in water stressed areas. The assessment was conducted in Thailand in 2016 and further expanded to overseas operations in 2017.

AQUEDUCT

We have applied the AQUEDUCT Program developed by the World Resources Institute

(WRI) and collaborated with our alliances to assess and develop a holistic water risk map The map's scope covers physical, regulatory and reputational risks.



CERES AQUA GAUGE

We have used the Ceres Aqua Gauge Program to assess water management status of each Business Group against international benchmarks. This allows us to define and prioritize the comprehensive plans for improving water management that include policies and standards, planning, risk assessment, stakeholder engagement, governance, monitoring and evaluation, and data disclosure.



We have utilized the Local Water Tool (LWT) Program to develop a water management plan for operations in high water scarcity areas, and to train employees in relevant functions.

Data for Water Resource Management

Utilization

Performance in

2017

Water Withdrawal

(million cubic meters)

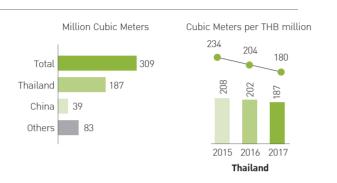
Water Withdrawal
Water Withdrawal
per Unit of Revenue

Proportion of
Recycled /
Reused Water

309.08
million cubic meters

177.03
cubic meters per million Baht

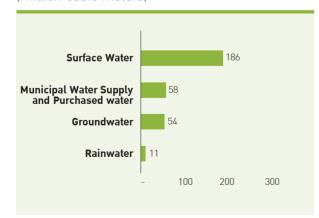
11.06%



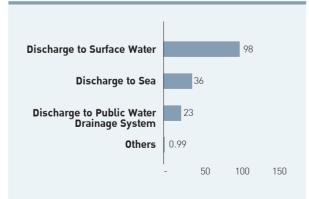
Water Withdrawal in 2017

By Type By Country By Business Line Surface Water Groundwater Groundwater Rainwater Municipal Water and Purchased Water Others By Business Line Agro-Industry and Food China Others

Amount of Water Withdrawal by Source (million cubic meters)



Amount of External Water Discharge by Category [million cubic meters]



The world is facing a water crisis. It is effecting the developed world as much as the developing world – no one is immune from the challenges we face. And, just as we share water, we must work together on the solutions – communities and civil society, governments, and the private sector.

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Action is also required urgently as water stress (e.g. quantity, quality, and infrastructure) is increasing due to 3 main factors:

- 1. An increasing population, especially in urban centers;
- 2. Economic growth with a rising middle class a great development but one that leads to a more resource intensive lifestyle and economy;
- Climate change which manifests primarily in water with rising sea levels and storm surges, more severe droughts and floods, as well as greater unpredictability.

As detailed in their latest Sustainability Report, C.P. Group is responding aggressively to these challenges. First and most importantly, C.P. Group has recognized water stress in its many forms and its potential impact to their business and communities where they operate, quantified the risk through detailed assessments, and established a water stewardship strategy that is integral to their business strategy. Action on water by

C.P. Group is fundamental, not a 'nice to have.' This action is reflected in the goals they have established and the progress they have made, from improving water efficiency in operations and ensuring employee access to safe drinking water, hygiene and sanitation (WASH), to conservation projects in shared watersheds and helping provide WASH to communities in need. C.P. Group is also advocating for good water governance, which is critical for long-term and wide-spread solutions for all.

In addition to continuing to make progress of their established goals, C.P. Group can further mature their water stewardship actions by increasing collective action with other industry who operate alongside C.P. Group in shared water basins, and establishing context-based goals with communities where they operate.



Mr. Greg Koch
Technical Director, ERM

Status of SDG Achievement as evaluated in the SDG Index and Dashboards Report, 2017

					Sou	th E	ast	Asia	ı				uth a						and eric	
	Thailand	China	Cambodia	Indonesia	Laos	Malaysia	Myanmar	Philippines	Singapore	Vietnam	Bangladesh	India	Pakistan	Turkey	Sri Lanka	Belgium	Poland	Russia	United Kingdom	United States
Access to improved water			•	•	•	•	•		•		•			•		•	•		•	•
Access to improved sanitation	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•
Freshwater withdrawal	•	•	•	•	•	•	•	•	•	•	•		•	•	•		•	•	•	•
Imported groundwater depletion	•	•	•	•	•	•	•	•	•	•	•	•	•			•	•	•		•
Wastewater treated	•	•	•		•				•	•	•	•		•	•	•	•			•

Promoting Access to Clean Water, Sanitation, and Hygiene for Employees and Communities





Results and Benefits

The assessment has covered

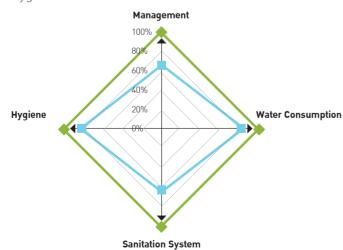
6 countries

The project has benefited over **50.000** employees

Recognizing the importance of workplace health and hygiene, we have launched the Water, Sanitation and Hygiene (WASH) Pilot Project in accordance with guidelines issued by the World Business Council for Sustainable Development (WBCSD), of which we are a member, in order to provide our employees with access to clean water, good sanitation, and hygiene within the workplace. The Project has also been expanded to cover various communities. Since 2015, we have undertaken the WASH Self-Assessment Tool for Business in our domestic operations, aimed at achieving full coverage of all operations by 2019. In addition, we have begun to implement the Project at some of our overseas operations.

WASH Self-Assessment Tool for Business evaluates the following 4 main aspects:

- 1. Management
- 2. Water consumption
- 3. Sanitation system
- 4. Hygiene



CASE STUDY 47

Agro-Indusry And Food **Business Group**

Construction of Groundwater Wells for Communities in Bangladesh



Project Background:

C.P. Group's chicken farming operations in Bangladesh realizes that communities in Bangladesh have been faced with a water shortage crisis. Therefore, the project was initiated to enhance the quality of life through access to clean water for the communities located near the farms.

Performance:

In such places as schools, markets, and mosques, the Group has provided water sources to children and communities in 7 locations situated near the farms. This initiative has helped strengthening the relationship between our farms and surrounding communities.



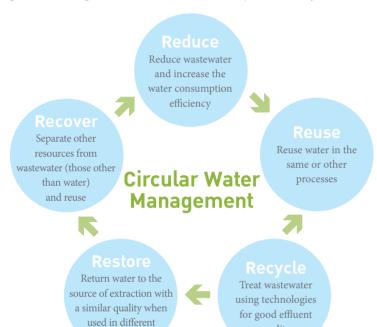
Results and Benefits

7 communities located near the farms have been supported

have benefited

Promoting Circular Water Management

Through various projects, we have implemented the Circular Water Management tool in accordance with the 5Rs Principle (Reduce, Reuse, Recover, Recycle, and Restore) to manage water consumption within the organization. The goal is to increase water consumption efficiency.



Recover



activities

Recycling Sediments from a Wastewater System at a Food **Processing Plants**

Rather than disposing them in a landfill, sediments are recycled as an alternative material for organic fertilizer production.

Restore



Minburi 2 Food Processing Plant Discharging effluent that had a higher quality than water into natural water sources accounted for more than 300.000 cubic meters.

Reduce



Korat Chicken Processing Plant

Replacing the water chiller with an air chiller could reduce the water consumption by 521,472 cubic meters.

Reuse



Aquaculture Businesses in Thailand Reusing water in the aquaculture farming process accounted for approximately 15%, equivalent to over 20 million cubic meters.

Recycle



12 Food Processing Plants in Thailand Reverse Osmosis (RO) for wastewater treatment has been used to reduce water withdrawal. This could reduce water withdrawal by 1,753,839 cubic meters per year.

Sustainable Wastewater Management

Discharge of substandard wastewater from industrial and We aim to make our wastewater management for both domestic agricultural facilities could lead to social and environmental problems as water pollution could affect the aquatic ecology, cause diseases, spread germs, and cause a nuisance to the been improved in several ways including using wastewater to nearby communities.

and overseas farms and factories as effective as possible. To reduce the amount of wastewater, production processes have generate biogas after treatment, and sharing treated wastewater with nearby farmers.

Water Management on Farms



Farms under CPF's operations collect wastewater or manure from wastewater treatment ponds and transfer it to a covered lagoon to generate biogas. The biogas is then used as an alternative fuel to generate electricity on farms. In addition, water passed through the biogas system, which is certified by the Pollution Control Department, is used for plant watering on farms, whereas some of the water is retreated and disinfected before being used as farm cleaning water. This treated water is also suitable for agriculture; therefore, farmers have acquired such water to use on their farms, which helps increase their productivity. This is another method of sharing water with farmers in water stressed areas.

Water Management in Manufacturing Plants



C.P. Group manages effluent from manufacturing plant production processes in accordance with effluent quality standards in each country where we operate. We are committed to minimizing negative impacts on areas outside the plants by allocating financial and human resources to manage this matter. Management measures include designing an efficient wastewater treatment system, installing a monitoring instrument such as an online BOD or COD as required by law, monitoring effluent quality regularly, and submitting monitoring reports to relevant government agencies. Overall, this reduces impacts to the environment and ecosystem.



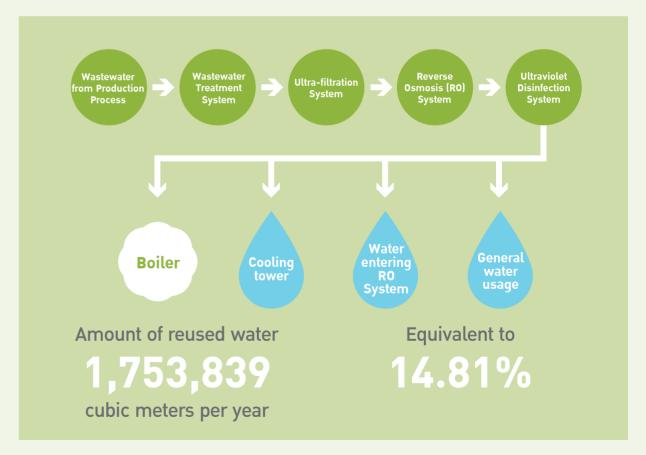
Water Stewardship 237

Reusing Water through Modern Technology

C.P. Group recognizes the severity of water problems caused by industrial operations. These problems may include water scarcity in areas around our manufacturing plants due to their high water consumption, polluted water in public areas, and Monitoring the efficiency of water consumption at these 12 food foul odors from wastewater discharge. Therefore, advanced wastewater treatment systems have been installed at our plants consume 11,839,877 cubic meters of water per year and reuse to resolve these problems. This also includes reusing and 1,753,839 cubic meters of water per year, equivalent to 14.81%. reducing effluent discharge to public waterways. Plants installed

with these wastewater treatment systems include 10 of CPF's plants and two of CPRAM's plants.

production and processing plants showed that these plants



Promoting Community Water Access

It is anticipated that water resources will be severely affected by climate change. Therefore, C.P. Group emphasizes water resource management, as water is considered a public good and access to clean water is a basic human right. Raising awareness of natural resources and environmental conservation to communities, continually developing the water supply, and preventing forest invasion could also improve community access to water.

CASE STUDY 48

Crop Integration **Business Group**

Nature Protected Project



Project Background:

Charoen Pokphand Produce Co., Ltd, a subsidiary of Charoen Pokphand Group, recognizes the deforestation problems in watershed areas in Thailand. Therefore, we initiated the Nature Protected Project to share knowledge and raise awareness about living together with the nature to youths and communities, proactively campaign for well-maintained forests, promote reforestation to recover damaged watershed areas, and improve employment prospects and the quality of life for locals to earn their living from the forests.

Performance:

The project has been carried out by first surveying the area, followed by analyzing and developing the area. This helps us understand the community and to develop water sources for highland agriculture. We have also studied changes and the readiness of communities as a step toward helping them become communities of conservation, and to assess potential impacts from the project on the economy, society, and the environment.



Results and Benefits

Constructed

20 check dams

that allow farmers to use the water for agricultural purposes

Surveyed the area of

10.730 [4.242 Acres]

for preventing forest encroachment, equivalent to 1,510 land plots

Supported seedlings for seedling nurseries



Investing in Natural Infrastructure

One wastewater management method involves the improvement of receiving wastewater bodies using natural processes and mechanisms. C.P. Group has applied WBCSD's Natural Infrastructure concept to our water management, which helps to treat wastewater and to provide benefits to society and communities.

Agro-Industry and Food **Business Group**

Kamphaeng Phet Agricultural **Village Community Forest**



Project Background:

C.P. Group recognizes potential impacts of wastewater discharge from swine farms on the environment. In order to support the new form of swine farms, we have initiated and implemented the "Kamphaeng Phet Agricultural Village Community Forest" Learning Center at a swine farm. Not only does this reduce the environmental impacts from wastewater discharge, but also serves as a learning center for local communities.

Performance:

We have developed the Kamphaena Phet Agricultural Village Community Forest Project by using an ecological forest plantation concept that combines 6 types of community eco-forests within 1 place, and uses treated wastewater mixed with rainwater to water and improve soil in the forest. This leads to water circulation with zero discharge to the environment. The project has been implemented in conjunction

with WBCSD's Natural Infrastructure Promotion Program for water management aimed at promoting investment in natural infrastructure for wastewater treatment purposes. The program makes the investment cost-efficient, reduces enterprise risks, and raises public awareness about its social and environmental benefits.



Results and Benefits

Had zero wastewater discharge

Reduced water and fertilizer consumption

Established a tourist attraction and learning center

ECOSYSTEM & BIODIVERSITY **PROTECTION**





















Key Performance in 2017



100%

of fishmeal and maize for animal feed are sourced from responsible and traceable sources



Collaborated with other parties to reforest the forest-depleted hills in Chao Phraya watershed



Protected the marine and coastal ecosystems in

22 Provinces

Challenges

According to data from the United Nations Environment Programme (UNEP), over 3 billion people rely on marine and coastal biodiversity and over 1.6 billion people rely on forest resources for their livelihoods. However, it is an alarming fact that approximately 45 million Rai (approximately 17 million Acres) of forests have been destroyed each year by human activities. More than 8 million tons of plastic wastes have been dumped into the oceans, which affect the food sources of living organisms, agriculture, and fishery. Therefore, ecosystem and biodiversity protection is essential, and business and industrial sectors should share the responsibility for this protection. Moreover, close monitoring needs to be put in place, including monitoring raw material sourcing processes and product or service provisions for customers. Similar to a water risk assessment, C.P. Group has conducted a biodiversity risk assessment globally, as in the long term the risks could impact our business operations, ecosystems, and natural resources.

Performance against Goal

2020 Goal (Thailand)

100% of key raw materials come from responsible sources without contributing to the depletion of forests and marine resources.

	2016	2017	Goal 2020
Fishmeal	100%	100%	100%
Maize	100%	100%	100%
Soybean	27%	23%	100%
Palm Oil	System under d	evelopment	100%
Cassava	System under d	evelopment	100%

Progress in 2017

- Conducted global biodiversity risk assessment
- Tracked the sources of key raw materials for agriculture and feed mills
- Implemented ecosystem and biodiversity protection measures.
- Supported the sustainable fisheries and aquaculture businesses

Management **Approach**

To protect the ecosystem and biodiversity, C.P. Group has not our business partners and stakeholders in an effort to responsibly only managed our resources and raw materials, but has also source raw materials without causing adverse impacts on prevented the deterioration of, conserved, restored, and natural habitats and ecosystems, such as forests and water developed sources of natural resources. We are committed to sources, by complying with relevant rules, regulations, and developing measures to maintain the balance of the ecosystem standards. This is to maintain the balance and sustainability of and biodiversity by continually assessing the risks and impacts and ecosystems, and to operate in an from our operations. More importantly, we have engaged with environmentally responsible manner.

Ecosystem and Biodiversity Protection Framework

- Sustainability report
- Communication on Progress (COP) to the UN Global Compact
- CDP Forest Disclosure

COMM

- Percentage of key raw materials that meet responsible sourcing standards
- Size and area of protected or restored natural habitats

Ecosystem and Biodiversity **Protection**

· Manage biodiversity and ecosystem services in

order to protect, conserve, and look after our natural

- · Natural Habitat Intactness
- Global Species Richness
- Biome Species Richness
- Threatened Species
- Small-Ranging Species
- · Carbon Stock
- · Water Quantity

Soil Quality

capital responsibly

• Responsible sourcing of key raw materials

- Terrestrial ecosystems
- Marine resources

IMPLEMENT

- 100% of key raw materials are responsibly sourced without depleting terrestrial ecosystems and marine
- Green economy management based on the C.P. Excellence Management Approach
- · Ecosystem and biodiversity protection in alignment with C.P. Group's Policy on Environmental Sustainability

Assessing Biodiversity Risks

HOME

C.P. Group conduct a biodiversity risk assessment in both Thailand and overseas using internationally recognized tools. To achieve the Sustainable Development Goals related to aquatic (both freshwater and saltwater) plants and animals. ecosystem and biodiversity protection, in 2017 we began readiness assessment and track progress activities for sustainable development in each country using the SDG Dashboard. We utilize WBCSD's Global Water Tool (GWT) to

assess biodiversity risks in the different areas where we operate. The GWT is used to assess biodiversity risks of terrestrial and

Status of SDG Achievement as Evaluated in the SDG Index and Dashboards Report. 2017

			Southeast Asia					uth a			Europe and North America									
	Thailand	China	Cambodia	Indonesia	Laos	Malaysia	Myanmar	Philippines	Singapore	Vietnam	Bangladesh	India	Pakistan	Turkey	Sri Lanka	Belgium	Poland	Russia	United Kingdom	United States
Marine sites, mean protected area	•	•	•		•	•	•	•	•				•	•		•	•	•	•	•
Ocean Health Index - Biodiversity		•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	
Ocean Health Index - Clean waters	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
Ocean Health Index - Fisheries	•	•	•	•	•	•	•	•	•		•	•	•		•		•	•	•	•
Fish stocks overexploited or collapsed	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•
Terrestrial sites, mean protected area	•	•		•			•		•			•		•		•	•	•	•	
Freshwater sites, mean protected area					•	•	•		•		•	•		•	•	•	•	•	•	
Red List Index of species survival	•	•	•	•	•	•	•	•		•	•	•			•	•	•	•	•	•
Annual change in forest area	•	•	•	•	•	•	•		•	•		•	•		•	•	•	•	•	•
Imported biodiversity impacts	•	•	•	•	•	•	•		•		•	•	•	•	•	•	•	•	•	•

Criteria: Maintaining SDG achievement

Challenges remain 🌘 Significant challenges remain 🌘 Major challenges remain 🌘 Information unavailable

Traceability of Raw Materials for Animal Feed

Traceability of key raw materials for animal feed is an important mechanism for C.P. Group to manage significant environmental and social risks, especially ecosystem and biodiversity protection. We are committed to complying with regulations, and have registered with the traceability system developed by C.P. Group. Furthermore, our business partners also have to continuously operate in accordance with the traceability system to ensure that raw materials for animal feed come from sources that have a legal title deed and are not from restricted areas or conservation areas. Feed Ingredients Trading Business Group has worked

with stakeholders in the supply chain to enhance their understanding of issues related to raw materials for each animal feed, to develop policies and criteria for sustainable sourcing of animal feed raw materials, to supply raw materials from sources that do not harm the environment, to conduct Life Cycle Assessments in order to understand the environmental impacts caused by each farm, to implement the Maize Traceability Program established in 2016, and to continue implementing these measures.

Progress

Fishmeal 100%

Of fishmeal purchased and used in Thailand since 2015 has come from sources certified with the IFFO Responsible Sourcing (IFFO RS) Standard, which is today's leading international standard for sustainable fishmeal and fish oil production.

Maize 100%

Of maize in Thailand has been purchased under the Maize Traceability Program where maize can be traced back to cultivation areas that have a legal title deed and do not encroach any forest.

Soybean 23.4%

Of soybean used for animal feed production in Thailand has been responsibly sourced from the Sustainable Soybean Meal Sourcing System in collaboration with AG Processing Inc. (AGP), an American large soybean processing cooperative established in 2016.

Cassava

We are in the process of developing a traceability system for cassava. It is expected that the system will be implemented in 2018.

Palm Oil

We are in the process of developing a traceability system for palm oil used in animal feed production. It is expected that the system will be implemented in 2018.

89% of palm oil used in our food businesses has come from sources certified by the Roundtable for Sustainable Palm Oil (RSPO) Standard.

Overseas Road Map

Between 2018 and 2020, C.P. Group plans to expand the traceability system and raw material sourcing from responsible sources to our businesses in relevant countries including Vietnam, China, India, Myanmar, Cambodia, Laos, Bangladesh, Pakistan, the Philippines, and Malaysia.

2018 2019 2020

Traceability of Animal Feed Raw Materials



HOME









Maize

Fishmeal

Soybean

Palm 0il

Cassava

Traceable to Sources













Cultivation Areas/Sources

Farmers/Fishermen

Traders/Primary Product Processors













Promotion of Sustainable Raw Material Manufacturing

C.P. Group's Sustainable Cultivation Standard*





- Regulatory compliance
- Focus on quality and safety
- Traceability
- Trainings
- Agricultural records



Labor Management

- Zero child labor and forced labor
- Fair working hours and compensation
- Occupational health and safety



Environmental Management

- Soil management
- Water sources
- Fertilizers and agricultural chemicals
- Energy consumption
- Waste management



Sustainable fishmeal and fish oil production standard

International

Standard

Remark: * C.P. Group's Sustainable Cultivation Standard is comparable to the Global GAP Standard.

CASE STUDY 50

Seeds. Fertilizers, and Plant Protection Products Business Group

Training Program on Safe Use of Pesticides for Farmers



Preventing Impacts on **Ecosystem and Biodiversity** from Products and Services

We put effort into preventing impacts on ecosystem and biodiversity that potentially arises from our products and services, including chemical residues in the ecosystem that could affect biodiversity. Therefore, we have developed chemical product safety data sheets and promoted the correct and safe usage of products. This ensures customers' safety and maintains ecosystem health and biodiversity.

Project Background:

Use of pesticides is necessary in agriculture. However, improper use of pesticides could harm farmers and affect consumers and the ecosystem, including leaving pesticide residue in plants, soil, groundwater, and public water bodies. Chia Tai continuously provides knowledge and advice to farmers to ensure responsible and safe use of pesticides.

Performance:

Tai, has provided training programs for all employees that allow them to promote the correct and safe use of pesticides to farmers, dealers, and retailers. Employees are also trained on how to use a chemical container cleaning method that requires them to clean containers 3 times to reduce chemical residue. Environmental impacts and developing an understanding of chemicals and pesticides is also important. In addition, Chia Tai has produced online media to distribute agricultural knowledge to farmers and the



Our plant protection business, Chia general public.





Results and Benefits

12,000 farmers

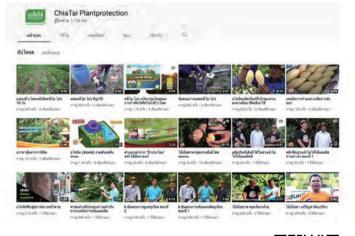
participated in the training in 2017

100%

of Chia Tai employees was trained to share knowledge with farmers

74 videos were aired

Videos to widely promote agricultural knowledge









Ecosystem & Biodiversity Protection 249

Conserving and Restoring the Ecosystem and Biodiversity

Responsibly operating our business by participating in and supporting the conservation of the environment and biodiversity is one of C.P. Group's priorities. Examples of this include site selection of business partners' facilities, raw material sourcing, and delivering products and services to customers. In addition, we have conducted activities and projects to drive, protect, and restore terrestrial ecosystems, forests, and marine ecosystems. We have also joined forces with our alliances to protect the ecosystem through the Pracharat Initiative, a public-private initiative that covers several sectors such as civil society and government. The organizations with which we have collaborated include: Royal Forest Department; Department of Fisheries; Department of National Parks, Wildlife and Plant Conservation; Marine Department; Royal Thai Army; Royal Thai Navy; Sustainable Development Foundation (Northern Region); Orphya Institute; Relevant Sub-district Administrative Organizations; Farmer community enterprises in Chiang Mai and Nan Provinces; Fishery communities in Songkhla, Pattani, Nakhon Si Thammarat, Samut Songkhram, Samut Sakhon and Chumphon Provinces; Educational institutes; Geo-Information Center for Management of Natural Resources and Environment for Participation.



Projects for Freshwater Ecosystem Protection in Coastal Areas

- Mae Chaem Model Plus Project, Chiang Mai Province*
- Living Weir Construction Project, Nan Province *
- Public-private Collaboration Project for Development and Restoration for Nan Watershed Forests, Nan Province
- Nature Protected Project, Chiang Mai Province
- CPF Rak Ni-ves Project at Pasak Watershed, Khao Phraya Doen Tong, Lopburi Province
- Mun River Conservation Project, Nakhon Ratchasima
- Thai Buffalo Development and Conservation Center, Chonburi Province



Projects for Marine and Coastal Ecosystem Protection

- CPF Grow-Share-Protect Mangrove Forestation Project, Chumphon and Samut Sakhon Provinces
- Crab Bank Project, Surat Thani Province
- Artificial Reef Project, Songkhla and Pattani Provinces
- Sustainability of Shrimp Farming, Trat Province
- Integrating Database and Knowledge of Short Mackerel Project, the Gulf of Thailand

Advocacy Activities for Environmental Conservation

• True's "Cultivating Love for the Environment" Project

*Projects conducted in collaboration with other parties



CASE STUDY 51

Charoen Pokphand Group

Mae Chaem Model Plus Project

The forest fire and smoke haze crisis in northern Thailand has resulted in air traffic and land transportation problems. and consequently has impacted the local economy. Therefore, the "Mae Chaem Model" Strategy was devised to address forest and soil management issues, and was created to be a model for forest fire management. The Model later led to "Mae Chaem Model Plus." which focuses on systematically addressing issues relevant to sustainable development for quality of life and the environment.

The Project has been driven primarily by C.P. Group and 28 other organizations from the government, private, and civil society sectors. Moreover, it has been implemented in line with sustainable development goals in terms of rights on forest land use, arable land, production, marketing, investment, career development, resource management, organizational networking development, and efficient database development.



Results and Benefits



- Restored nature and the environment
- Earned income from reforestation



Fliminated the smoke haze issue caused by forest fires in northern Thailand



Increased average household income in the areas

Seven Strategies to Drive Mae Chaem Model Plus Sustainably







2. Forest and Land Organization



3. Forest Protection and Conservation



4. Ecosystem Restoration



5. Career Development and Promotion



6. Awareness Building and **Knowledge Sharing**



7. Promotion of Multi-stakeholder Engagement

C.P. Group Participated in **Driving Mae Chaem Model Plus**

Following the 7 strategies to drive Mae Chaem Model Plus, C.P. Group has collaborated with local government agencies in Mae Chaem District and other networks, such as Sustainable Development Foundation (Northern Region), Orpaya Institute, Ban Thap Sub-district Administrative Organization, Gong Gai Village Community Enterprise in Ban Thap Sub-district, and Geo-Information Center for Management of Natural Resources and Environment for Participation, in order to substantially drive Mae Chaem Model Plus.

1. Geo-Information Center for Management of Natural **Resources and Environment** for Participation, Mae **Chaem District**

Categorizes the data related to arable land ownership and forest areas from current communities, covering over 7 Sub-districts, 26 communities, and 104 villages in Mae Chaem District.

3. Grow Forest and Generate Income Project

HOME

Raised awareness and increased green areas through reforestation using seedlings provided by locals, and generated income from activities such as cultivation of bamboo and coffee.



and Mae Nachon Sub-districts), providing benefits and access to water for agriculture for areas over 3,000 rai (approximately 1,186 acres).



4. Establishing Community **Enterprises**

To leverage communities through clustering and group management, such as Gong Gai Village Community Enterprise.

5. Being a part of Royal Forest Department's "Management of Multi-purpose Forest for Sustainable Development through the King's Philosophy Project, Mae Chaem District, Chiang Mai"

Established "Coffee Forest Development School" in Gong Gai Village, Ban Thap Sub-district, and Mae Chaem District by transferring cultivation knowledge and management.

CASE STUDY 52

Charoen Pokphand Group

Land Development Project in Nan Province

Topographical features in Nan Province are mostly mountains that are located in a north-south direction, especially at the northern and eastern borders connected to Laos. The Province's highest mountain is located in Bo Kluea District whereas Doi Phu Kha. an important mountain in the Province, is situated in Pua District. Plain areas are located in the middle of the Province and in river basins. Nan's most important water source is the Nan River, which originates in the northern part of the Province, streams down to Sirikit Dam in Uttaradit Province, and is finally merged with the Ping River in Nakhon Sawan Province, becoming the Chao Phraya River. There are 7 national parks in total, and Phra That Chae Haeng Temple is a sacred historic place in Nan.





Lack of opportunities





Issues in Nan Province



At present, forest areas in Nan have declined, and some are forest-depleted hills. Local farmers have faced difficult issues including land rights, chemical usage that has damaged the ecosystem and farmers' health, inadequate sustainable water sources for agriculture and personal consumption, smaller amounts of water in rivers and canals, droughts in the dry season, floods in the rainy season, and river bank erosion. These problems are being addressed collectively by different sectors including government, academic, civil society, private, and general public.

C.P. Group has collaborated with alliances, local communities, government agencies, and institutes to restore and protect natural resources and the ecosystem, to improve farmers' standard of living, and to generate income so that people can live with forests sustainably.

"Public-private Collaboration Project for Development and Restoration of Nan Watershed Forest" in Na Bong Village, Bo Kluea Tai Sub-district, Bo Kluea District, Nan Province

The Royal Thai Army and the Third Army have a policy to and Restoration for Nan Watershed Forest." The objectives restore watershed forests in northern Thailand, particularly in Nan Province, that for many years have been affected by traditional agricultural practices. Watershed forest areas have been utilized for agriculture, affecting the ecosystem of watershed forests and causing natural disasters such as floods, flash floods, landslides in the rainy season, droughts in the dry season, and forest fires and smoke haze. Using chemicals for agriculture in highland, which is an important watershed forest area, have also contributed to such problems. The Internal Security Operations Command in Nan, C.P. Group, and 13 other organizations have collaborated on the "Public-private Collaboration Project for Development

are to reduce watershed forest encroachment, increase green areas, improve the livelihood of locals, create career opportunities on the basis of living in harmony with forests, and reduce impacts on the ecosystem and the environment in watershed forest areas in Na Bong Village (Moo. 14), Bo Kluea Tai Sub-district, Bo Kluea District, and Nan Province, which covers 380 people in 90 households. The Group is responsible for implementing the Grow Forest and Generate Income Project, providing coffee cultivation knowledge and marketing channels for farmers participating in the Project.



Cultivating coffee to develop sustainable careers



Improving the quality of life for locals on the basis of living in harmony with forests

Restoring the ecosystem and resolving the community's water management issues



Charoen Pokphand Group

Living Weir Project







Nan Province has been faced with limited water in rivers and canals, droughts during the dry season, floods during the rainy season, and river bank erosion. Therefore, a new type of weir to address droughts and floods was constructed through collaboration between the Group and our alliances. They include the Nan Civil Society Coordination Center; the Special Work Unit of 32nd Ranger Regiment; the Third Army; the 38th Military Circle; the Royal Forest Department; the Department of National Parks, Wildlife and Plant Conservation; local watershed management agencies; the Nan Forest Protection Unit; local government agencies; Sub-district Administrative Organizations; community

leaders; area leaders; and locals. This type of weir is built using local natural materials called "Living Weirs" that have passed intern explosion processes. The Living Weirs are built based on understanding and collaboration within communities. Once water is available, ecosystem restoration and returning resources to nature can be clearly observed. The main objectives of the construction are to manage the communities' water issues, prevent floods and flash floods, and collect a sufficient amount of water for seasonal agriculture and cultivation and consumption.



Decelerating and storing water to prevent severe flooding and to discharge water in time



Not obstructing the ecosystem of animals and plants. Fish can spawn in the upstream naturally



Irrigating water for community water consumption throughout dry season



Building natural water spots that bring back aquatic animals and plants, and trees on river banks



Maintaining moisture in the ecosystem by absorbing water in

Increasing groundwater



Creating sustainable harmony in communities



Strengthening the local economy and improving the quality of life for locals







Results and Benefits

Built 7 weirs by collaborating with alliances

Assisted over households





Conserving Marine Resources for Sustainable Development

oceans and marine resources for sustainable development. including:

C.P. Group emphasizes protection and conservation of natural

These projects are aimed at reducing impacts from pollution, marine resources through various projects related to conservation, promoting and developing conservation and management of development, restoration, and protection. Projects carried out fishery and marine resources, promoting equal access to by the Group are in line with Sustainable Development Goal fishery resources, and reducing marine impacts due to climate (SDG) 14 (Life below Water), or conservation and use of the change. There are 10 Targets under Goal 14 of the SDGs,







2. Manage and protect marine and coastal ecosystems;



3. Minimize and address the impacts of ocean acidification;



4. Enhance fish sustainability;



5. Increase marine and coastal conservation areas;



6. Prohibit certain forms of fishery subsidies that contribute to overfishing:



7. Increase the economic benefits from the sustainable use of marine resources;



8. Develop research capacity, and transfer marine technology and marine research knowledge;



9. Support small-scale artisanal fishers;



10. Implement international marine laws.

- Short Mackerel Resource Research Project Areas
- Fishmeal Supply Chain Research Project Areas
- Areas with both Short Mackerel Resource Research and Fishmeal Supply Chain Projects
- Roi Phet Sustainable Shrimp Farm
- Crab Bank Project, Surat Thani Province
- 500 pieces of artificial reefs, Sathing Phra District, Songkhla Province
- 500 pieces of artificial reefs, Panare District, Pattani Province



HOME

Charoen Pokphand Group

Short Mackerel Resource **Research Project**



Project Background:

Short mackerel is an economic animal and indicates richness in the Gulf of Thailand. However, the quantity of short mackerel in Thai waterways has significantly decreased. Not only does this affect consumers and fish communities, but also decreases the nation's economic value. C.P. Group took advantage of the opportunity to collaborate with all relevant parties to address marine resource issues. Hence, we collaborated with Kasetsart University and the Department of Fisheries to initiate the Short Mackerel Research Project, conducted to acknowledge and analyze the causes and define measures to concretely and sustainably address the crisis.

Performance:

The Group has participated in the research project on "Integrating Database and Knowledge of Short Mackerel Resource

Situation and Problems in the Gulf of Thailand for Sustainable Development," The scope covers the northern and western coasts of the Gulf of Thailand, which are main habitats of short mackerel. Data and knowledge exchange activities were conducted in 9 Provinces to analyze and study the changes in short mackerel resources. Contributing factors of change include biology; natural resources; economic, social and environmental aspects; usage; rules and measures; and fishery control. The objectives are to raise public awareness and inspire the co-utilization of marine resources. The project procedures include data gathering and analysis, onsite activities, meetings, and public relation activities.

The Group has held 2 meetings with all relevant parties, including government agencies, the civil society sector, the private sector, and fishermen (both commercial and artisanal fishermen).





Results and Benefits



Collaborated with all parties for integrated problem solving



Understood the situation of short mackerel resources in the Gulf of Thailand



Understood the eco-hydrological factors that affect short mackerel resources in the Gulf of Thailand



Understood the impacts of government regulations and measures



Understood the social and community factors that influence fishermen's adaptation



Established appropriate ways to drive management



Raised awareness to the public on sustainable aquatic animal resource conservation



Inspired the optimal and sustainable co-utilization of marine resources



Charoen Pokphand Group

Fishmeal Supply Chain **Research Project**

Project Background:

At present, marine and coastal resources have been threatened by irresponsible fisheries, including the use of illegal fishing gear, overfishing, juvenile fish catch, and producing fishmeal for feed ingredients that only considers quality and not the sourcing methods. These actions affect marine ecosystems and artisanal fisheries' way of life. In addition, the increase in consumer awareness on social and environmental issues has influenced the Thai government's policies and measures, which eventually affects the fishmeal industry in Thailand. C.P. Group is aware of such issues, and therefore, has supported the integrated

analysis of and resolution to marine resource issues from all relevant parties, by initiating the Fishmeal Supply Chain Research Project. Sal Forest Co., Ltd. conducted the

Performance:

C.P. Group has carried out the research project on "Fishmeal Supply Chain and Development of Utilization for Sustainable Marine Resource Conservation" that covers the study areas in 5 Provinces, including Samut Sakhon, Chumphon, Nakhon Si Thammarat, Phuket, and Songkhla.











The project procedures comprise gathering relevant data throughout the fishmeal supply chain, relevant government measures, and attempts to address the problems by private sector. Public hearings were conducted with all parties to obtain opinions and suggestions throughout the project.



Results and Benefits



Analyzed the situation of the fishmeal industry in Thailand



Obtained suggestions on sustainable development of the fishmeal industry



Engaged all parties for integrated problem-solving



Developed a database and a data storage format CASE STUDY 5

Agro-Industry and Food **Business Group**



Ecosystem & Biodiversity Protection 261



Sustainable Shrimp Farm



Project Background:

Poor shrimp farming has negative impacts on water resources. The Group has conducted a sustainable shrimp farm system project that focuses on implementing internationally recognized standards such as Good Aquaculture Practice (GAP) and Best Aquaculture Practices (BAP), which help reduce environmental pollution. This is in line with SDG Target 14.1 that focuses on prevention and reduction of marine pollution, and Target 14.3 that emphasizes minimizing and addressing the impacts of ocean acidification. Moreover, we are also in the process of developing a multi-stakeholder engagement model to realize sustainable shrimp farming. The model will be piloted first in Nakhon Si Thammarat, Phang Nga, and Samut Songkhram, and will be expanded to other shrimp farms across the country.

Performance:

Charoen Pokphand Foods Public Company Limited has developed the Roi Phet closed system shrimp farm to be a model of water resource efficiency use. The 3 main objectives

- 1. Establish a closed system model for shrimp farm using world-class technologies to enhance farming efficiency.
- 2. Increase production volumes by controlling environmental conditions in farm houses and preventing diseases to allow efficient shrimp growth.
- 3. Conserve water resources by implementing measures that reduce and reuse water consumption, and other means to maximize water consumption efficiency using a water circulation system.



Results and Benefits



Reduced water risks

Used less than **20%** of water for shrimp farming, compared to general shrimp farming



Reduced effluent quantity and regularly monitored effluent quality

CASE STUDY 57

Retail and Distribution **Business Group**

Crab Bank Project

Project Background:

"Fried rice with crab meat" is one of the most popular menus in 7-Eleven convenience stores. Consequently, large amounts of crab meat are required and the crab meat demand tends to increase every year. On the other hand, there is evidence that blue crab will be in short supply. Therefore, to respond to customers' needs and to sustainably conserve blue crabs in Thai seas, CPRAM has initiated the Crab Bank Project to conserve and increase the quantity of blue crabs in Thailand.

Performance:

CPRAM has collaborated with relevant parties both upstream and downstream. These parties include fishermen, Viva Inter Crab (a crab meat processor), CPRAM (a food producer), and CP All (a food distributor). This collaboration has been carried out to promote blue crab conservation by not catching blue crabs during spawning season, releasing egg-bearing female crabs to natural water bodies to increase the number of blue crabs, and allowing communities to conduct fisheries sustainably. Surat Thani Coastal Fisheries Research and Development Center provides academic support in order to be efficient in conservation, protection, and development of blue crab fisheries in Thai seas.











Results and Benefits

Released over juvenile blue crabs per year to nature



Promoted conservative fishery



Collaborated throughout the entire supply chain





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Charoen Pokphand Group

Artificial Reef Project





Project Background:

The coral reef ecosystem is important to humans and other living organisms, as it is a source of high protein foods, prevents damages to coastal areas from large waves, and helps generate revenue from tourism. However, human activities and natural disasters have decreased and sometimes destroyed coral reefs in Thailand, Therefore, C.P. Group and True Corporation initiated the Artificial Reef Project that has been conducted in collaboration with coastal fishery communities; the Department of Fisheries; the Department of Marine and Coastal Resources; the Marine Department; the Royal Thai Navy;

the education sector; locals, and provincial administrative government officials.

Performance:

The Group and True constructed the artificial reefs as spawning and nursery grounds for juveniles in coastal areas of the Gulf of Thailand in Kradangnga Sub-district, Sathing Phra District, Songkhla Province; and Panare Sub-district, Panare District, Pattani Province. In 2017, five hundred pieces of artificial reefs were placed in each area, accounting for 1.000 pieces in total.



Results and Benefits

Placed artificial reefs in

2 Provinces



Provided breeding grounds and juvenile nursing grounds



RESPONSIBLE (S) **SUPPLY CHAIN MANAGEMENT**













Key Performance in

2017



Every Business Group in Thailand has assessed and identified their "Critical Suppliers"



11,377 critical suppliers have been provided with the

Supplier Code of Conduct Handbook



18,326 farmers

have received capacity-building training

Challenges

Nowadays, successful business models must integrate economic growth, social development, and environmental considerations throughout the supply chain. This allows businesses to withstand and adapt to constant changes, both domestically and internationally. These changes involve food security, raw material sourcing transparency and traceability, manufacturing processes that aim to reduce climate change impacts, and adherence to increasingly stricter safety regulations. C.P. Group has implemented a supply chain management system, together with our suppliers and relevant partners, through policies and a Supplier Code of Conduct. This encourages all business partners worldwide to take part in maintaining balance and reducing impacts while creating shared value between organizations. The Group also encourages our business partners to take action in protecting the environment and developing society and communities where their businesses operate.

C.P. Group has stressed the importance of continuously and transparently communicating our Responsible Supply Chain Management Policy, Supplier Code of Conduct Handbook, and performance to all related stakeholders. This demonstrates our responsible business operations and our adaptability to industrial changes. At the same time, it also creates competitiveness among the Group and our business partners within the supply chain to promote sustainability worldwide.

Performance against Goal

2020 Goal (Thailand)

100% of critical suppliers have been assessed for sustainability.

Year-on-Year Progress in Thailand			
	2016	2017	Goal 2020
Number of Business Groups that have assessed and identified their critical suppliers	2	10	10

Progress in 2017

- Developed a Responsible Supply Chain Management Policy and a Supplier Code of Conduct Handbook
- Enhanced capability of Thai farmers according to Good Agricultural Practice (GAP)
- Assessed risks of critical suppliers
- Cooperated with business partners
- Built capacity of small-scale swine farmers

Management **Approach**

with the Responsible Supply Chain Management Framework, supply chain management goal. We are also committed to which represents the Group's commitment to managing risks auditing our critical and high-risk suppliers on sustainability, and within the supply chain according to our Responsible Supply are continuously communicating our performance.

Our supply chain management has been implemented in line Chain Management Policy. Supplier Code of Conduct, and

Responsible Supply Chain Management Framework

- Sustainability report
- Communication on Progress to the UN Global Compact

 Collaborate with suppliers and business partners in the supply chain to ensure responsible supply chain management, with continuous development and improvement

- Percentage of critical suppliers that are assessed on sustainability
- Number of critical suppliers and business partners receiving training
- · Number of farmers with training for capability enhancement



- Supply chain mapping
- Supply chain sustainability risk assessment
- · Risk prioritization within supply chain

IMPLEMENT

- · Supplier self-assessment
- Verification
- Supplier development
- Food traceability
- Farmers

- By 2020, complete audit for all critical suppliers and ensure the traceability of raw materials sourced from them
- Responsible Supply Chain Management Policy
- Supplier Code of Conduct

Developing Responsible Supply Chain Management Policy and Supplier Guiding Principles

C.P. Group has developed the C.P. Group Responsible Supply Chain Management Policy and Supplier Guiding Principles that convey our expectations to critical suppliers to ensure their correct and continuous implementation, and to achieve international best practices. In order to impact our organizational values and communication, the Policy specifies significant elements that are required to manage the supply chain in a sustainable manner. C.P. Group expects the Board of Directors, executives, and all employees to uphold high ethical standards in all activities, including honesty and fairness in all communication within and outside of the Group.

Sustainable Supply Chain Management Implementation Roadmap





Periodic Supply Chain Risk **Assessments**

- · Compile a list of direct and indirect suppliers.
- · Assess risks of suppliers according to their "supply chain risk factors."
- Identify high-risk suppliers.
- Identify tier-1 critical suppliers.
- · Conduct periodic self-assessment by suppliers.

Periodic Supplier Audits

- Audit all suppliers identified with risks.
- The audit team comprises a supplier relations officer, a legal representative, a compliance representative, and an external consultant/ auditor.



HOME











Corrective Action Requests (CAR)

 In the instance of non-compliance to the Supplier Code of Conduct, a minor CAR or a major CAR will be issued depending on the severity of the issue. The supplier will be required to improve their performance according to the CAR.

Encouraging Performance Improvements

- The supplier relations officer will explain the results Communicate, in the local language, the to the supplier.
- The officer will also explain the necessary actions required to improve the supplier's audit result.

Supplier Relationship Management

organizational values and Supplier Code of Conduct to all suppliers using the most appropriate channel such as email, post, and face-to-face meetings.





Grievance Channels

 The supply chain management team is responsible to ensure that individuals, employees, external stakeholders, and suppliers are able to file grievances and suggestions to C.P. Group directly.

Communicating our Supply Chain Management

- Communicate the improvements regarding supply chain risk management to stakeholders and the
- Communicate performance in accordance with the UN Guiding Principles to the public, at least through an annual report.



Enhancing Capability of Thai Farmers according to Good Agricultural Practice (GAP)

safe, pest-free, and of high quality. This is referred to collectively as the Yield Default Value, and was created by the Department of Agriculture and the Rice Department. C.P. Group continues to advocate for GAP and encourage Thai farmers to conduct their activities in accordance with GAP. In addition to the accreditation

GAP is the practice of producing crops to yield produce that is that the farmers receive for their manufacturing processes, using GAP allows the produce to be recognized and sold for a higher price, ultimately increasing the farmers' income. GAP also enhances consumer confidence as the produce is safe, free from chemical residues, and traceable to farms.

CASE STUDY 59

International Trading **Business Group**

Standardizing **Jasmine Rice Project**

Project Background:

Consumers have long been wary of chemical residues in rice. Thus. C.P. Intertrade Co., Ltd. has developed this Project to encourage farmers to grow jasmine rice and to participate in a purchase back program. This Project will increase farmers' income in the following provinces in the Northeastern region of Thailand: Surin, Yasothon, Buriram, and Sisaket.



Performance:

Farmers have been educated on the methods and techniques of growing iasmine rice in accordance with GAP and with the demand of the marketplace. Using these methods and techniques ensures that the Rice Department approves and guarantees that the rice is free from chemical residue. The Project is projected to expand into 2 more Provinces: Ubon Ratchathani and Amnat Charoen.

⊗) R	esults a	nd Benefits
\bowtie $-$		
The	income	of
3,	571	farmers
	been in	

Areas covered by the Project are

73,612 Rai

(approximately 29,106 Acres)

Performance Perfor									
	2013/14	2014/15	2015/16	2016/17					
Number of farmers	262	447	639	3,571					
Area (in rai)	4,853	8,696	13,029	73,612					
Area (in acre)	1,918	3,438	5,151	29,103					

HOME

Crop Integration Business Group

Increasing Green Bean Yield Project, Bago, Myanmar



Project Background:

Poverty is one of the most urgent issues facing Myanmar. The Food Security Working Group (FSWG) found that Myanmar's largely agricultural economy has low yields. Farmers still lack the opportunity to access the marketplace and they need to improve their agricultural production techniques, considering that food security needs to be improved with comprehensive considerations. For Myanmar, the most appropriate agricultural strategy is to encourage farmers to switch from a traditional farming method to the modernized cultivation methods that have been developed through new innovative practices. Therefore, the Increasing Agricultural Yield Project has been initiated and implemented among farmers in Myanmar to drive growth. A local agricultural village fund policy, called the Obo Fund, focuses on investing in agriculture.

Performance:

C.P. Group, through the Crop Integration Business Group, started participating in the development of rubber and palm oil production technologies in 2013 and 2016, respectively. Those technologies provided the base for further development to grow green beans in an integrated manner in Bago, Myanmar. The joint initiative between our Business Groups has led to the following activities:

- Driving community enterprises through the Group's policies;
- Cooperating with local communities;
- Enhancing farmers' knowledge;
- Connecting farmers to the marketplace with C.P. Group acting as a facilitator;
- Utilizing agriculture supporting systems; and
- Returning the profits gained from produce to the Fund.

The Group found that farmers have been able to return 100% of the borrowed capital to the Fund. The main strategies implemented involved modernizing the cultivation methods, increasing the price of green bean seeds, and conducting sustainable and ethical marketing.



Results and Benefits

Agricultural yield per Rai increased at an average of 32.8%

Profit increased by 81.4%

Areas covered by the Project are (approximately 1,724 Acres) **CASE STUDY 61**

Feed Ingredients Trading **Business Group**

"Self-sufficient Farmers, Sustainable Maize" Project

Project Background:

Growing maize in Thailand is challenging. Some of the challenges include a below-average yield per Rai, produce with low quality and high cost, a strong pricing influence from maize middlemen buyer and environmental issues such as smog and non-arable lands. Due to famers' lack of knowledge, Bangkok Produce Merchandising PCL has worked with the Agricultural Land Reform Office (ALRO) to organize seminars to educate local farmers on maize farming in accordance with the Thai Agricultural Standard-TAS4402, Good Agricultural Practices for Maize.

Project Roadmap













Past Progress

Training with farmers comprehensively	Demonstrating pilot agricultural plots	Managing harvesting activities	Farmers selling their produce to manufacturing plants
		Milli	

Performance:

This Project began in 2014 and has continued through 2017. The Group has since expanded the Project to cover supply chain management, from the production to the sales stages, and to focus on becoming more efficient in agriculture by implementing modern technologies to increase yields and reduce costs. By demonstrating pilot agricultural plots using modern technology under the project "Self-sufficient Farmers, Sustainable Maize" in Banland Sub-district, Non Thai District in Nakhon Ratchasima Province, we have encouraged clustering of farmers to expand to large-scale production. These activities seek to elevate Thai maize to compete in the global marketplace and to improve sustainable maize practices. Moreover,



the Group has initiated the work plan for 2018-2019 by setting targets to cover all the key agricultural raw materials for animal feed, which are maize, cassava. and palm oil.

Work Plan for 2018-2019

2018 2019 Target • Train 900 farmers Target • Cover a total farming area Adopt sustainable of 13,500 Rai (5,337 Acres) cultivation guiding principles Performance 1.000 farmers to follow the



Cassava

(30.05.2018)

• 1,021 farmers were been

Target

 A total farming area of 30,194 Rai (11,937 Acres) has been covered

Develop a traceability

Maize for **Animal Feed**



guiding principles



· Develop a traceability

Palm Oil

Results and Benefits

Income increased by 944 Baht per Rai

Total yields sent to C.P. Group accounted for **61,000** Tons

Farmers covering a total farming area of **195,500** Rai [77.294 Acres] have been trained

7.700 farmers across 23 Provinces have participated in the Project

Retail and Distribution **Business Group**

Promoting Good Practice for Vegetable and Fruit **Farming Project**

Project Background:

Chemical residues in agricultural produce remains a primary concern for consumers. Siam Makro PCL has initiated this Project by cooperating with different stakeholders in the public and private sectors to promote Thai vegetable and fruit standards throughout the food chain, and to allow traceability of the produce in accordance with the ThaiGAP standard. This will help improve the quality of Thai agricultural produce, including the seed selection process, recommendations, and quality control of produce throughout the entire cultivation processes, all the way to the selling point at Makro. The goal is to ensure that the produce are free from chemical residues and one traceable to the origins.

Performance:

- Improve product quality to the level designated by Makro to secure
- Encourage farmers tofollow ThaiGAP (Thai Good Agricultural Practice), and educate farmers on proper use of pesticide and fertilizer, including the safe period before harvesting, and pesticide contamination prevention.
- Set up a regional distribution center with a product safety and quality control center.



Results and Benefits

Farmers have improved their quality of life and can rely on a more stable source of income

Areas covered in the Project are 20,000 Rai (approximately 7,907 Acres)

Over **40** farmer groups have participated in the Project

Farmer

Distribution Center

Makro

- Promote farming practice in accordance with the ThaiGAP standard
- Establish a regional distribution center Initiate the "Makro Quality Pro Mark" with a product safety and quality control center certified with the GMP and GLP
- Control the quality from the center to the consumers
- Project to guarantee the safety of produce to consumers
- · Receive external audit on product safety and traceability to ensure consumer confidence



Supporting Small-Scale Swine Farmers

of the World" approach, C.P. Group has placed great importance small-scale swine farmers is an important step in promoting on developing the capacity and capabilities of swine farmers. sustainability in Thailand's agricultural sector. We have continuously focused on training swine farmers on

Adhering to the "Business Partnership to become the Kitchen" biogas application to their own businesses. The support of

Agro-Industry and Food **Business Group**

Green Farm Project Expansion to Swine Contract Farmers in Thailand

Project Background:

CPF swine farms used to be open-air, which resulted in flies and strong odors from swine manure. This affected both CPF workers and the local surrounding communities. Therefore, CPF began to find solutions through technological innovation.



Performance:

All of CPF swine farms have been converted to green farms, and have temperature of the facility, making it become a model to develop the suitable for different animals to be same in other organizations. Domestic raised in a comfortable and and international organizations have visited CPF's green farms to gain are also installed with a biogas system knowledge and apply new innovations that has been hailed as a global at their respective businesses. At warming-reducing technology, with the same time, CPF has encouraged the added benefit of generating swine farmerst to participate in the electricity for use within the swine Green Farm Project to install the farms. Evaporative Cooling System (EVAP) in their closed-swine farms. EVAP

enables farmers to control the stress-free environment. Green farms



Results and Benefits

Training has been provided for

5,900 farmers

of swine contract farms in Thailand have installed a biogas system



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APPENDIX

APPENDIX

OUR GLOBAL SOCIAL AND ENVIRONMENTAL PROJECTS



Sustainable Road, United Community

Partnered with the local abbot and community members to improve the quality of a three-km road leading to Nyaung Na Pin township, easing transportation. Result: Created a lasting bond between local communities and the Group.



Our Kindness to You

The Crop Integration Group (Maize) transferred maize cultivation knowledge to communities, offered scholarships and sports equipment, and built washbasins for Bahan Jeb Village School. Result: Community members and young adults improved their quality of life and hygiene.



Supporting Employees

Visited the homes of employees and offered them the Group's products to improve their quality

Result: Engaged with employees through internal assistance and sharing.



Donating Blood, **Prolonging Lives**

Employees, customers, and business partners donated blood to the Red Cross from 2014 to 2017. Result: Contributed to the country

through cooperation between the Group and our stakeholders.



Milk for Kids Activity

Employees, customers, and business partners collectively purchased pasteurized milk from local dairy farms to donate to children and young adults in schools Result: In 2017, donated over

8,480 Liters to 2,650 young monks and nuns.



The Red Caravan Project

Participated in the National Blood Donation Campaign together with the National Hematology Institute resolve insufficient blood supply issues during the summer. Result: In 2017, The Red Caravan

Project collected 33,939 units of donated blood, increasing the 2016 donation by 26,000 units.



Local Village Fund (LVF)

Donated money to 50 rural village committee members as a village development fund. Result: The villages had funds to

develop their local communities.



Uniting for Flood Victims

Provided 22,190 survival kits to flood victims in the Irrawaddy and Bago Regions of Myanmar. Result: Employees took pride in taking part in alleviating the suffering of flood victims.



Food for Kids Activity

Employees catered lunch and undertook activities with 400 students at Myitta Nanda School in Yangon, Myanmar. Result: Employees contributed to

society based on the Three-Benefit Principle.



Kathina Ceremony

Participated in 37 Kathina ceremonies between 2000 and

Result: Demonstrated as a good



and other organizations to help



Medical Volunteer Project

Supported medical volunteers travelling to rural areas for checkups, and donated medicine and the Group's products to the poor, disabled, young, and

Result: Provided access to healthcare for the disadvantaged.



Building Accommodations for Patients and their Relatives

Built accommodations in K Hospital (the National Cancer Hospital), Tan Trieu branch, in Hanoi, Vietnam, to help reduce burdens for the Hospital as the numbers of patients and their relatives are increasing annually. Result: Patients and their relatives can stay at the Hospital with more convenience.

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Contributing to the **Country Together**

Every year in December, management and employees around Vietnam participate in activities to contribute to local communities.

Result: Management and employees came together to contribute to the country, as per our organizational values.



Granting Scholarships

Granted annual scholarships to students in poverty through the "Humanitarian Scholarships for Education" Program.

Result: Students gained access to education, and were provided with opportunities to make a living in the future.



Building Washbasins for Kindergarten Students

Built washbasins for students in Ban Dong Bang Kindergarten in Vientiane, Laos.

Result: Promoted hygiene to students



Swine Farming Learning Centers

Set up two swine farming learning centers in the South and one in the North to provide access to modern and hygienic swine farming practices to employees, business partners, farmers, and

Result: Developed human resources both inside and outside the organization, which is a key aspect of a sustainable business.



Developing Youths in the **AIESEC Network**

Educated participating students at Young Speak Spring 2017 on sustainable production and consumption, in partnership with AIESEC that includes 126 partnering

Result: Instilled the UN Sustainable Development Goals to youths.



Raising Laver for Orphan Project

Partnered with Ben Tre Orphanage to initiate the Raising Layer for Orphan Project to teach poultry farming and how to cook with eggs to children at the orphanage.

Result: The orphans received better nutrition suitable for their ages, and are able to apply the knowledge gained to make a living in the future.



Giving Blood... Equals to Giving Lives

Employees donated blood to the Lao Red Cross Society every year. Result: Employees contributed to the country, as per our organizational values.



Growing Organic Vegetables in Swine Farms

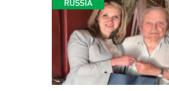
Started a project to grow organic vegetables in swine farms, fertilized by the swine manure, to promote the Zero Waste idea. The employees were able to consume chemicalfree and nutritious vegetables. Result: Added value to swine manure through organic vegetables, demonstrated good environmental management, and provided employees



Donating Wheelchairs

Donated wheelchairs to families of employees to aid their daily

Result: Engaged with employees through internal assistance.



APPENDIX

Products

of people in poverty.

Donating Pork to Veterans

Worked with the government to donate pork to veterans to celebrate Russia's Victory Day. Result: Fostered a good relationship with the government and local communities.



Donating the Group's

Donated the Group's products to 200 people in poverty living in shelters in Vientiane, Laos. to students. Result: Helped improve the lives Result: Students increased



Increasing Green Space in Communities

Planted trees in public spaces. residential areas, and main roads. Result: Created a better environment for the local communities.





Offering Lunch to Students Project

Donated the Group's ready-toeat meals and school supplies

access to nutritious food.



Bringing Children Happiness

Donated toys to kindergarten students who are mostly children of our farm workers, and renovated school buildings near the Maturya Swine Farm annually.

Result: Fostered a good relationship between the farm and local communities.



Planting Trees in Residential Areas

Worked with local operations, the government, and the local communities to plant 600 trees on Arbor Day that covered an area of 25,762 Square Meters near the Group's manufacturing plants in Barangay areas.

Result: Initiated cooperation between the government, the local communities, and local operations to improve the environment and to raise environmental awareness.



Building Toilets

Built hygienic toilets in schools and communities without toilets in 3 rural areas.

Planting a Winning Forest

Worked with the government to

replant forests that were burned

Result: Fostered a good relationship

between the government and the

local communities.

down

Result: Students and local communities gained access to hygienic toilets.



Blood Donation Project

Encouraged employees and citizens to donate blood.

Result: Society increased awareness of the importance of donating blood and increasing blood supply in blood banks.



Blood Donation Project

Donated blood to local medical centers.

Result: Fostered a sense of gratitude from employees toward the country.



Blood Donation Project

Worked with the Philippine Red Cross to encourage employees and the local communities near the Group's manufacturing plants to donate blood.

Result: 117 people donated 53 units of blood to the Red Cross to aid patients in emergency cases, and foster a public mind among employees and community members.



Health and Dental Check-

Worked with the local public health officials and dentists to provide check-up services in Brgy. Apsayan, Gerona, Tarlac ares, which are among the poorest areas in the Philippines.

Result: 362 people in poverty received the services and gained basic knowledge of healthcare.

CP Dream

Provided books, school supplies, and lunch for 200 rural students, ranging from kindergarten to primary education.

Result: Students received books and school supplies for better education.



Worked with local municipalities in key locations.

public space cleanliness.

to organize a clean-up program in public spaces to promote tourism Result: Employees and locals recognized the importance of



Donated seeds and academic knowledge to nine farmer families to grow maize for animal feed on fou-Hectares of unused land. Result: Increased additional income of farmers after rice harvesting season.



Building Toilets in a School

Built four toilets in Apsayan Primary School to alleviate hygiene problems in the school. Result: 225 students had toilets that are a model for other schools in the same community, and the students pay more attention to personal hygiene.



Donating School Supplies

In June 2017, donated school supplies to five primary schools in Samal, and Pilar Distict in Bataan.

Result: 547 students received school supplies.



CP Charity Fund Run 2016

Partnered with business partners and the Royal Thai Embassy, Kuala Lumpur, to host the CP Charity Fund Run 2016 to help the disadvantaged.

Result: The disadvantaged improved their quality of life.



Blood Donation Project

Since September 2014, worked with the Philippine Red Cross to promote blood donation from employees and local communities near the Group's manufacturing

Result: In 2017, 571 people donated blood and the Project continues on.



Improving Public Utilities in Schools

Donated school furniture, laptops. and school uniforms; renovated school buildings and walls; improved access to clean drinking water; and built a cafeteria.

Result: 2,622 students in 24 public schools in TN and Andhar Pradesh received these amenities.



Educating Students in Livestock

Asia Aquaculture (M) Sdn Bhd worked with Polytechnic Sandakan Sabah to educate 34 university students on livestock and shrimp farming knowledge and skills.

Result: Students are able to apply their knowledge to their studies, and ultimately to their future careers.



Planting Mangrove Forests

With concern over depleting mangrove forests, organized an activity in December 2014 to plant 32.000 mangrove trees over an area of 43.000 Square Meters in Samal and Bataan.

Result: Engaged with local communities and raised their awareness of mangrove forest conservation.



Assisting the Elderly and the Disabled

Provided financial assistance and synthetic organs for 61 elderly and disabled people.

Result: The elderly and disabled improved their quality of life and



Blood Donation Project

Encouraged employees and citizens to donate 1 million CCs of blood annually.

Result: Blood donors took pride in participating in the Project to save lives



Setting up Scholarship Fund

Since 2014, provided scholarships for excellent students in seven primary schools who lack the finances for an education, which is a major social problem in local communities.

Result: 125 students received these scholarships.



Protecting Local Surroundinas

Planted 350 large trees in TN and Andhar Pradesh.

Result: Initiated cooperation within local communities and encouraged them to take care of the environment.



Helpina Flood Victims

With employees, donated the Group's food products to flood victims

Result: Helped reduce starvation among flood victims.



Developing Relationships with Local Police Officers

Offered a gift basket to local police officers patrolling around the animal feed mill and chicken farm areas

Result: Fostered a good relationship between the officers and the organization.



Donating Metal Detectors Donated two portable metal

detectors to a mosque near the Group's animal feed mill to detect explosives and weapons in front of the mosque.

Result: Fostered a good relationship with local communities.



Offering Gifts to local **Community Leaders**

Offered gifts to local community leaders at a mosque on New Year's Day.

Result: Gained a positive recognition from local communities.



Renovating Mosques

Visited local community leaders and renovated mosques.

Result: Engaged with local communities by assisting in mosque renovation.



Donating Funds to Renovate Mosques

Donated 100,000 Pakistani Rupees to renovate mosques. Result: Strengthened mosques. which are the center of community members.



Offering Iftars

Offered Iftars during Ramadan (2014-2017) to 400 people living near the Group's manufacturing plants.

Result: Created a positive organizational image.



The Super Bags

Provided students with glow-inthe-dark shoe bags and leaflets to educate them on road and cycling safety.

when walking or cycling on roads.



Result: Students are more careful



Sponsored the SuperDrob Cup

football tournament for students in different regions who were born between 2003 and 2014. Result: Students could exercise and develop their football skills.



Participated in Cycling **Tournament**

Employees participated in the SuperDrob Bike Team, a team of 15 cyclists, to race in Poland yearround.

Result: Employees enjoyed their favorite activity and created a good relationship with local communities.



Supporting Young Athletes Supported the young football

team SuperDrob and organized a youth football tournament. Result: Fostered a good relationship between employees, their families, and local communities.



Initiated Sports Tournaments

Initiated the Cup of President of SuperDrob S.A. cycling marathon tournaments.

Result: Fostered a good relationship with community members, and they became healthier.



Organizations

Panda Restaurant Group, an important strategic partner with Overhill Farms/Bellisio Foods, donated millions of dollars to non-profit schools and children's hospitals through the Panda Cares Project.

Result: Promoted sharing spirit as per our organizational values.



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Volunteers Helping Families

Supported the work of the Greater Minneapolis Crisis Nursery to end sexual harassment and abandonment of children, and to provide assistance to families in critical situations 24 hours a day. 365 days a year.

Result: Inspired local community members to help end sexual harassment in children, and strengthened families.



Offering Eggs and Blankets to Children in Poverty

Management and employees offered eggs and blankets to children in poverty.

Result: Children in poverty improved their quality of life.



CP Charity Foundation

The President Office in Beijing founded and registered CP Charity Foundation on August 24, 2015 to coordinate rural development, agricultural, and farmer support activities in

Result: The government and Chinese people admired the Foundation's efforts.



Education Foundation

Supported Alan Page's PAGE Foundation by Bellisio Foods to develop education systems and improve access to education for young adults.

Result: Helped minorities of color to overcome education obstacles and pursue their dreams.



Building a Well for a School

Employees of Valuka-13 farm helped build a well for Chanpur Primary School in Valuka. Mymensingh, on April 7, 2015. Result: Students received access to clean drinking water, and community members admired the Group.



Repainting a School

Employees volunteered to repaint Bangladesh House Building Finance Corporation Model School in Uttara Model Town, Dhaka

Result: Employees took pride in their contribution to the school.



Helping Disadvantaged Children

Every week throughout 2016, management and employees offered eggs and chicken to the Koruncuk orphanage.

Result: Children received better nutrition from protein and employees took pride in their contribution.



The Build Foundation Project

In 2017, 217 employees in the Chia Tai Di Jing Group collectively donated over 33,000 Yuan and volunteered to renovate school buildings in rural areas in Thailand.

Result: Students had a better learning atmosphere.



Donating Blood to Help Society

Organized a blood donation project to support the Central Blood Bank in Turkey where blood supply is insufficient. Result: The Blood Bank received sufficient blood, and employees took pride in their contribution.



Supporting Poor Students

The Caring for Poor Students in Luoyang Project was launched in 2016 and donated 1 million Yuan to help poor students in Luovana.

Result: Students from over 20 poor families received access to education



Founding Chinese Rural Research Institute

In 2011 and 2016, donated 90 million Yuan to Tsinghua University to found Chinese Rural Research

Result: The Institute received more research funding to help develop rural regions



The Spring Pink Project

For nine years, funded the Spring Pink Project to help women with different difficulties.

Result: Donated over 5 million Yuan to help over 1 million women and their families.



Creating a Sense of Social Responsibility among Students through Lotus Heart: Smart Kid. Good Kid Project

APPENDIX

Started on April 25, 2014 at Honggiao-Zhongxin School to provide lessons for students in social responsibility and proper nutrition through the Action-learning model and skill development.

Result: More than 4.000 students from 12 schools increased their sense of social responsibility.



Offering Scholarships to University Students through Lianyungang CTTQ Charity

Offered scholarships worth over 500,000 Yuan to students from Nanjing University, China Pharmaceutical University. Shenyang Pharmaceutical University, and Nanjing University of Technology.

Result: Over 177 students gained access to higher education.



Providing Research Funding through CTTQ Liver Research Fund

Established in 2011 to provide funding to 183 research projects, of which 139 projects were publicized in medical journals, and training for medical professionals from 29 Provinces in China.

Result: Supported over 1,300 medical professionals helping them develop human capital in China



Supporting Higher Education

Organized the Qing Hua Global Project to support Tsinghua University, In 2017, donated 1 million Yuan to the University's agricultural development fund and 1 million Yuan to the Qing Hua Global Fund.

Result: The University received funding to improve education in different areas.



Donating Food Project

CP Taiwan donated food and volunteers to the Taiwan Fund Foundation to help children and people in Nantou County, and supported the "Ding Ju" festival, a religious ceremony in the Jhushan Township.



with internship opportunities.



Cooperative Education Project for Bachelor's **Degree Students** In 2017, CP Taiwan provided

university students in Taiwan Result: Ten students received internship offers, of which six were from National Pingtung University of Science and Technology, two from National Taiwan Ocean University, and another two from National Penghu University of Science and Technology.



REPORTING BOUNDARY CHAROEN POKPHAND GROUP 2017

BUSINESS LINE / COMPANY NAME	COUNTRY	ECONOMIC		ENVIRONMENTAL			SOCIAL		
BUSINESS LINE / CUMPANT NAME	COUNTRY	ECONOMIC	Energy	Emissions	Water	Waste	Health & Safety	Humar Resourc	
CHAROEN POKPHAND GROUP CO., LTD.	Thailand	•	0	0	0	0	0	•	
AGRO-INDUSTRY & FOOD BUSINESS LINE									
1 CHAROEN POKPHAND FOODS PCL.	Thailand	•	•	•	•	•	•	•	
C.P. Pokphand Co. Ltd.	China	•	•	•	•	•	•	•	
C.P. A quaculture (Beihai) Co., Ltd.	China	•	0	0	0	0	0	•	
C.P. Aquaculture (Dongfang) Co., Ltd.	China	•	0	0	0	0	0	•	
C.P. Vietnam Corporation	Vietnam	•	•	•	•	•	•	•	
Charoen Pokphand Enterprises									
(Taiwan) Co. Ltd.	Taiwan	•	•	•	•	•	•	•	
C.P. Cambodia Co., Ltd.	Cambodia	•	•	•	•	•	•	•	
CPF (INDIA) Private Ltd.	India	•	•	•	•	•	•	•	
C.P. Laos Co., Ltd.	Laos	•	•	•	•	•	•	•	
Charoen Pokphand Foods (Malaysia) Sdn. Bhd.	Malaysia	•	•	•	•	•	•	•	
Charoen Pokphand Foods Philippines Corp.	Philippines	•	•	•	•	•	•	•	
SuperDrob Zaklady Drobiarsko-Miesne S.A.	Poland	•	•	•	•	•	•	•	
Charoen Pokphand Foods (Overseas) LL	Russia	•	•	•	•	•	•	•	
Tops Foods NV	Belgium	•	•	•	•	•	•	•	
Norfolk Foods (Private) Limited.	Sri Lanka	•	0	0	0	0	0	•	
C.P. Standart Gida Sanayi ve Ticaret A.S.	Turkey	•	•	•	•	•	•	•	
CP Foods (UK) Ltd.	United Kingdom	•	•	•	•	•	•	•	
Bellisio Investment LLC	United States of Amer	ica •	•	•	•	•	•	•	
CP-MEIJI CO., LTD.	Thailand	•	•	•	•	•	•	•	
2. AGRO-INDUSTRY AND FOOD Business group.	China	•	•	•	•	•	•	•	
3. Chia Tai Enterprises International Limited.	China	•	•	•	•	•	•	•	
4. Myanmar C.P. Livestock Co., Ltd.	Myanmar	•	•	•	•	•	•	•	
5. C.P. Bangladesh Co., Ltd.	Bangladesh	•	•	•	•	•	•	•	
6. Charoen Pokphand Pakistan (Pvt.) Ltd.	Pakistan	•	•	•	•	•	•	•	
7. Chia Tai Feedmill Pte. Ltd.	Singapore	•	0	0	0	0	0	O	
B. China Animal Husbandry Business	China	•	•	•	•	•	•	•	
P. CHIA TAI CO., LTD.	Thailand	•	•	•	•	•	•	•	
10. C.P. INTERTRADE CO., LTD.	Thailand	•	•	•	•	•	•	•	
11. KHAO C.P. CO., LTD.	Thailand	•	•	•	•	•	•	•	
12. DYNAMICS TRANSPORT CO., LTD.	Thailand	•	•	•	•	•	0	•	
13. DYNAMIC INTER-TRANSPORT CO., LTD.	Thailand	•	•	•	•	•	0	•	
14. AYUTTHAYA PORT AND ICD CO., LTD.	Thailand	•	•	•	•	•	•	•	
15. APSARA RICE (Cambodia) Co., Ltd	Cambodia	•	•	•	•	0	•	•	
16. CHAROEN POKPHAND PRODUCE CO., LTD.	Thailand	•	•	•	•	•	•	•	
	India	•	•	•	•	•	•	•	
	Myanmar	•	•	•	•	•	•	•	
	Vietnam	•	•	•	•	•	•	•	
17. CHAROEN POKPHAND AGRICULTURE CO., LTD.	Thailand	•	•	•	•	•	•	•	
18. C.P. STARLANES CO., LTD.	Thailand	•	•	•	•	•	•	•	
19. CHAROEN POKPHAND ENGINEERING CO., LTD.	Thailand	•	0	0	0	0	0	•	
20. PERFECT COMPANION GROUP CO., LTD.	Thailand	•	•	•	•	•	•	•	
	China	•	•	•	•	•	•	•	

APPENDIX		287

		1	l		ENVIRON	MENTAL		SOCIAL		
	BUSINESS LINE / COMPANY NAME	COUNTRY	ECONOMIC	Energy	Emissions	Water	Waste	Health & Safety	Human Resources	
RE	TAIL AND DISTRIBUTION BUSINESS GROUP									
1.	CP ALL PLC.	Thailand	•	•	•	•	•	•	•	
2.	SIAM MAKRO PLC.	Thailand	•	•	•	•	•	•	•	
3.	C.P. LOTUS CORPORATION	China	•	•	•	•	•	•	•	
TE	LECOMMUNICATIONS BUSINESS GROUP									
1.	TRUE CORPORATION PLC.	Thailand	•	•	•	•	•	•	•	
E-	COMMERCE AND DIGITAL BUSINESS GROUP									
1.	ASCEND GROUP CO., LTD.	Thailand	•	•	•	•	•	•	•	
2.	True Money (Cambodia) Limited	Cambodia	•	•	•	•	0	0	•	
3.	PT Witami Tunai Mandiri (TMN Indonesia)	Indonesia	•	•	•	•	0	0	•	
4.	True Money Myanmar Company Limited	Myanmar	•	•	•	•	0	0	•	
5.	True Money Philippines Inc.	Philippines	•	•	•	•	0	0	•	
6.	Freewill Solutions Co., Ltd.	Thailand	•	0	0	0	0	0	•	
PR	OPERTY DEVELOPMENT BUSINESS GROUP									
1.	C.P. LAND PLC.	Thailand	•	•	•	•	•	•	•	
2.	C.P. PROPERTY HOLDING CO., LTD.	Thailand	•	•	•	•	•	•	•	
3.	Shanghai Kinghill Limited	China	•	•	•	•	•	0	•	
4.	Chia Tai Land Co., Ltd.	China	•	•	•	•	•	0	•	
ΑU	TOMOTIVE AND INDUSTRIAL PRODUCTS BUSINESS GROU	IP								
1.	C.P. MOTOR HOLDING CO., LTD.	Thailand	•	0	0	0	0	0	0	
2.	Luoyang Northern Ek Chor Motorcycle Co., Ltd	China	0	0	0	0	0	0	0	
3.	CPPC PLC.	Thailand	•	•	•	•	•	•	•	
		China	•	•	•	•	•	0	•	
		Vietnam	•	•	•	•	•	•	•	
РΗ	IARMACEUTICALS BUSINESS GROUPS									
1.	Sino Biopharmaceutical Limited	China	•	•	•	•	•	0	•	
FII	NANCE AND INVESTMENT BUSINESS GROUP									
1.	Zheng Xin Bank Company Limited.									
2.	Ping An Insurance (Group) Company of China,Ltd.									
3.	ITOCHU Corporation									
4.	CITIC GROUP Corporation LTD.									

- performances that are covered in this Sustainability Report 2017.
- O performances that are not covered in this Sustainability Report 2017.

^{*} Finance and Investment Business Group are currently not under the management of Charoen Pokphand Group.

SUSTAINABILITY PERFORMANCE DATA 2017

HEART

I STANDARD	DATA	UNIT	THA	ILAND	СН	INA	ОТІ	HERS	то	TAL
I. CORPO	RATE GOVERNANCE									
DEPARTMEN	NTS THAT ARE WITHIN THE SCOPE OF	THIS SUST	AINABILI ⁻	TY REPOR	Γ					
	Production Plants	Plants		67	1	17		75		259
	 Animal Farms and Horticultural Farms 	Farms		52	19	92	3	96		940
	• 7-Eleven Stores	Stores	10,2			0		0	10	,268
	Hypermarkets/Superstores	Stores	:	23	,	71		1		195
2. HUMA	AN RIGHTS AND LABOR PR	ACTICES								
HUMAN RES	SOURCES DATA									
102-8	Workforce									
			Male	Female	Male	Female	Male	Female	Male	Female
	Total Workforce		186	3,988	68	,082	51	,625	306	3,695
		Persons	81,684	105,304	42,053	26,029	35,627	15,998	159,364	147,331
	BY CONTRACT TYPE		Male	Female	Male	Female	Male	Female	Male	Female
	Employees		123	3,315	64.	,956	23	,959	212	,230
		Persons	52,968	70,347	40,464	24,492	17,922	6,037	111,354	100,876
	Workers/Contractors		63	. :	3,	: 126	27.	.666	94.	.465
		Persons	28,716	34,957	1,589	1,537	17,705	9,961	48,010	46,455
405-1	Employee Diversity			:	•			:		:
	BY LEVEL		Male	Female	Male	Female	Male	Female	Male	Female
	Top Management	Persons	747	192	507	174	245	34	1,499	400
	Mid Management	Persons	2,656	1,550	1,699	956	943	227	5,298	2,733
	Management	Persons	5,315	4,256	4,288	2,402	1,716	477	11,319	7,135
	• Officer	Persons	46,871	69,123	33,663	20,429	13,607	4,272	94,141	93,824
	Workers	Persons	24,505	29,830	2,004	2,234	14,984	9,939	41,493	42,003
	BY AGE		Male	Female	Male	Female	Male	Female	Male	Female
	Under 30 years old	Persons	33,160	46,588	15,509	9,672	16,635	7,316	65,304	63,576
	30 - 50 years old Over 50 years old	Persons	44,097 3,798	54,097 4,225	22,940 3,714	15,740 819	12,802 1,520	6,477 956	79,839 9,032	76,314 6,000
	Over 50 years old	Persons	3,796	4,220	0,714	019	1,520	900	9,032	0,000
401-1	New Hires									
	EMPLOYEE		Male	Female	Male	Female	Male	Female	Male	Female
	Number of new hires	Persons	45	,214	10,	589	4,	369	60	,172
			18,516	26,698	7,106	3,483	3,245	1,124	28,867	31,305
	BY AGE		Male	Female	Male	Female	Male	Female	Male	Female
	 Under 30 years old 	Persons	11,961	17,914	3,932	1,534	2,683	868	18,576	20,316
	• 30 - 50 years old	Persons	3,261	4,372	2,933	1,893	518	211	6,712	6,476
	Over 50 years old	Persons	114	60	240	57	59	62	413	179
	WORKER		Male	Female	Male	Female	Male	Female	Male	Female
	Number of new hires	Persons	29	,529	6	37	12	,151	41	,747
		L CI 20112	13,898	15,631	6	61	8,245	3,906	22,149	19,598

RI STANDARD	DATA	UNIT	THAI	LAND	СН	INA	ОТІ	HERS	TO	TAL
	BY AGE		Male	Female	Male	Female	Male	Female	Male	Female
	Under 30 years old	Persons	9,723	10,377	4	25	6,103	2,397	15,830	12,799
	• 30 - 50 years old	Persons	4,040	5,002	2	36	1,984	1,423	6,026	6,461
	 Over 50 years old 	Persons	136	248	0	0	231	110	367	358
	Turnover	-								
'	EMPLOYEE		Male	Female	Male	Female	Male	Female	Male	Femal
	Number of turnover		37,	236	11,	316	3,	509	52	,061
		Persons	14,844	22,392	7,865	3,451	2,636	873	25,345	26,716
	BY AGE		Male	Female	Male	Female	Male	Female	Male	Femal
	Under 30 years old	Persons	10,385	16,436	3,740	1,381	1,717	593	15,842	18,410
	• 30 - 50 years old	Persons	3,387	4,804	3,705	1,921	834	250	7,926	6,975
	Over 50 years old	Persons	236	170	419	149	84	37	739	356
	WORKER		Male	Female	Male	Female	Male	Female	Male	Femal
	Number of turnover		15,	.231	1	63	11,	382	26	,776
		Persons	6,985	8,246	5	158	7,839	3,543	14,829	11,947
	BY AGE		Male	Female	Male	Female	Male	Female	Male	Femal
-	Under 30 years old	Persons	4,615	5,204	2	56	5,644	2,211	10,261	7,471
	• 30 - 50 years old	Persons	2,209	2,553	3	102	2,036	1,224	4,248	3,879
	Over 50 years old	Persons	150	466	0	0	221	155	371	621
OCCUPATION	NAL HEALTH AND SAFETY DATA									
			Male	Female	Male	Female	Male	Female	Male	Femal
	EMPLOYEE									
		Cases per 200,000 hours worked		Female 20 4.14		Female .33 0.26		Female .27		.05 3.24
	EMPLOYEE • Injury Rate (IR)	200,000 hours worked	4.18	20 4.14	0.38	.33 0.26	2 2.47	.27 1.79	3 2.80	.05
403-2 (a)	EMPLOYEE	200,000 hours worked Cases per 200,000	4.18 0.	20 4.14 23	0.38 0.38	33 0.26 27	2.47 0	.27 1.79 .45	2.80 0	.30
	EMPLOYEE • Injury Rate (IR)	200,000 hours worked Cases per	4.18 0.0.32	20 4.14 23 0.18	0.38	.33 0.26	2 2.47	.27 1.79	2.80 0 0.39	.30 0.21
	EMPLOYEE • Injury Rate (IR)	200,000 hours worked Cases per 200,000 hours worked Cases per	4.18 0.0.32	20 4.14 23	0.38 0.32	33 0.26 27	2 2.47 0 0.51	.27 1.79 .45	2.80 0 0.39	.30
	Injury Rate (IR) Lost Time Injury Rate (LTR)	200,000 hours worked Cases per 200,000 hours worked	4.18 0.0.32	20 4.14 23 0.18	0.38 0.32	33 0.26 27 0.19	2 2.47 0 0.51	.27 1.79 .45 0.30	2.80 0 0.39	.30 0.21
	Injury Rate (IR) Lost Time Injury Rate (LTR)	200,000 hours worked Cases per 200,000 hours worked Cases per 200,000 hours worked Lost days per	4.18 0.032 0.30	20 4.14 23 0.18	0.38 0.32 0.007	0.26 27 0.19	2.47 0 0.51 0	.27 1.79 .45 0.30	2.80 0 0.39 0	.05 3.24 .30 0.21
	Injury Rate (IR) Lost Time Injury Rate (LTR) Occupational Disease Rate (ODR)	200,000 hours worked Cases per 200,000 hours worked Cases per 200,000 hours worked	4.18 0.032 0.30	20 4.14 23 0.18 00	0.38 0.32 0.007	0.26 27 0.19 11 0.15	2.47 0 0.51 0	27 1.79 45 0.30	2.80 0 0.39 0	.05 3.24 .30 0.21 .04 0.03
	Injury Rate (IR) Lost Time Injury Rate (LTR) Occupational Disease Rate (ODR) Lost Day Rate (LDR)	200,000 hours worked Cases per 200,000 hours worked Cases per 200,000 hours worked Lost days per 200,000 hours worked	4.18 0.32 0.00 0.00 2.4.49	20 4.14 23 0.18 00 0.00	0.38 0.32 0.07 1.	.33 0.26 27 0.19 .11 0.15	2 2.47 0 0.51 0.16 3 4.26	.27	3 2.80 0 0.39 0 0.05 2 3.44	.05 3.24 .30 0.21 .04 0.03
	Injury Rate (IR) Lost Time Injury Rate (LTR) Occupational Disease Rate (ODR)	200,000 hours worked Cases per 200,000 hours worked Cases per 200,000 hours worked Lost days per 200,000 hours worked Percentage	4.18 0.032 0.000 2.449	20 4.14 23 0.18 00 0.00 68 1.41 73	0.38 0.32 0.07 1.0.79	33 0.26 27 0.19 11 0.15 84 3.43 26	2 2.47 0 0.51 0 0.16 3 4.26 2	1.79 45 0.30 1.11 0.00 68 2.33	3 2.80 0 0.39 0 0.05 2 3.44 1	.05 3.24 .30 0.21 .04 0.03 .64 1.85
	Injury Rate (IR) Injury Rate (IR) Lost Time Injury Rate (LTR) Occupational Disease Rate (ODR) Lost Day Rate (LDR) Absentee Rate (AR)	200,000 hours worked Cases per 200,000 hours worked Cases per 200,000 hours worked Lost days per 200,000 hours worked	4.18 0.32 0.00 0.00 2.449 1.161	20 4.14 23 0.18 00 00 68 1.41 73 1.82	0.38 0.32 0.07 1.079	33	2 2.47 0 0.51 0.16 3 4.26 2 2.75	27	3 2.80 0 0.39 0 0.05 2 3.44	.05 3.24 .30 0.21 .04 0.03 .64 1.85 .63
	Injury Rate (IR) Lost Time Injury Rate (LTR) Occupational Disease Rate (ODR) Lost Day Rate (LDR)	200,000 hours worked Cases per 200,000 hours worked Cases per 200,000 hours worked Lost days per 200,000 hours worked Percentage (%)	4.18 0.32 0.32 0.00 2.4.49 1.61	20 4.14 23 0.18 00 0.00 68 1.41 73	0.38 0.32 0.07 1.079	33	2 2.47 0 0.51 0.16 3 4.26 2.75	.27	3 2.80 0 0.39 0 0.05 2 3.44 1.51	.05 3.24 3.30 0.21 0.03 6.64 1.85 6.63 1.75 7
403-2 (a)	Injury Rate (IR) Injury Rate (IR) Lost Time Injury Rate (LTR) Occupational Disease Rate (ODR) Lost Day Rate (LDR) Absentee Rate (AR)	200,000 hours worked Cases per 200,000 hours worked Cases per 200,000 hours worked Lost days per 200,000 hours worked Percentage	4.48 0.32 0.000 2.449 1.161	20 4.14 23 0.18 00 68 1.41 73 1.82 5 1	0.38 0.32 0.07 1.0.79 0.21	33	2 2.47 0 0.51 0.16 3 4.26 2 2.75	.27	3 2.80 0 0.39 0 0.05 2 3.44 1 1.51	.05 3.24 3.30 0.21 0.04 0.03 6.64 1.85 6.63 7 1.75
	Injury Rate (IR) Injury Rate (IR) Lost Time Injury Rate (LTR) Occupational Disease Rate (ODR) Lost Day Rate (LDR) Absentee Rate (AR)	200,000 hours worked Cases per 200,000 hours worked Cases per 200,000 hours worked Lost days per 200,000 hours worked Percentage (%)	4.18 0.32 0.32 0.00 2.4.49 1.61	20 4.14 23 0.18 00 00 68 1.41 73 1.82	0.38 0.32 0.07 1.079	33	2 2.47 0 0.51 0.16 3 4.26 2.75	.27	3 2.80 0 0.39 0 0.05 2 3.44 1.51	.05 3.24 3.30 0.21 0.04 0.03 6.64 1.85 6.63 7 1.75
403-2 (a)	Injury Rate (IR) Injury Rate (IR) Lost Time Injury Rate (LTR) Occupational Disease Rate (ODR) Lost Day Rate (LDR) Absentee Rate (AR) Number of Fatalities	200,000 hours worked Cases per 200,000 hours worked Cases per 200,000 hours worked Lost days per 200,000 hours worked Percentage (%) Persons	4.18 0.032 0.000 2.449 1.161 4 Male	20 4.14 23 0.18 00 68 1.41 73 1.82 5 1 Female 32	0.38 0.32 0.07 1. 0.79 0.21	33	2 2.47 0 0.51 0 0.16 3 4.26 2.75 1 Male	.27	3 2.80 0 0.39 0 0.05 2 3.44 1.51 6 Male	.05 3.24 3.30 0.21 0.04 0.03 6.64 1.85 6.63 1.75 7 1
403-2 (a)	Injury Rate (IR) Injury Rate (IR) Lost Time Injury Rate (LTR) Occupational Disease Rate (ODR) Lost Day Rate (LDR) Absentee Rate (AR) Number of Fatalities WORKER	200,000 hours worked Cases per 200,000 hours worked Cases per 200,000 hours worked Lost days per 200,000 hours worked Percentage (%)	4.18 0.032 0.00 0.00 2.449 1.1.61 4 Male	20 4.14 23 0.18 00 68 1.41 73 1.82 5 1 Female 32	0.38 0.32 0.07 1. 0.79 0.21	33 0.26 27 0.19 .11 0.15 84 3.43 26 0.38 1 0 Female	2 2.47 0 0.51 0 0.16 3 4.26 2.75 1 Male	1.79 45 0.30 1.11 0.00 68 2.33 66 2.38 1 0 Female	3 2.80 0 0.39 0 0.05 2 3.44 1.51 6 Male	.05 3.24 3.30 0.21 .04 0.03 .64 1.85 .63 7 1 Female
403-2 (a)	Injury Rate (IR) Injury Rate (IR) Lost Time Injury Rate (LTR) Occupational Disease Rate (ODR) Lost Day Rate (LDR) Absentee Rate (AR) Number of Fatalities WORKER	200,000 hours worked Cases per 200,000 hours worked Cases per 200,000 hours worked Lost days per 200,000 hours worked Percentage (%) Persons	4.18 0.032 0.000 2.4.49 1.1.61 4 Male 0.000	20 4.14 23 0.18 00 0.00 68 1.41 73 1.82 5 1 Female 32	0.38 0.32 0.07 1. 0.79 0.21 Male NA	33	2 2.47 0 0.51 0.16 3 4.26 2 2.75 1 Male 0.05	1.79 45 0.30 .11 0.00 68 2.33 .66 2.38 1 0 Female	3 2.80 0 0.39 0 0.05 2 3.44 1 1.51 6 Male 0	3.24 30 0.21 0.04 0.03 64 1.85 63 1.75 7 1 Femal 30

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SUSTAINABILITY PERFORMANCE DATA 2017

HEART

404-1	TRAINING AND DEVELOPMENT OF	EMPLOYEES	Male	Female	Male	Female	Male	Female	Male	Female
	Average training hours for all	Hours per	20.63		9.	07	10.69		16.18	
	employees	person per year	21.13	20.14	12.97	5.17	10.13	11.25	16.39	15.97
	BY LEVEL		Male	Female	Male	Female	Male	Female	Male	Female
	Top Management	Hours per	21	.68	3.	30	9.	81	13	3.34
		person per year	21.55	22.17	3.56	2.56	10.12	7.63	13.60	12.40
	Mid Management	Hours per	29	1.65	8.	27	15	.16	20).47
		person per year	30.52	28.17	11.30	2.90	14.74	16.93	21.55	18.39
	Management Hours per	26	1.03	8.	91	13	.62	18	3.35	
		person per year	27.69	23.95	11.30	4.64	13.83	12.88	19.38	16.71
	Officer	Hours per	18	.46	10	.49	11	.14	15	5.47
		person per year	18.66	18.33	13.52	5.49	10.44	13.50	15.63	15.31
	Workers	Hours per	2.	03	0.20		7.54		4.57	
		person per year	2.23	1.90	0.12	0.35	5.89	12.81	4.55	4.59
4. STAK	EHOLDER ENGAGEMENT	Г								
	Number of Business Groups compiling expectations of stakeholders	Business Groups		12	1	0	-	7	1	13

Remarks:

- NA: Not Available
- Average training hours exclude the domestic and international Master's and Doctoral Education Programs supported by the Group, and the training courses
 that continued during 2016-2017
- Injury and fatality data from workers and contractors exclude data from Telecommunications, and Property Development Business Groups
- Injury means work-related injury from first-aid level to lost-day level (from 1 day)
- Lost Time Injury means injury that causes lost-day from one day on (calculating from the day after the incident)
- Severity level (or violence) of Injury calculates from the number of actual absent working days
- Injury rate (IR) = Total number of injuries at all levels (cases) over the reporting period x 200,000 hours worked/ Total hours worked (over the reporting period)
- Lost Time Rate (LTR) = Total number of lost time injuries (cases) over the reporting period x 200,000 hours worked / Total hours worked (over the reporting period)
- Lost Day Rate (LDR) = Total number of lost days (days) over the reporting period x 200,000 hours worked / Total hours worked (over the reporting period)
- Occupational Disease Rate (ODR) = Total number of occupational diseases (cases) over the reporting period x 200,000 hours worked / Total hours worked (over the reporting period)
- Absentee Rate (AR) =Total number of actual absentee days lost from occupational injuries or diseases, but not leave with permission, over the reporting period x 100 / Total days worked (over one year)
- Total Number of Work-related fatalities = Total number of occupational fatalities which may be caused by accidents or diseases

APPENDIX 291

HEALTH

RI STANDARD	DATA	UNIT	THAILAND	CHINA	OTHERS	TOTAL
5. SOCI	AL IMPACT					
	Number of farmers receiving support	Persons	58,333	7,402	26,643	92,378
	Number of SMEs receiving support	Persons	48,739	6,745	2,162	57,646
	Number of people in vulnerable groups	Persons	14,174	810	261	15,245
	receiving support					•
6. HEA	LTH & WELL-BEING					
	Number of available products aiming to	Products	142	NA	NA	142
	promote better health and well-being					
	Number of children receiving support and	Persons	30,000	NA	2,650	32,650
	having the opportunity to access food					
7. EDU	CATION					
	Number of children, youth and adults with	Persons	2,560,426	1,002	7,334	2,568,762
	access to education					
	Number of scholarships provided	Scholarships	21,929	180	NA	22,109
8. INNO	OVATION					
	Total Research and Development (R&D)	THB Million	3,627	7,752	844	12,223
	spending					
	Number of R&D positions	Persons	2,242	2,900	246	5,388
	Number of Patents and Petty Patents	(Petty) Patents	114	591	4	709

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306-1 (a) Water Discharge

SUSTAINABILITY PERFORMANCE DATA 2017

HOME

RI STANDARD	DATA	UNIT	THAILAND	CHINA	OTHERS	TOTAL
9. CLI	MATE CHANGE MANAGEMENT					
ENERGY						
302-1 (e)	Total Energy Consumption	Million GJ	22.49	14.54	7.45	44.48
302-1 (a)	Non-Renewable Energy	Million GJ	5.22	10.02	2.99	18.2
302-1 (b)	Renewable Energy	Million GJ	2.33	0.09	1.60	4.0
302-1 (c)	Electricity Purchased	Million GJ per hour	14.94	4.43	2.85	22.2
302-1 (d)	Electricity Sold	Million GJ per hour	0.02	0.00	0.00	0.0
302-3	Energy Intensity	GJ per THB Million	21.64	29.20	35.70	25.4
		of revenue				
GREENHOL	ISE GAS (GHG) EMISSIONS					
	CHG Emissions (Scope 1+2)	Million tCO ₂ e	2.70	1.84	0.69	5.24
305-1 (a)	Direct GHG emissions (Scope 1)	Million tCO2e	0.37	0.71	0.20	1.2
305-2 (c)	Biogenic CO2 emissions	Million tCO2e	0.21	0.01	0.16	0.3
305-3	 Indirect GHG emissions (Scope 2) 	Million tCO2e	2.34	1.13	0.48	3.9
305-4	GHG emission intensity	Million tCO2e per THB	2.60	3.71	3.33	2.9
		Million of revenue				
WASTE						
	Total Waste Generation	Tons	539,223	154,174	248,242	941,6
306-2 (a)	Hazardous Waste	Tons	2,872	6,962	2,123	11,97
	Reused/Recycled	Percentage (%)	54.06	NA	1.43	13.2
306-2 (b)	Non-Hazardous Waste	Tons	536,351	147,212	246,099	929,66
	Reused/Recycled	Percentage (%)	4.54	14.27	22.41	10.6
	 Composting 	Percentage (%)	69.87	4.88	20.05	48.2
	Waste Intensity	Tons per THB Million	0.52	0.30	1.19	0.5
		: of revenue			1	1
10. WA	TER STEWARDSHIP					
WATER						
303-1 (a)	Water Withdrawal	Thousand m ³	187,318	38,476	83,288	309,0
303-1 (a)	Surface Water	Thousand m ³	139,764	6,888	39,264	185,9
	Ground water	Thousand m ³	17,221	11,662	25,331	54,2
	Rainwater	Thousand m ³	10,929	NA	NA	10,92
	Municipal water	Thousand m ³	19,399	19,920	18,693	58,0
	 Wastewater from other organizations 	Thousand m ³	4	6	NA	
303-3 (a)	Reused and recycled Water	Thousand m ³	24,339	2,715	7,127	34,18
	Percentage of water reused/recycled	Percentage (%)	12.99	7.06	8.56	11.0
303-3 (b)						
303-3 (b)	Water withdrawal intensity	m ³ per THB Million of revenue	180.25	77.27	399.03	177.0

Thousand m³

35,263

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GRI STANDARD	DATA	UNIT	THAILAND	CHINA	OTHERS	TOTAL
	SYSTEM AND BIODIVERSITY PROT	TECTION				
	Number of mangrove and watershed forest areas protected and conserved	Rai (approximately in Acres)	6,233 (2,464)	NA	NA	6,233 (2,464)
12. RES	PONSIBLE SUPPLY CHAIN MANAG	GEMENT				
	Number of critical suppliers communicated with Supplier Code of Conduct Handbook	Persons	11,377	NA	NA	11,377
	Number of farmers receiving capacity-building trainings	Persons	18,362	NA	NA	18,362

Remarks:

- NA: Not Available
- The calculation method under this Sustainability report is in accordance with GRI Standards
- Total fuel consumption= the sum of all types of fuel resource consumption x its heating value (in each) Unit in GJ per month (Note that all conversion factors are referred from to the Annual Thailand Energy Report, Department of Alternative Energy Development and Efficiency)
- Electricity consumption= The sum of electricity used (in kWh) x 3.6 Unit in GJ per month)
- Total energy consumption = non-renewable energy consumption + renewable energy consumption + electricity consumption (Unit in GJ per month)
- Energy types included in the calculation of intensity per revenue are non-renewable energy including coal, fuel oil, diesel, gasoline, bunker oil, LPG, and natural
 gas as well as renewables including biogas, biomass (such as rice husk, charcoal, cashew nutshell, fire wood/ scrap wood/woodchips, corn cob, pal kernel
 shells, and sawdust) and biodiesel, and electricity consumed within the organization only
- Reporting scope of GHG emissions covers CO2, CH4, and N2O which are calculated and shown in the form of CO2 equivalent that generates GWP (Global Warming Potential) specified by IPCC specification (Intergovernmental Panel on Climate Change 2006). Meanwhile, the figure of emission factors is referred from IPCC and Thailand Greenhouse Gas Management Organization (Public Organization)
- GHG intensity per revenue covers GHG scope 1 and scope 2 (GRI 305-1, 305-2)
- Total water consumption is collected by using data from water meter, water bill, calculation from flow rate of water pump and average volume of rainwater from Meteorological Department (GRI 303-1)
- Total reused/recycled water is calculated by using data from water meter and flow rate of water pump
- Total hazardous and non-hazardous waste stored within organization is an accumulated figure in previous year (GRI 306-2)
- Total waste generated is a figure of non-hazardous waste and hazardous waste generated in each year. For the amount of waste stored within the organization, the calculation is from an accumulated figure of waste in the present year an accumulated figure of in the previous year
- All information about waste disposal methods have already been approved by waste disposers or waste disposal manifest from waste disposers(GRI 306-2)

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GRI CONTENT INDEX GRI102-55

GRI 102: GENERAL DISCLOSURES 2016

	DISCLOSURES	PAGE/WEBSITE	EXTERNAL ASSURANCE
Organiza	ational Profile		
02-1	Name of the organization	Our Businesses	-
		About this Report	
02-2	Activities, brands, products, and services	Our Businesses	-
102-3	Location of headquarters	Business Overview	-
02-4	Location of operations	Business Overview	-
		Our Businesses	
02-5	Ownership and legal form	Our Businesses	-
02-6	Markets served	Business Overview	-
		Our Businesses	
02-7	Scale of the organization	• 2017 Highlights	-
		Business Overview	
02-8	Information on employees and other workers	Appendix	=
02-9	Supply chain	Responsible Supply Chain Management	-
02-10	Significant changes to the organization and its supply chain	About this Report	-
02-11	Precautionary Principle or approach	Climate Change Management	_
		Water Stewardship	
02-12	External initiatives	Stakeholder Engagement	_
02-13	Membership of associations	Stakeholder Engagement	_
02 10	Worldon's or adoctration	- Otationoldor Engagornom	
Strategy			
02-14	Statement from senior decision-maker	Message from the Senior Chairman	_
		Message from the Chairman	
		Message from the CEO	
02-15	Key impacts, risks, and opportunities	Message from the Senior Chairman	
02-10	rtey impacts, risks, and opportunities	Message from the Chairman	
		Message from the CEO	
		Our Businesses	
		Climate Change Management	
		Water Stewardship	
		• Water Glewardship	
Ethics a	nd Integrity		
02-16	Values, principles, standards, and norms of behavior	Sustainability Milestone	-
		Six Core Values	
		C.P. Excellence	
02-17	Mechanisms for advice and concerns about ethics	Corporate Governance	
Governa	nca	'	
JUVEIIIA			
	Governance structure	Sustainability Governance	-
02-18	Governance structure		
		Corporate Governance	
02-18	Executive-level responsibility for economic, environmental,	Corporate Governance Sustainability Governance	-
		'	-
102-20	Executive-level responsibility for economic, environmental,	'	-
02-20 Stakeho	Executive-level responsibility for economic, environmental, and social topics Ider Engagement	Sustainability Governance	-
02-20 Stakeho 02-40	Executive-level responsibility for economic, environmental, and social topics Ider Engagement List of stakeholder group	Sustainability Governance Stakeholder Engagement	-
02-20 Stakeho 02-40 02-41	Executive-level responsibility for economic, environmental, and social topics Ider Engagement List of stakeholder group Collective bargaining agreements	Sustainability Governance Stakeholder Engagement Human Rights and Labor Practices	- - -
02-20 Stakeho 02-40 02-41 02-42	Executive-level responsibility for economic, environmental, and social topics Ider Engagement List of stakeholder group Collective bargaining agreements Identifying and selecting stakeholders	Sustainability Governance Stakeholder Engagement Human Rights and Labor Practices Stakeholder Engagement	- - - -
02-20 Stakeho 02-40 02-41	Executive-level responsibility for economic, environmental, and social topics Ider Engagement List of stakeholder group Collective bargaining agreements	Sustainability Governance Stakeholder Engagement Human Rights and Labor Practices	- - - - -

	DISCLOSURES	PAGE/WEBSITE	EXTERNAL ASSURANCE
Reporti	ng Practice		
102-45	Entities included in the consolidated financial statements	Our Businesses	-
		Reporting Boundary	
102-46	Defining report content and topic Boundaries	Materiality Assessment	-
102-47	List of material topics	List of Material Issues	-
102-48	Restatements of information	In 2017, we discontinued reporting GRI	-
		308-2 and GRI 414-2 as our supplier audit	
		program is set to be completed by 2020.	
		We will report the abovementioned GRI	
		indicators again once the result of the	
		program has been confirmed.	
102-49	Changes in reporting	About this Report	=
102-50	Reporting period	About this Report	-
102-51	Date of most recent report	About this Report	=
102-52	Reporting cycle	About this Report	=
102-53	Contact point for questions regarding the report	Materiality Assessment	=
		About this Report	
102-54	Claims of reporting in accordance with the GRI Standards	About this Report	÷.
102-55	GRI content index	GRI Content Index	=
102-56	External assurance	About this Report	-

MATERIAL TOPICS

GRI STANDARD	DISCLOSURES	PAGE/WEBSITE	OMISSION/ NOTE	EXTERNAL ASSURANCE
Economic Pe	erformance			
GRI 103:	103-1 Explanation of the material topic and its Boundary	Sustainability Milestone	-	-
Management	103-2 The management approach and its components	Sustainability Milestone	-	-
Approach	103-3 Evaluation of the management approach	Sustainability Milestone	=	-
2016			=	-
GRI 201:	201-1 Direct economic value generated and distributed	• 2017 Highlights		
Economic				
Performance				
2016				
Indirect Ecor	nomic Impacts			
GRI 103:	103-1 Explanation of the material topic and its Boundary	Social Impact	-	-
Management		Education		
Approach		 Innovation 		
2016	103-2 The management approach and its components	Social Impact	-	-
		Education		
		 Innovation 		
	103-3 Evaluation of the management approach	Social Impact	-	-
		Education		
		 Innovation 		
	203-1 Infrastructure investments and services supported	Social Impact	-	-
		Education		
	203-2 Significant indirect economic impacts	Social Impact	-	-
		Education		
		 Innovation 		

GRI STANDARD	DISCLOSURES	PAGE/WEBSITE	OMISSION/ NOTE	EXTERNAL ASSURANCE
Anti-corrupt	ion			
GRI 103 Management Approach 2016 GRI 205: Anti-corruption	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach 205-2 Communication and training about anti-corruption policies and procedures	Corporate Governance Corporate Governance Corporate Governance Corporate Governance		
Energy	i			
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach	Climate Change Management Climate Change Management Climate Change	-	-
GRI 302: Energy 2016	302-1 Energy consumption within the organization 302-3 Energy intensity 302-4 Reduction of energy consumption	Management • Appendix • Appendix • Appendix	-	- - -
Water				
GRI 103: Management Approach 2016 GRI 303: Water 2016	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach 303-1 Water withdrawal by source 303-3 Water recycled and reused	Water Stewardship Water Stewardship Water Stewardship Appendix Appendix Ecosystem & Biodiversity Protection	- - - -	- - - - -
Biodiversity			ı	ı
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach	Ecosystem & Biodiversity Protection Ecosystem Biodiversity Protection Ecosystem &	-	-
GRI 304: Biod- iversity 2016	304-3 Habitats protected or restored	Biodiversity Protection • Ecosystem & Biodiversity Protection	-	-
Emissions				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach	Climate Change Management Climate Change Management Climate Change Management	-	-
GRI 304: Biod- iversity 2016	305-1 Direct (Scope 1) GHG emissions	• Appendix	Direct GHG emissions from stationary combustion of CP ALL Public Company Limited are not available because our data collection system is under standardization. This data will be available in the next reporting period.	\

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GRI STANDARD	DISCLOSURES	PAGE/WEBSITE	OMISSION/ NOTE	EXTERNAL ASSURANCE	
	305-2 Energy indirect (Scope 2) GHG emissions	Appendix	-	✓	
	305-4 GHG emissions intensity 305-5 Reduction of GHG emissions	Appendix Appendix	-	-	
Effluents and	l Wastes		'		
GRI 103:	103-1 Explanation of the material topic and its Boundary	Climate Change	-	-	
Management Approach 2016	103-2 The management approach and its components	Management Climate Change Management	-	-	
2010	103-3 Evaluation of the management approach	Climate Change Management	-	-	
GRI 306: Effluents and Waste 2016	306-1 Water discharge by quality and destination	Appendix	As this is our first global report, we are still in the process of data collection. To avoid data discrepancies, we were only able to provide total amount of water discharge and discharge by destination. We will report water discharge by quality in the next reporting period.	-	
	306-2 Waste by type and disposal method	Appendix	-	-	
Supplier Env	ironmental Assessment				
GRI 103: Management	103-1 Explanation of the material topic and its Boundary	Ecosystem & Biodiversity Protection	-	-	
Approach 2016	103-2 The management approach and its components	Ecosystem & Biodiversity Protection	-	-	
	103-3 Evaluation of the management approach	Ecosystem & Biodiversity Protection	-	-	
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	Ecosystem & Biodiversity Protection	-	-	
Employment					
GRI 103: Management	103-1 Explanation of the material topic and its Boundary	Human Rights and Labor Practices	-	-	
Approach 2016	103-2 The management approach and its components 103-3 Evaluation of the management approach	Human Rights and Labor Practices Human Rights and	-	-	
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	Labor Practices • Appendix	-	-	
Occupational Health and Safety					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Human Rights and Labor Practices	-	-	
	103-2 The management approach and its components	Human Rights and Labor Practices	-	-	
	103-3 Evaluation of the management approach	Human Rights and Labor Practices		-	

TRODUCTION

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GRI STANDARD	DISCLOSURES	PAGE/WEBSITE	OMISSION/ NOTE	EXTERNAL ASSURANCE
Occupational	Health and Safety			
GRI 403: Occupational Health and Safety 2016	403-2 Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	 ◆ Appendix 	Rates of injury and number of work-related fatalities for all workers of True Corporation Public Company Limited, C.P. Land Public Company Limited and CPRAM (Ladkrabang) Co. Ltd. are not available because our data collection system is under standardization. This data will be available in the next reporting period.	√
Training and	Education			
GRI 103: Management Approach	103-1 Explanation of the material topic and its Boundary	Leadership and Human Capital Development	-	-
2016	103-2 The management approach and its components	Leadership and Human Capital Development	-	-
	103-3 Evaluation of the management approach	 Leadership and Human Capital Development 	-	-
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	Appendix	-	-
Human Right	s Assessment	1	1	1
GRI 103: Management	103-1 Explanation of the material topic and its Boundary	Human Rights and Labor Practices	-	-
Approach 2016	103-2 The management approach and its components	Human Rights and Labor Practices	We are in the process of developing human rights due diligence process for the whole group and have only started tracking human rights grievance in 2017.	-
	103-3 Evaluation of the management approach	Human Rights and Labor Practices	-	-
GRI 412: Human Rights Assessment 2016	412-1 Operations that have been subject to human rights reviews or impact assessments	Human Rights and Labor Practices	-	-
Local Comm	unities			
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Social Impact Health and Well-being Education Water Stewardship	-	-
	103-2 The management approach and its components	Ecosystem & Biodiversity Protection Responsible Supply Chain Management Social Impact Health and Well-being Education Water Stewardship	-	-

GRI STANDARD	DISCLOSURES	PAGE/WEBSITE	OMISSION/ NOTE	EXTERNAL ASSURANCE	
Local Comm	Local Communities				
GRI 413: Local Communities 2016	103-3 Evaluation of the management approach 413-1 Operations with local community engagement, impact assessments, and development programs	Ecosystem & Biodiversity Protection Responsible Supply Chain Management Social Impact Health and Well-being Education Water Stewardship Ecosystem & Biodiversity Protection Responsible Supply Chain Management Social Impact Health and Well-being Education Water Stewardship Ecosystem & Biodiversity Protection Responsible Supply Chain Management Social Impact Health and Well-being Education Water Stewardship Ecosystem & Biodiversity Protection Responsible Supply Chain Management	All (100%) business groups implemented local community engagement and development programs. All operations are also subject to impact assessment if required by law. In 2017, the operations implemented impact assessments accounted for 100%.	-	
Supplier Envi	ironmental Assessment	1	I	I	
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach	Ecosystem & Biodiversity Protection Ecosystem & Biodiversity Protection Ecosystem &	-	-	
GRI 414 Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	Biodiversity Protection • Ecosystem & Biodiversity Protection	-		
Product and	Service Labelling	,	1	1	
GRI 103: Management Approach 2016 GRI 417: Marketing and Labeling 2016	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach 417-1 Requirements for product and service information and labeling	Health and Well-being Health and Well-being Health and Well-being Health and Well-being	- - -	- - -	
Healthy and A	Affordable Food				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary 103-2 The management approach and its components 103-3 Evaluation of the management approach	Health and Well-being Innovation Health and Well-being Innovation Health and Well-being Innovation	-	- - -	

COMMUNICATION ON PROGRESS - ADVANCED LEVEL

CRITERION	DESCRIPTION	PAGE
1	The COP describes mainstreaming into corporate functions and business units	54 - 63, 74 - 76, 78 - 83, 85, 88, 90, 92, 94, 96 - 97, 101, 104, 106, 146, 170, 190, 197, 199 - 204, 207
2	The COP describes value chain implementation	80, 86 -89, 93, 117, 120, 146, 150 - 151, 163 - 165, 229, 242, 244 - 247, 249, 268 - 274
3	The COP describes robust commitments, strategies or policies in the area of human rights	86, 88 – 89, 269
4	The COP describes effective management systems to integrate the human rights principles	85 – 90, 92, 94, 245, 267 - 268
5	The COP describes effective monitoring and evaluation mechanisms of human rights integration	83, 85, 95, 267, 269
6	The COP describes robust commitments, strategies or policies in the area of labor	86, 88 – 89, 106, 245
7	The COP describes effective management systems to integrate the labor principles	82 - 83, 85 – 87, 267, 269
8	The COP describes effective monitoring and evaluation mechanisms of labor principles integration	268 - 269
9	The COP describes robust commitments, strategies or policies in the area of environmental stewardship	56 - 57, 211 - 212, 228, 241 - 242, 245, 268
10	The COP describes effective management systems to integrate the environmental principles	212, 214 – 215, 229, 244, 269
11	The COP describes effective monitoring and evaluation mechanisms for environmental stewardship	245, 261, 269, 272
12	The COP describes robust commitments, strategies or policies in the area of anti-corruption	77, 80
13	The COP describes effective management systems to integrate the anti-corruption principle	80 – 81, 83
14	The COP describes effective monitoring and evaluation mechanisms for the integration of anti-corruption	83
15	The COP describes core business contributions to UN goals and issues	55, 64 - 65, 68, 72, 84, 98, 112, 129, 132, 153, 156 - 157, 174, 188, 210, 226, 240, 250, 258 - 263, 266
16	The COP describes strategic social investments and philanthropy	10, 132 - 155, 166 - 187, 233, 238 - 239, 246 - 260, 262 - 263, 270 - 276
17	The COP describes advocacy and public policy engagement	81, 128 – 129, 186 - 187
18	The COP describes partnerships and collective action	81, 128 - 129, 142 - 145, 153, 167 - 168, 177, 180 - 181, 183, 186 - 187, 207, 244, 249 - 254, 258 - 263, 272 - 273
19	The COP describes CEO commitment and leadership	8 - 9
20	The COP describes Board adoption and oversight	41, 59, 74 - 76, 79 - 80, 83, 106, 134, 164, 190
21	The COP describes stakeholder engagement	64 - 65, 83, 112 - 129, 215, 231, 269

UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

GOAL	DESCRIPTION	CHAPTER
1	End poverty in all its forms everywhere	Social Impact Climate Change Management
2	End hunger, achieve food security and improved nutrition and promote sustainable agriculture	Health & Well-being Climate Change Management
3	Ensure healthy lives and promote well-being for all at all ages	Human Rights & Labor Practices Health & Well-being
4	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	Human Rights & Labor Practices Leadership & Human Capital Development Education
5	Achieve gender equality and empower all women and girls	Human Rights & Labor Practices
6	Ensure availability and sustainable management of water and sanitation for all	Water Stewardship Ecosystem & Biodiversity Protection
7	Ensure access to affordable, reliable, sustainable and modern energy for all	Climate Change Management
8	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	Human Rights & Labor Practices Social Impact Education Innovation Water Stewardship
9	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	Innovation
10	Reduce inequality within and among countries	Human Rights & Labor Practices Social Impact
11	Make cities and human settlements inclusive, safe, resilient and sustainable	Climate Change Management
12	Ensure sustainable consumption and production patterns	Corporate Governance Human Rights & Labor Practices Climate Change Management Ecosystem & Biodiversity Protection Responsible Supply Chain Management
13	Take urgent action to combat climate change and its impacts	Climate Change Management
14	Conserve and sustainably use the oceans, seas and marine resources for sustainable development	Ecosystem & Biodiversity Protection
15	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	Ecosystem & Biodiversity Protection
16	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	Corporate Governance Human Rights & Labor Practices Stakeholder Engagement Responsible Supply Chain Management
17	Strengthen the means of implementation and revitalize the global partnership for sustainable development	Climate Change Management Water Stewardship Ecosystem & Biodiversity Protection



LRQA Assurance Statement

Relating to Charoen Pokphand Group Co., Ltd.'s Sustainability Report for the calendar year 2017

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

Terms of Engagement

Lloyd's Register Quality Assurance Ltd. (LRQA) was commissioned by Charoen Pokphand Group Co., Ltd. (CPG) to provide independent assurance on its Sustainability Report for the calendar year 2017 ("the Report") against the assurance criteria below to a limited level of assurance and at the materiality of the professional judgement of the verifier using LRQA's verification approach. LRQA's verification approach is based on current best practice and uses the principles of AA1000AS (2008) - Inclusivity, Materiality, Responsiveness and Reliability of performance data and processes defined in ISAE3000.

Our assurance engagement covered CPG's operations and activities in Thailand, including its subsidiary companies and specifically the following requirements

- · Confirming that the Report is in accordance with GRI standards and Core option, and
- Evaluating the reliability of data and information for selected specific standard disclosures: Total water withdrawal by source (GRI 303-1): Direct GHG emissions (GRI 305-1) - combustions only; Energy indirect greenhouse gas emission (GRI 305-2) and Types of injury and rates of injury, occupational diseases, lost days, absenteeism and number of work-related fatalities (GRI 403-2) only.

Our assurance engagement excluded the data and information of CPG's operations and activities outside of Thailand.

LRQA's responsibility is only to CPG, LRQA disclaims 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:

- Met the requirements above
- Disclosed reliable performance data and information for the selected specific standard disclosures
- 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.

LRQA's Approach

LRQA's assurance engagements are carried out in accordance with LRQA's Report Verification procedure. The following tasks though 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.
- · 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 CPF, CP All and TRUE. We also spoke with key people in various facilities responsible for compiling the data and drafting the Report.

This document is subject to the provision on page 2.



Sampling of evidences presented at CP Land Bangkok and CPPC Rayong, to confirm the reliability of the selected specific standard

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. However, we believe that CPG should improve their practices for directly engaging with the local communities and supply chain stakeholders.

We are not aware of any material aspects concerning CPG's sustainability performance that have been excluded from the Report. CPG has processes for identifying and determining their material aspects; the evaluation process considers factors such as stakeholder concerns, business risks and legal compliance.

Responsiveness:

CPG and its subsidiaries have processes for responding to various stakeholder groups. We believe that future reports should further explain the actions being taken by CPG to address the concerns raised during its engagement with supply chain stakeholders, communities and NGOs. These concerns typically relate to agricultural practises such as farmer awareness in optimizing fertilizers, safe use of pesticides and handling of contaminated packaging.

Reliability:

CPG use spreadsheets and manual systems to collect and calculate the data and information associated with the selected specific standard disclosures listed above. CPG should consider periodically reviewing data and information consolidated from its subsidiary companies. This would promote awareness of the data systems and check accuracy of data sources and transposed information.

LRQA's 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

This verification, together with verification for two CPG subsidiaries are the only work undertaken by LRQA for CPG and as such does not compromise our independence or impartiality.

Signed Dated: 9 July 2018

Opart Charuratana LRQA Lead Verifier

On behalf of Lloyd's Register Quality Assurance Ltd. Lloyd's Register International (Thailand) Limited 22th Floor, Sirinrat Building, 3388/76 Rama IV Road Klongton, Klongtoey, Bangkok 10110 THAILAND LRQA Reference: BGK600000165

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Our lifelong journey always bases its importance on our 'security' and our 'dreams.'

We tend to forget that the most important thing in our life that brings about true security and power to realize great dreams is True Love (compassion). True Love allows us to see through all the differences, connect to the truth and everything else, including our true self, to truly enjoy this amazing life together.

SUPHACHAI CHEARAVANONT

Chief Executive Officer Charoen Pokphand Group Co.,Ltd.









