



SUSTAINABILITY REPORT 2023

Charoen Pokphand Produces Co., Ltd.
Charoen Pokphand Agriculture Co.,Ltd.
and companies in Crop Integration Business.
Charoen Pokphand Group.





CROP INTEGRATION BUSINESS

SUSTAINABILITY REPORT 2023

CROP INTEGRATION BUSINESS

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SUSTAINABILITY MANAGEMENT

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MATERIALITY ASSESSMENT

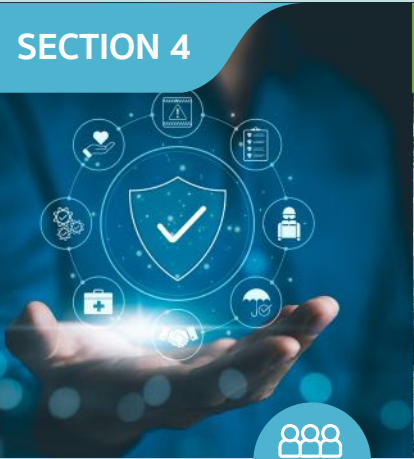
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HEART

LIVING RIGHT

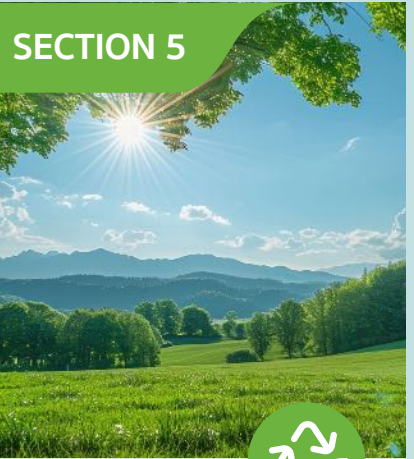
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HEALTH

LIVING WELL

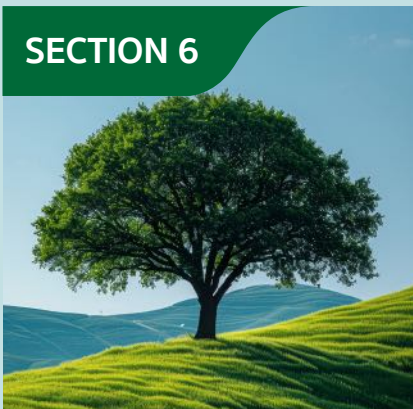
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HOME

LIVING TOGETHER

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MESSAGE FROM VICE CHAIRMAN CROP INTEGRATION, RICE, TRANSPORTATION AND SERVICE BUSINESS

INNOVATIVE ORGANIZATION

**“Innovation development isn’t just a matter
of policy but should be conscious mind of every employ”**

Our vision is to become an organization that fosters innovation, creating economic, social and environmental benefits for the entire world. Charoen Pokphand Produce Co., Ltd. and companies in the Crop Integration Business Group are focus on creating a culture of exchanging knowledge along with encouraging employees to create innovations. To step towards sustainable business growth in terms of economy, society, and environment.

ENVIRONMENT

**“It is our responsibility
to strike the right balance
between development and the
conservation of our natural
resources while respecting
the rights of all of our
stakeholdersun”**

Charoen Pokphand Produce Co., Ltd. and companies in the Crop Integration Business Group are constantly seeking ways to share knowledge with and build the capabilities of the communities we impact while also ensuring we do all we can to help ecosystems and biodiversity flourish. This will help ensure that the natural resources, on which our business depends, remain sustainable and abundant.

Mr.Prasit Damrongchietanon



MESSAGE FROM CHIEF EXECUTIVE OFFICER CROP INTEGRATION BUSINESS.

HAVE THE KNOWLEDGE TO LEARN NEW THINGS.

Include the Charoen Pokphand Group just in case, don’t forget the words “3 benefits” in every country that they invest in. which is good that the success of various businesses The important thing with responsibility and accountability to the questions that the surrounding social community grows together.

Crop Integration Business which operates upstream of the production sector and will be a part that makes farmers earn and bring growth because it is considered various technologies to increase production efficiency to be transferred to farmers. At the same time, employees are encouraged to participate in creating new innovations. to become a learning organization and business growth in terms of economy, society, and environment in a sustainable manner.

**“Everything around us can be
innovative. Start with interest and action.
Don’t let fear makes us dare not think or do
something different If you try it and you get
an error reviewed and made improvements.
Our company is ready to support employees
to participate in creating new things that are
beneficial to the organization and society.”**

REWARD YOU LAND BY TAKING CARE OF THE ENVIRONMENT

Our company places importance on participation in conservation. Rehabilitation of natural resources and the environment in collaboration with the agency and network partners in many areas Continue to take care of important watershed forests. as well as encouraging employees to jointly take care of and planting perennials in the organization’s area in the event “Planting forests in the house” to increase green space for the country because of participation in nature conservation considered as one of the goals to repay the land. that the integrated plant business intends to operate.

Mr. Sumeth Pinyosnit



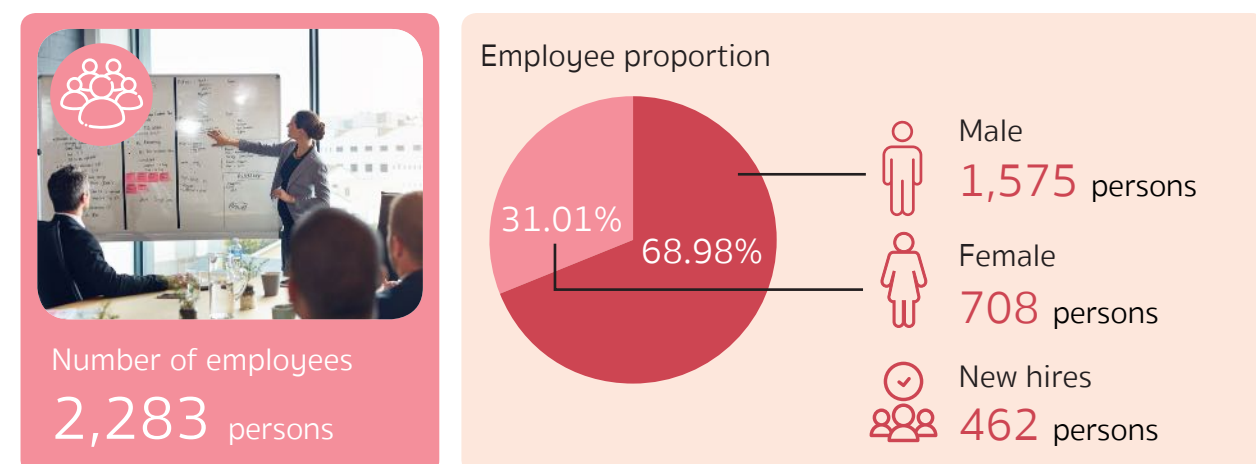
SUMMARY OF KEY PERFORMANCE IN 2023

GRI 102-7

ECONOMIC GROWTH



HEART : LIVING RIGHT



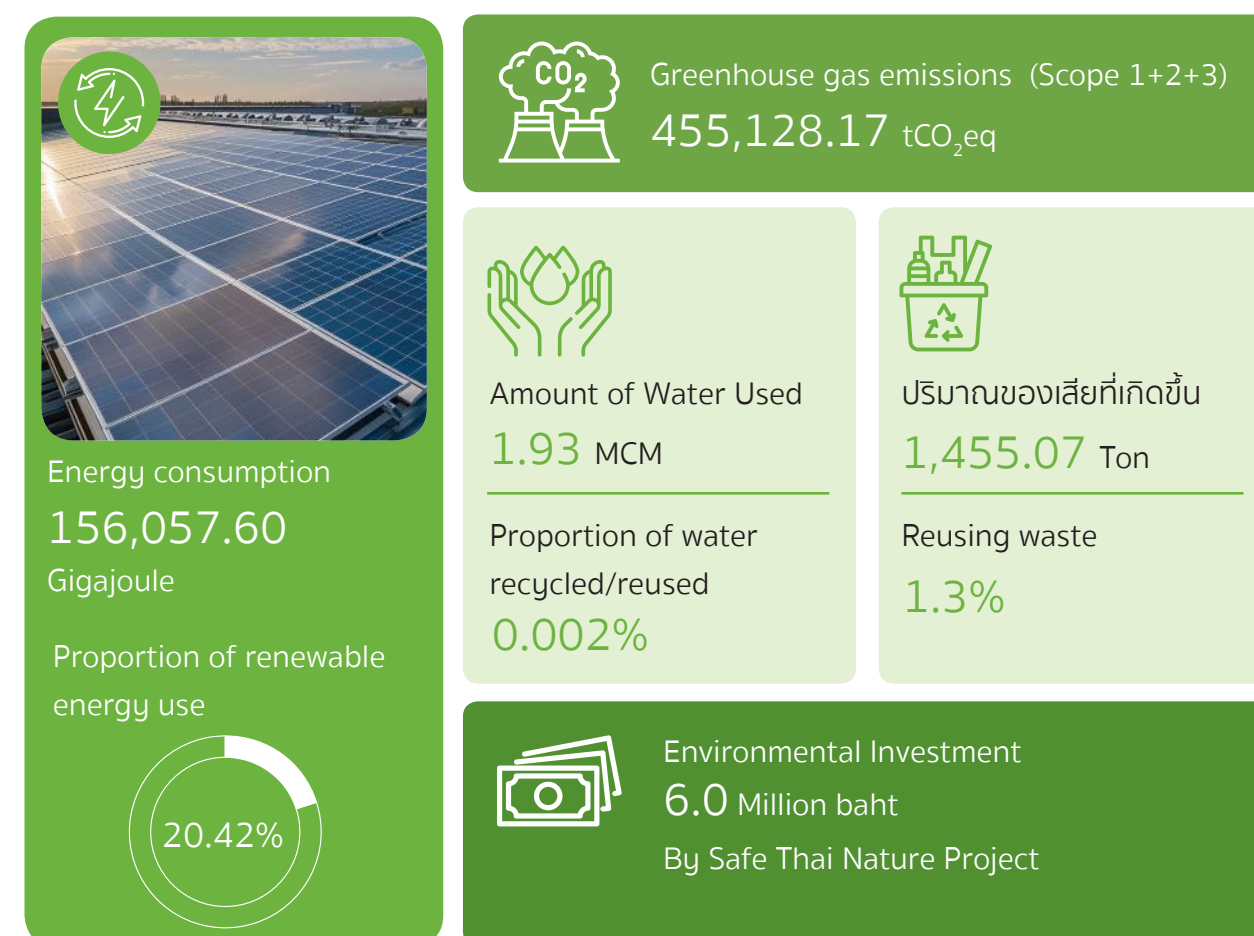
100% Employees and leaders trained in sustainability, safety



HEALTH : LIVING WELL



HOME : LIVING TOGETHER



PERFORMANCE RESULTS OF THE 15 SUSTAINABILITY GOALS 2023

HEART LIVING RIGHT

100%

CORPORATE GOVERNANCE
Percentage of Business assessed on CG practices. (Ethisphere)

100%

HUMAN RIGHTS & LABOR PRACTICES
Percentage of Business with Human Rights Impact Assessment.

9.55%

EDUCATION & INEQUALITY REDUCTION
Support 9,546 children, youths, and adults will gain access to education and necessary skills development. Goals 100,000 people.

100%

LEADERSHIP & HUMAN CAPITAL DEVELOPMENT
Percentage of Employees Engaged in Learning and Initiatives.

100%

CYBER SECURITY & DATA PROTECTION
Percentage of Business with certified international standard.


Health Living Well

0.84%


HEALTH & WELL-BEING
Sales from products and services by B2B2C and B2C

40.05%


SOCIAL IMPACT AND ECONOMIC CONTRIBUTION
Improved employment prospects and quality of life for 40,049 farmers and vulnerable groups. Goals 100,000 people

OCCUPATIONAL HEALTH & SAFETY
Zero Accident 2.34 no. per 1,000,000 working hours

32%

INNOVATION MANAGEMENT
16 registered patents and petty patents from 50 targets.

83%

STAKEHOLDER ENGAGEMENT
engagement score of multi-stakeholder perception survey. Goals 80%

Home Living Together


89.1%

CLIMATE RESILIENCE
Climate resilience emission quantity 89.18% Greenhouse gases per unit of income increased. Compared to the base year 2020


90%

CIRCULAR ECONOMY
90% of all plastic packaging are recyclable, reusable or compostable.

0%

WATER STEWARDSHIP
98.25% reduction in water withdrawal per unit revenue compared to baseline year 2020

100%

ECOSYSTEM AND BIODIVERSITY PROTECTION
100% Protected and restored terrestrial ecosystems by Safe Thai Nature Project.

73.91%

RESPONSIBLE SUPPLY CHAIN MANAGEMENT
Sustainability audit with 17 high-risk supplier from 23 supplier.

AWARDS AND STANDARDS (CPP)

Certification of passing business governance standards.

In the first year, Charoen Pokphand Produce Co.,Ltd. received a plaque and certificate of passing corporate governance standards. And received a special award from BCG in 3 areas:



Bioeconomy



Green economy



Economic overview



Safety Health and Environment Management-Outstanding Model

Establishment Award Occupational safety and working environment



Seed Processing Plant Soi 19



National Level
21th years



Organic Fertilizer Plant



National Level
8th years



Chemical Fertilizer Packing and Mixing plant
National Level 2th years



Seed Processing Plant Soi 12



National Level
17th years

Zero Accident Campaign Award (Zero Accident Campaign Activity)



Chemical Fertilizer Packing and Mixing plant



2nd years Beginning Level



CSR

Corporate Social Responsibility (CSR)
CSR-DIW Award Chemical Fertilizer Packing and Mixing plant



4th years Beginning Level

Protection standard award and Solve drug problems (TSRI)



Seed Processing Plant Soi 19



11th years Beginning Level

Seed Processing Plant Soi 12



9th years Beginning Level

Organic Fertilizer Plant



7th years Beginning Level

Chemical Fertilizer Packing and Mixing Plant



4th years Beginning Level



International Standard Systems and Certification

ISO 9001: 2015 (Quality Management)

1. Seed Processing Plant Soi 19
2. Seed Processing Plant Soi 12
3. Organic Fertilizer Plant
4. Chemical Fertilizer mixing and packing plant

ISO 14001: 2015 (Environmental Management)

1. Seed Processing Plant Soi 19
2. Seed Processing Plant Soi 12

AWARDS AND STANDARDS (CPA&CPS)



Safety, occupational health
National Outstanding Model Business
Establishment Award



Zero Accident Campaign Award
Campaign activity to reduce work
accident statistics to zero



Standards and certification systems

- ISO 9001
- ISO 45001
- ISO 14001
- GHPs

DOW JONES SUSTAINABILITY INDEX (DJSI)

Pokphand Group Produces Co.,Ltd. join the Dow Jones Sustainability Index membership Industry Leader of the Food & Staples Retailing industry for the first time with a 34- score assessment, no.68 in the world, with details as follows :



Now a Part of S&P Global

2023 CSA weights overview



Governance & Economic

Corporate Governance	15
Materiality	65
Risk & Crisis Management	11
Business Ethics	65
Policy Influence	0
Supply Chain Management	52
Tax Strategy	0
Info. Security/ Cybersecurity	20
Innovation Management	31



Environmental

Environmental Reporting	100
Environmental Policy & Management Systems	95
Operational Eco-Efficiency	48
Biodiversity	26
Climate Strategy	17
Food Loss & Waste	39
Genetically Modified Organism	0
Packaging	6
Sustainable Agricultural Practices	0
Water Related Risks	24



Social

Social Reporting	100
Labor Practice Indicators	46
Human Rights	48
Living Wage	6
Human Capital Development	27
Talent Attraction & Retention	16
Corporate Citizenship & Philanthropy	25
Occupational Health & Safety	70
Health & Nutrition	12
Customer Relationship Management	12

BUSINESS BASE OF CROP INTEGRATION BUSINESS

GRI 102-1, 102-2, 102-3, 102-4, 102-5, 102-6, 102-16, 102-45

THAILAND

- 3 Research Stations
- 2 Seed Laboratory
- 1 Biotechnology Laboratory
- 1 Soil and Plant Nutrient Analysis Laboratory
- 1 Chemical Fertilizer Laboratory
- 4 Seed Processing Plant
- 2 Nutrient Factory
- 1 Rubber Factory
- 12 Farms and orchards

MYANMAR

- 2 Research Stations
- 1 Seed Laboratory
- 1 Soil and Plant Nutrient Analysis Laboratory
- 2 Seed conditioning factories
- 3 Nutrient Factory

VIETNAM

- 1 Research Stations
- 1 Seed Laboratory
- 1 Biotechnology Laboratory
- 1 Soil and Plant Nutrient Analysis Laboratory
- 1 Seed conditioning Factory

INDIA

- 2 Research Stations
- 1 Seed Laboratory
- 1 Biotechnology Laboratory
- 1 Seed conditioning Factory



Number of employees
2,283 People



4 countries
(Thailand, Myanmar, Vietnam, India)
(Information : 31 Dec. 2023)



Corn Farmers
1,010,000 People
Number of farmers in the
business base country


The 10 countries doing business are Thailand, Lao PDR, Cambodia, Myanmar, India, Nepal, Sri Lanka, Bangladesh and Pakistan.





MAIN BUSINESS

From the fact that Charoen Pokphand Group operates an Integrated Agricultural Business and Animal Feed Production for domestic and international, corn being one of the crucial raw materials due to its high protein content. Therefore, to support the production shortfall of corn with stable and good quality for raising animals, Crop Integration Business plays an important role in the upstream production consisting of R&D of corn hybrids to be suitable to climate change and cultivation behavior of growers as well as seed production without contamination through controlled seed production facilities to produce corn hybrid seeds that meet the quality requirement of growers. In addition, the company provides and transfers knowledge about cultivation technology, know how to apply fertilizer to increase production or adding organic fertilizer to improve the soil fertility to member farmers. Last but not the least, the most crucial factor is water resources management and irrigation to enable all year round planting which will result in increasing income and farmers' standard of living according to CP's Three Benefits Principle : Farmers, Countries and Organization.


MAIN COMPANY


Charoen Pokphand Produce Co., Ltd. 
 Charoen Pokphand Seed Co., Ltd.
 Charoen Pokphand Agriculture Co., Ltd. Thailand

C.P. Seeds (Vietnam) Co., Ltd. 
 Vietnam

CPP Fertilizer Co., Ltd. 
 CPP Myat Min Agro Co., Ltd. Myanmar

Charoen Plantation Co., Ltd. 
 Cambodia

Charoen Pokphand Produce (Lao) Co., Ltd. 
 Lao PDR

Charoen Pokphand Seeds (India) Pvt., Ltd. 
 India

ECONOMIC DIMENSION



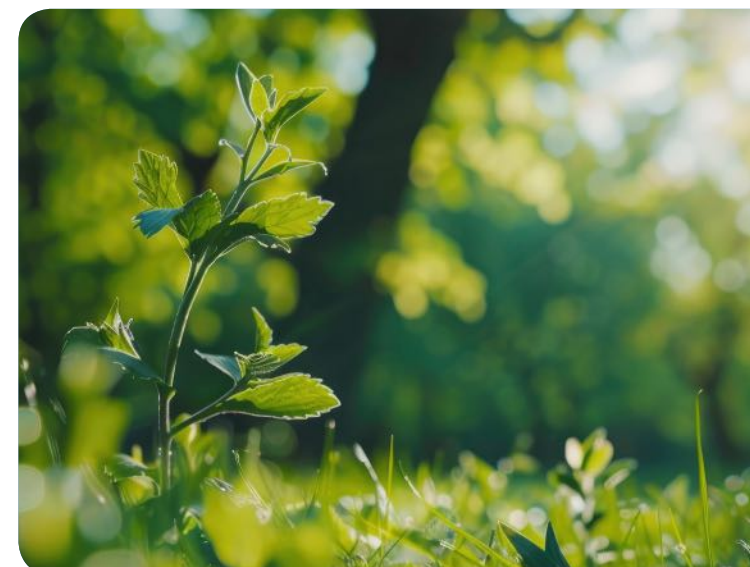
ECONOMIC DIMENSION

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






SOCIAL DIMENSION

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



ENVIRONMENTAL DIMENSION

-  Operational Eco-Efficiency
-  Ecosystem and Biodiversity
-  Raw Material Sourcing

Sustainable Upstream Business Direction.



Upstream business is the first step in the supply chain. It is the production, procurement of raw materials used in the production process of various products and services, which is important for the production process and processing in the next step. These businesses must adapt and develop for long-term sustainability.

Challenges of upstream agribusiness, such as climate change This causes uncertainty in production, fluctuating crop prices affecting farmers' income, diseases and pests. Cause damage to production, labor shortage Due to entering the aging society and the new generation turning to work in the industrial sector more, Uncertainty of government policy and consumer needs Greater emphasis on food and health, access to technology and innovation, which are important to increase production efficiency and reduce costs. Sustainable upstream agriculture creates long-term food and environmental security. Including reducing the impact on the environment Increase production efficiency and create stability for farmers



Sustainable upstream agricultural business operations



Use of technology and innovation

Precision agriculture such as sensors, drones and data systems to analyze data and improve production efficiency, Agricultural machinery such as planting, fertilizing, watering, and harvesting to reduce labor costs and increase productivity, renewable energy Using solar and wind energy in production To reduce costs and be environmentally friendly.



Efficient resource management

Study soil, water, and climate conditions and select appropriate plants. Use water efficiently, such as drip irrigation systems, Create value for agricultural waste materials such as the production of organic fertilizers, biomass energy. and develop into a carbon credit business.



Supply chain management

Shorten the steps in the supply chain. Promote plant growing Buy produce and send it directly to the factory. Manage transportation routes to reduce costs and increase efficiency.



Create a culture and encourage farmers to save money

Farmers should have enough income to pay off their debts. and have surplus cash to use



Support from the government and private sectors:

Develop infrastructure Promote marketing Certification of agricultural product standards Providing knowledge, training, and financial support

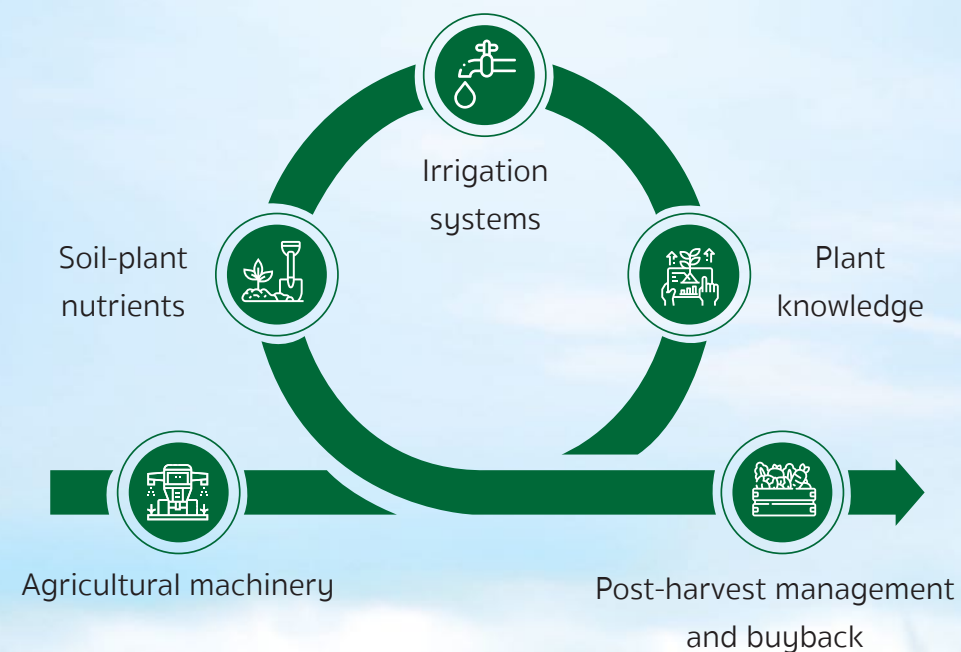
Crop Integration Business is CP's upstream business. Since research and development of varieties seed production Promotion of plant cultivation by integrated professional farm growers and together with distributors Using sustainable upstream agricultural business practices. In order to get standardized products and can be traced back in sufficient quantities to meet business needs For long-term food and environmental security.

VISION

Leader in integrated agriculture
in sustainable irrigation areas.

MISSION

A leader in integrated agriculture
by managing the supply chain shorter
and directly to consumers. Using technology
in 5 areas of excellence



SIX CORE VALUES

THREE BENEFITS



We are committed to doing business responsibly. and focus on sustainable benefits In every country that invests, there are benefits to the people who invest and benefits to the organization



SPEED WITH QUALITY

We work hard to achieve our goals. By thinking quickly, acting quickly and achieving quality results according to the standards set by the company.



SIMPLIFICATION

We are committed to performing tasks that are beneficial to the organization. Reduce redundant steps and improve work to be modern which employees can actually put into practice, quickly and efficiently.



ACCEPT CHANGE

We embrace change and adapt to changing situations. It is not in the same state just because it is something that has been done before. By learning and never stopping to seek new opportunities. We are also committed to improving to meet all the needs of farmers, partners and the nation.



INNOVATE

We are dedicated to continuous innovation and business development to become “**Innovative organization**” Create the best products and services for farmers and our customers.



INTEGRITY

We adhere to morality and ethics. Work with honesty towards yourself. Colleagues and consumers There is a traceability system to build confidence in the organization and brand.

SUSTAINABILITY MANAGEMENT



Crop Integration Business, Charoen Pokphand Group believes that in addition to delivering value through quality products and services, and meets the needs of customers and consumers Businesses will be able to operate sustainably. Must be based on social responsibility. and the environment according to the Sufficiency Economy Philosophy

This is the origin of conducting business by adhering to the philosophy of 3 benefits that focuses on creating benefits for the nation. society and companies as always Including applying the C.P. Excellence guidelines.

Our organization is committed to operating sustainably, going beyond complying with the rules, regulations and standards of the countries in which we operate. By following international principles of sustainability such as the UN Global Compact. United Nations Principles on business operations and human rights (UN Guiding Principles on Business and Human Rights: UNGP) and the Sustainable Development Goals of the United Nations (UN Sustainable Development Goals: UN SDGs)



SUSTAINABILITY STRATEGY



SUSTAINABILITY GOVERNANCE

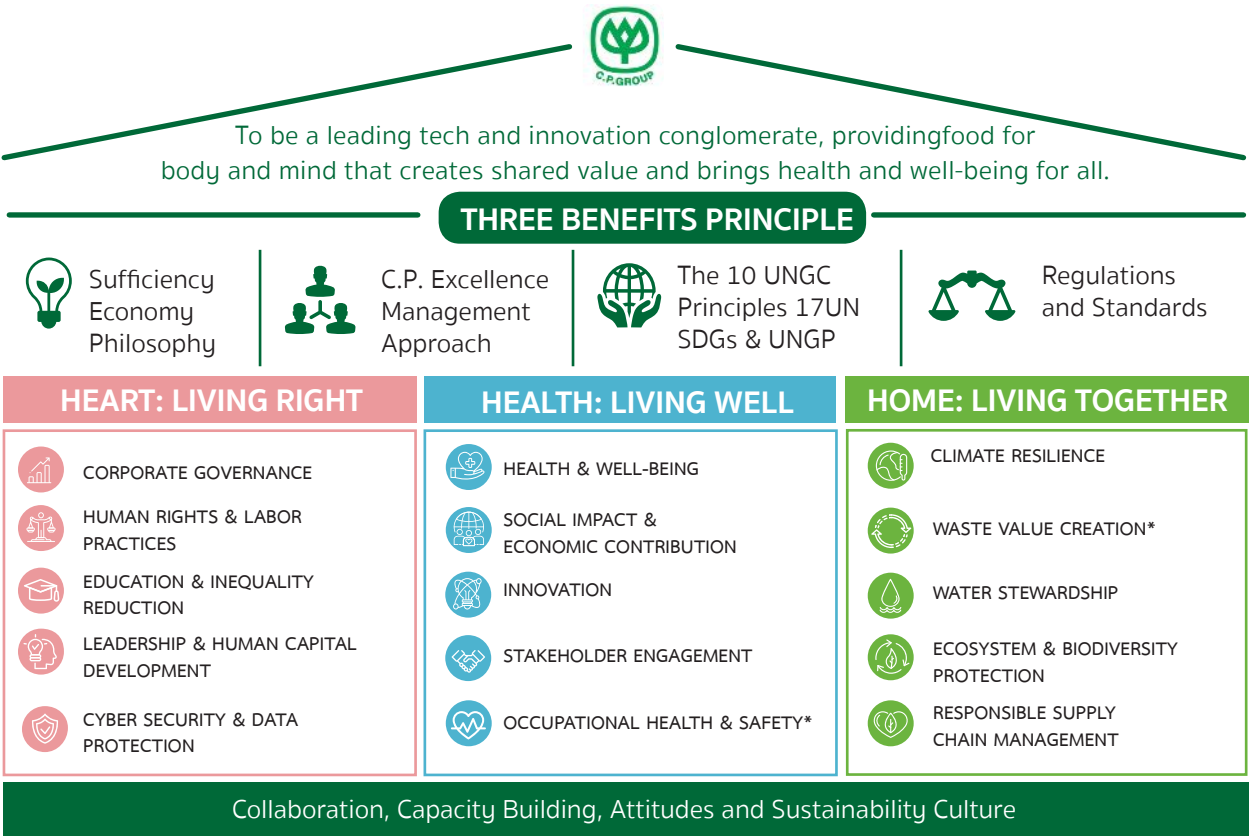


MATERIALITY ASSESSMENT



ABOUT THIS REPORT

SUSTAINABILITY STRATEGY FRAMEWORK 2030



Enabled by Partnerships, Capability, and Culture of Sustainability

In 2016, Crop Integration Business adopt the Strategies and Sustainable development goals of the Charoen Pokphand Group to create a sustainable way of working under the 3Hs framework ; HEART – Committed to a sustainable business HEALTH – Committed to a sustainable society HOME – Committed to a sustainable environment. CP Group’s sustainability strategy consists of 4 issues, which are an important basis for CP Group’s sustainable business operations, namely the 3-Benefits Philosophy, which aims to create benefits for the nation, society, and the company.

Our organization places importance on conducting business based on the principles of good governance. and can be verified Including being responsible for society and the environment in a sustainable way. For the highest benefit of all stakeholders.

Crop Integration receive sustainability strategies and goals 2030, increasing from the CP Group’s goals in 3 issues.



SUSTAINABILITY ACTION CONCEPT





EDUCATION & INEQUALITY REDUCTION



Goal 2023

Supporting **9,546** children, youth and adults to have the opportunity to access education and developing the necessary skills from the goal of **100,000** people

Goal 2030

Support children, youth and adults to have the opportunity to access education and developing the necessary skills from the goal of **100,000** people

CYBER SECURITY & DATA PROTECTION



Goal 2023

100% Certified Cyber Security Standards

Goal 2030

100% of Crop Integration Business certified to international cyber security and data protection standards.

GOOD HEALTH & WELL-BEING



Goal 2023

0.84% of sales come from **B2B2C and B2C** products and services that promote health and wellness

Goal 2030

Sales generated from **B2B2C and B2C** products and services that promote health and wellness

SOCIAL IMPACT & ECONOMIC CONTRIBUTION



Goal 2023

40.05% dPromote occupations and quality of life for farmers and vulnerable groups **40,049** out of the target of **100,000**

Goal 2030

Number of farmers, small entrepreneurs vulnerable groups and others throughout the supply chain that has been supported to generate income for all **100,000**

OCCUPATIONAL HEALTH & SAFETY



Goal 2023

The lost time accident rate was **2.17** cases/1,000,000. working hours

Goal 2030

Lost time accident rate is zero.

INNOVATION



Goal 2023

Number of registered patents and petty patents **16** out of **50** targets

Goal 2030

There are a total of **50** registered patents and petty patents.



STAKEHOLDER ENGAGEMENT



Goal 2023

The survey found that Crop Integrated Business received **83%** stakeholder engagement score from the target **80%**

Goal 2030

80% of multi-stakeholder engagement surveys score positively



CLIMATE RESILIENCE



Goal 2023

The amount of greenhouse gas emissions has increased. **17.96%** per revenue unit compared to the base year 2020

Goal 2030

100% of direct and indirect greenhouse gas emissions (Scope1 and Scope2) net zero.



CIRCULAR ECONOMY



Goal 2023

N/A

Goal 2030

All plastic packaging used is more than **90%** recyclable, reusable or compostable.



WATER STEWARDSHIP



Goal 2023

Reduced water consumption **66.79%** per revenue unit from the target of **30%** compared to the base year 2020

Goal 2030

Reduce water consumption by **30%** per revenue unit. compared to the base year 2020



ECOSYSTEMS AND BIODIVERSITY PROTECTION



Goal 2023

1 project, Safe Thai Nature Project done in conjunction with external organizations

Goal 2030

Number of projects with relevant international partners to manage and monitor biodiversity in business operations.



RESPONSIBLE SUPPLY CHAIN MANAGEMENT



Goal 2023

73.91% of businesses with a traceability process of the **23** first-tier business partners, **17** were audited for sustainability.

Goal 2030

100% of high-risk raw materials are traceable and high-risk suppliers audited.

MATERIALITY ASSESSMENT RESULTS OF CROP INTEGRATION BUSINESS

Material Issue	Topic	Business Line			
		Agricultural Integration Business	Seed Business	Fertilizer Business	Crop Integration Business
Corporate Governance	Governance and Business Ethics	●	●	●	●
	Risk and Crisis Management	●	●	●	●
	Cyber Security & Data Protection	●	●	●	●
Human Rights and Labor Practices	Labor Practices and Human Rights (Excluding Occupational Health & Safety)	●	●	●	●
	Safety, occupational health and working environment	●	●	●	●
Leadership & Human Capital Development	Human Resource Management	●	●	●	●
Stakeholder Engagement	Stakeholder Engagement	●	●	●	●
	Customer Relationship Management	●	●	●	●
Social Impact	Corporate Citizenship and Philanthropy (excluding education activities)	●	●	●	●
	Social Impacts from Operations, Products, and Services	●	●	●	●
Health & Well-being	Health & Well-being	●	●	●	●
	Animal Welfare	●	●	●	●
Education	Social Inclusion in Education	●	●	●	●
Innovation	Innovation Management	●	●	●	●
Climate Change	Climate Change Impact	●	●	●	●
	Energy Management	●	●	●	●
	Effluent and Waste Management	●	●	●	●
	Resource Efficiency	●	●	●	●
Water Stewardship	Water Management	●	●	●	●
Ecosystem & Biodiversity Protection	Raw Material Sourcing / Biodiversity and Ecosystems	●	●	●	●
	Packaging	●	●	●	●
Supply Chain	Management Responsible Supply Chain Management	●	●	●	●

● No Impact

● Little impact

● Middle Impact

● High Impact

● Very High Impact

SUSTAINABILITY DEVELOPMENT STRUCTURES



MATERIALITY ASSESSMENT PROCESS

GRI 102-2, 102-15, 102-32, 102-46, 102-47, 102-54, 103-1



SUSTAINABILITY STRATEGY 2030

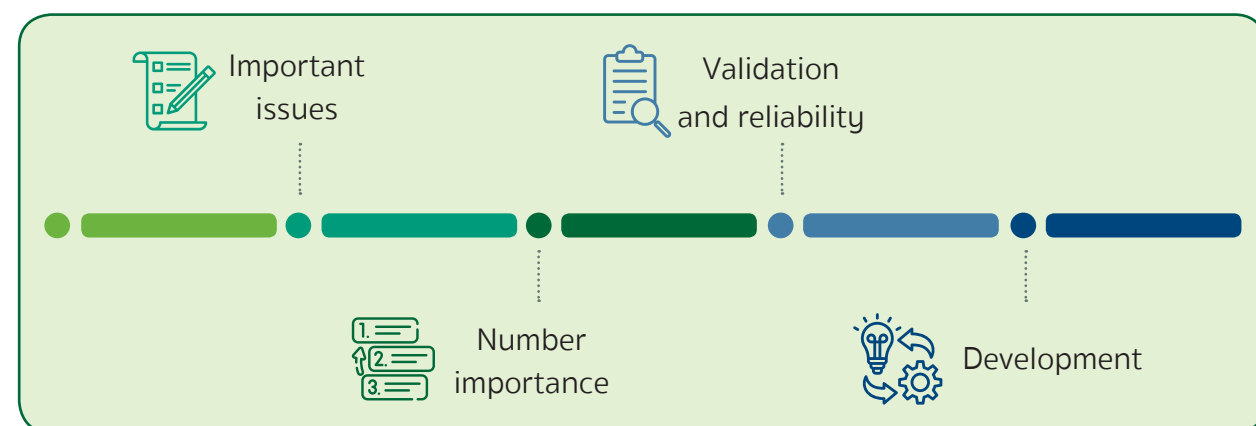


ASSESSMENT OF KEY SUSTAINABILITY ISSUES

INDUSTRY FOCUSED	INTERNAL FOCUSED	EXTERNAL FOCUSED	FUTURE FOCUSED
Assessing key business issues by taking business-related factors and other companies in the same industry to consider	Assessing key business issues by taking into account the main factors related to the internal operations of the business.	Assessing key business issues by taking into account the issues of interest of stakeholders	Assessing key business issues by bringing up issues of interest to relevant industry leaders and the perspective of investors to consider

Crop Integration Business determine the content and quality of this report. On the basis of the organization’s operations and important issues that affect the economy, society and the environment. Under the perspective of stakeholders both inside and outside the organization To be one of the channels for communication for stakeholders to be informed of our commitment and operating results according to the company’s strategic sustainability framework. The company uses international sustainability reporting GRI Sustainability Reporting Standards, Core option, as a framework for preparing the report. By considering both internal and external factors related to operations. To evaluate important sustainability issues

Assessment of sustainability issues under the 10 key principles of the GRI Standards, which includes stakeholder participation, Considering the context of sustainability, Assessment of important sustainability issues, completeness of information, as well as verifying the quality of reports by carrying out work to check the accuracy of disclosed information, balance of operating results. Comparable data to show historical performance trends, data reliability and reporting timeliness to inform stakeholder decision-making. There are processes and procedures for evaluating important sustainability issues as follows:



STEPS TO IDENTIFY KEY ISSUE

Important issues



Information and analysis of important sustainability issues related to Charoen Pokphand Group and Crop Integration Business

The steps for identifying important issues include

- Sustainability workshop in 2016 shared between executives Including collecting information from trading partners to consider. After that, it is reviewed every year, once a year.
- Results of the review of significant issues for 2021 of the Charoen Pokphand Group and Crop Integration Business.
- Compare sustainability issues of Crop Integrated Business with the same business : Sustainable Development Goals, United Nations Global Compact, World Business Committee for the Environment (WBCSD), Dow Jones Sustainability Index.
- Stakeholder groups from survey data of Charoen Pokphand Group's trading partners and CSR, total 14 groups.
- Prepare important issues of the subsidiaries that has prepared a sustainability report and organized a forum to listen to opinions with additional stakeholders. From the questionnaire survey

Prioritization



- Meeting of the Sustainability Management Committee to consider information on important issues regarding sustainability. Separated by stakeholder group
- Survey opinions of employees, executives and stakeholder representatives through an online system.
- Consider important information From meetings and surveys of stakeholders' opinions Follow this step
 - Weighting values for business groups.
 - Weight of each stakeholder group
 - Calculate the importance score to stakeholders.
 - Calculate the importance score for business operations
 - Materiality Matrix

Verifying accuracy and reliability



Verify the preparation of sustainability reports according to GRI standards to complete all 4 aspects. The steps for verifying accuracy include:

- Interview external stakeholders to sustainability issues and other ideas to develop sustainability reports.
- The management team considers and approves significant issues.
- Verify and certify the accuracy of sustainability reporting by an independent agency.

Continuous Development



Listen to opinions in order to develop future sustainability reports. To be able to meet the expectations of stakeholders At the same time, there are also many contact channels open.

OBJECTIVES OF THE SURVEY OF STAKEHOLDERS'S OPINIONS.



Performance
15 Sustainability Goals



Assess the impact
Sustainability issues



Assess the impact
Sustainability issues

Stakeholder Perception Survey and assess sustainability impacts (online system)



- Links are separated into each stakeholder group of each business group.
- Analyze answers and report overall results for each business. Without specifying the name and identity of the survey respondent.
- Can be used from both PC, tablet and mobile phone.
- The survey takes approximately 30 minutes and results cannot be saved for later.

General Information

Section 1General Information

- 2 questions
1. age
 2. sex

Section 2Performance results 15 important goals of Charoen Pokphand Group

- 15 questions
- Performance level according to the sustainability goals of Crop Integration Business

Section 3Assessment of Company Sustainability Issues

- 10 questions
- Stakeholders were asked to select 5 issues of interest from 23 issues.
- What is your opinion on the impact of the company’s operations on that issue?
- 3.1 Assess the severity of the impact
 - 3.2 Assess the likelihood of impacts

Section 4Communication: Listening and responding to stakeholders.

- 3 questions
- 4.1 Efficiency in communicating with stakeholders both inside and outside the organization.
 - 4.2 Listening to the opinions of stakeholders
 - 4.3 Respond to the needs and expectations of stakeholders

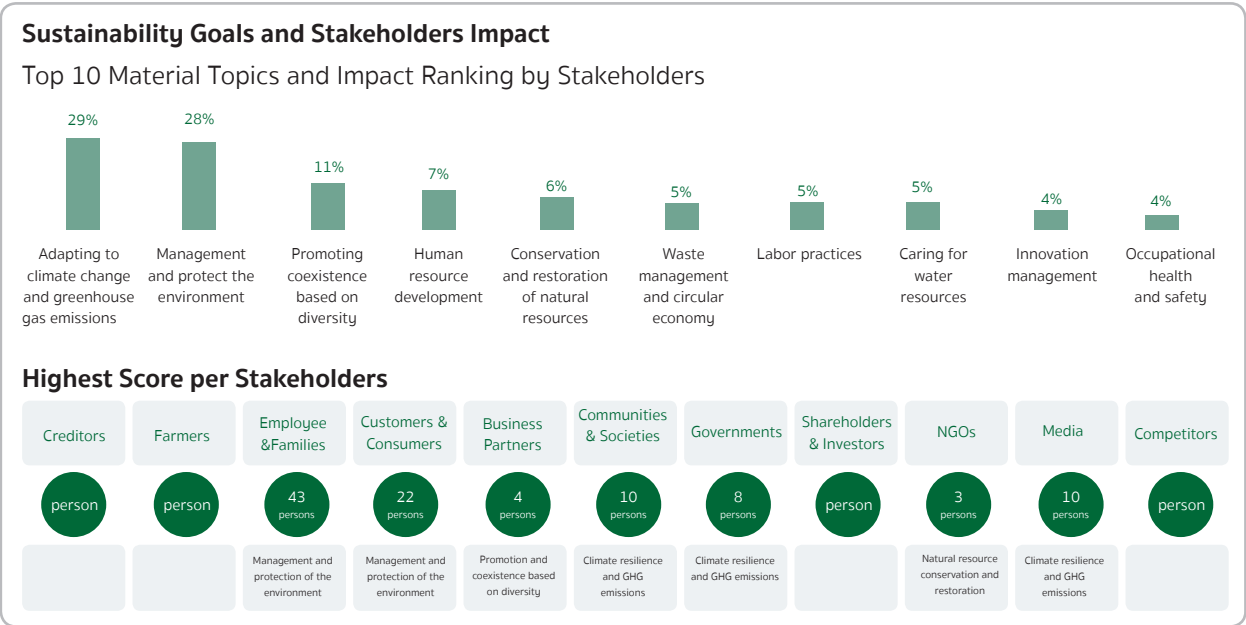
Section 5Overall Opinions

- 1 questions
- 5.1 Overall satisfaction with the company

RESULTS OF THE ASSESSMENT OF SIGNIFICANT SUSTAINABILITY ISSUES

STAKEHOLDER ENGAGEMENT REPORT YEAR 2023

Crop Integration Business.



STAKEHOLDER ENGAGEMENT REPORT YEAR 2023

Crop Integration Business.



SCOPE OF ASSESSMENT OF MATERIAL ISSUES.

Sustainability Issues	Related GRIs	Scope											
		Inside Organization	Outside Organization										
		Employee	Customers / Consumers	Community & Society	Partners	Shareholders / Investors	Media / Online media	Government Agency	Supplier	Competitor	NGOs	Creditor / Bank	
Topic HEART economy													
Corporate Governance	102-11, 102-12, 102-13, 102-18, 102-22, 102-24, 102-30, 102-35, 102-38, 103-1, 103-2, 103-3, 205-1, 205-2, 205-3, 406-1	●			●	●			●	●			●
Human Rights and Labor Practices	102-41, 103-1, 103-2, 103-3, 401-2, 403-1, 403-2, 403-3, 403-4, 403-5, 403-6, 403-7, 403-9, 403-10, 405-1, 405-2, 412-1	●	●	●	●								
Education	103-1,103-2,103-3,203-2	●		●				●					
Leadership & Human Capital Development	103-1, 103-2, 103-3, 401-1, 404-1, 404-2, 404-3	●			●				●				
Cyber Security and Data Protection	102-19, 102-20, 103-1, 103- 2, 103-3, 418-1	●	●				●						
Topic HEALTH society													
Good health & Well-being	103-1, 103-2, 103-3, 417-1	●	●										
Social Impact	103-1, 103-2, 103-3, 201-1, 413-1	●		●	●			●				●	
Occupational health & Safety	103-1, 103-2, 103-3, 403-9, 403-10	●	●	●									
Innovation	103-1, 103-2, 103-3	●	●	●	●			●	●				
Stakeholder Engagement	103-1, 103-2, 103-3, 102-40, 102-41, 102-42, 102-43, 102-44	●	●	●	●	●	●	●	●	●	●	●	●
Topic HOME environment													
Climate change Management	103-1, 103-2, 103-3, 302-1, 302-3, 302-4, 305-1, 305-2, 305-4	●			●			●	●				
Circular Economy	103-1, 103-2, 103-3, 306-1, 306-2, 306-3, 306-4, 306-5	●	●	●	●			●	●				
Water Stewardship	103-1, 103-2, 103-3, 303-1, 303-2, 303-3, 303-4, 303-5	●		●									
Ecosystem & Biodiversity Protection	103-1, 103-2, 103-3, 304-1, 304-2	●		●	●				●				
Responsible Supply Chain	103-1, 103-2, 103-3, 204-1, 308-1, /414-1	●	●		●				●				

ABOUT THIS REPORT



SUSTAINABILITY REPORTING

Crop Integration Business has prepared the 2023 Sustainability Report, 4 edition, which was published to the public on November 1, 2024



OPERATION SCOPE

This report presents the overall performance of companies in the Crop Integration Business covering 4 production base countries. from 1 January to 31 December 2023



THIRD PARTY CERTIFICATION

This report has been assessed and verified for credibility by TUV NORD (Thailand) Co., Ltd., an internationally recognized independent certification body. For the reviewed data, it includes : GRI 101, GRI 102, GRI 102-16, GRI 102-17, GRI302-1, GRI 303-3, GRI 305-1, GRI 305-2, GRI 306-3, GRI 306-4, GRI 306-5, GRI 403-9 and GRI 403-10



PURPOSE OF THIS REPORT

This report is prepared to communicate the commitment to conduct business towards sustainability in terms of economy, society and environment.



REPORT SCOPE

The Company has prepared this Sustainability Report. Complies with Global Reporting Initiatives (GRI) standards and discloses information in accordance with Core Option guidelines.



OPERATION PROGRESS REPORT

The company has continuously presented progress in implementing the principles of the United Nations Global Compact since 2015. Since 2019, the company has raised the level of transparency into the progress report according to the principles of the United Nations Global Compact. 21 United Nations



UNITED NATIONS SUSTAINABILITY DEVELOPMENT GOALS

The Company is committed to operating in accordance with the 17 Sustainable Development Goals (SDGs) of the United Nations.



COMPANIES IN THE SCOPE OF THE REPORT

Human resources performance covered all companies in the Crop Integration Business Group (100%), while energy, water, waste, air and safety performance covered all of the company's four production countries. Charoen Pokphand Produce Co., Ltd. but does not include Charoen Pokphand Seed Co., Ltd. and Charoen Pokphand Agriculture Co., Ltd. due to a merger.



CONTACT US

Sustainability Governance and Compliance Office (SGC),

Fortune Tower 23rd floor 1 Ratchadaphisek Road,
Din Daeng, Bangkok 10400

Phone : +66 (0) 2764 7000

E-mail : sgc.cpp@cptg.co.th

[https : //sgc.cptg.co.th](https://sgc.cptg.co.th)



CONTACT US

Crop Integration Business, Charoen Pokphand Group places importance on creating participation with stakeholders. Including listening to comments, suggestions, and criticisms in order to develop the business group's operating processes. To have better efficiency and be able to respond directly to the needs of stakeholders. By the business group Various and comprehensive communication channels have been arranged. So that every group of stakeholders can communicate with the business group. conveniently and quickly

Office

Sustainability Governance and
Compliance Office (SGC) ,



Fortune Tower 23rd floor 1 Ratchadaphisek Road, Din Daeng, Bangkok 10400



Phone : +66 (0) 2764-7000



E-mail : sgc.cpp@cptg.co.th



Website
<https://sgc.cptg.co.th/>

HEART



Crop Integration Business, Charoen Pokphand Group realize the importance of economic sustainability Therefore, the business has been operated under the concept Organizational growth from the perspective of a stable, long-term economy. There is a planning process and set clear goals that you want to achieve. As well as having an efficient work process that supports risks that occur. To develop new innovative products that leads to sustainability accepted by customers Embedded in the activities of people in the organization, conveying the message to the organization’s brand and products.

To be a leading integrated agricultural business company under the framework of vision, mission, and policy, the integrated plant business has set economic sustainability goals, consisting of:



CORPORATE
GOVERNANCE



HUMAN RIGHTS
& LABOR
PRACTICES



EDUCATION &
INEQUALITY
REDUCTION



LEADERSHIP
& HUMAN CAPITAL
DEVELOPMENT



CYBER SECURITY
& DATA PROTECTION

CORPORATE GOVERNANCE

GRI 102-12, 102-13, 102-16, 102-17, 102-18, 102-19, 103-1, 103-2, 103-3, 205-2, 205-3

OPPORTUNITIES

Crop Integration Business confidence that good corporate governance It is an important factor for business operations and enhancing competitiveness. as well as leading the organization to sustainable growth in addition, it adds value to partners and stakeholders in the long term. Good corporate governance Demonstrates the existence of an efficient, transparent, and verifiable management system. Build trust among stakeholders in the value chain All of this requires commitment and cooperation from employees at all levels. With a committee and senior executives clearly promote and support corporate governance.

CHALLENGES

The challenge is creating understanding and communicating to 100% of employees to see the importance of good corporate governance. Leading to the creation of a responsible business culture. and practices are based on the same standards.

100%

Goal 2030

Businesses implement a corporate governance impact scoring assessment

KEY OPERATING RESULTS IN 2024

CORPORATE GOVERNANCE

businesses implement a corporate governance impact scoring assessment

100%

CORPORATE GOVERNANCE POLICY

There is an announcement system and monitor compliance with the policy.

SUPPORTING THE SDGs

SDG 12

Responsible Consumption and Production

SDG 16

Peace, Justice, and Strong Institutions

16.5

Substantially reduce corruption and bribery in all their forms.

16.5

Ensure responsive, inclusive, participatory, and representative decision-making at all levels.

16.B

Promote and enforce non-discriminatory laws and policies for sustainable development

RISK MANAGEMENT

There is a system (ERM and E&C Risk).

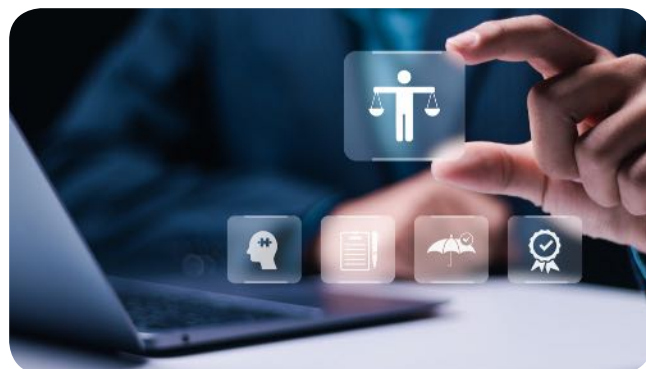
COMPLIANCE

Follow up and report results and take disciplinary action against rules violations.

GRIEVANCES AND WHISTLEBLOWING

There is a process for receiving complaints and Whistle-blowing of the business group.

CODE OF CONDUCT



Crop Integration Business aiming to raise awareness and instilling a sense of responsibility for work according to the standards of good conduct as well as being transparent and verifiable for directors, executives and employees at all levels a course on business ethics has been included in the orientation of new employees. Along with continually organizing training courses to refresh knowledge on business ethics. along with an ethical knowledge test and practice on an annual basis.

Has also prepared a code of conduct for business partners. and encourage business partners to realize the importance and comply with so that the supply chain management takes place in a concrete way and business.

CODE OF CONDUCT

Important things

that Charoen Pokphand Group employees must adhere to as guidelines for their work for the sustainability of the organization.



#6CoreValues

#Integrity

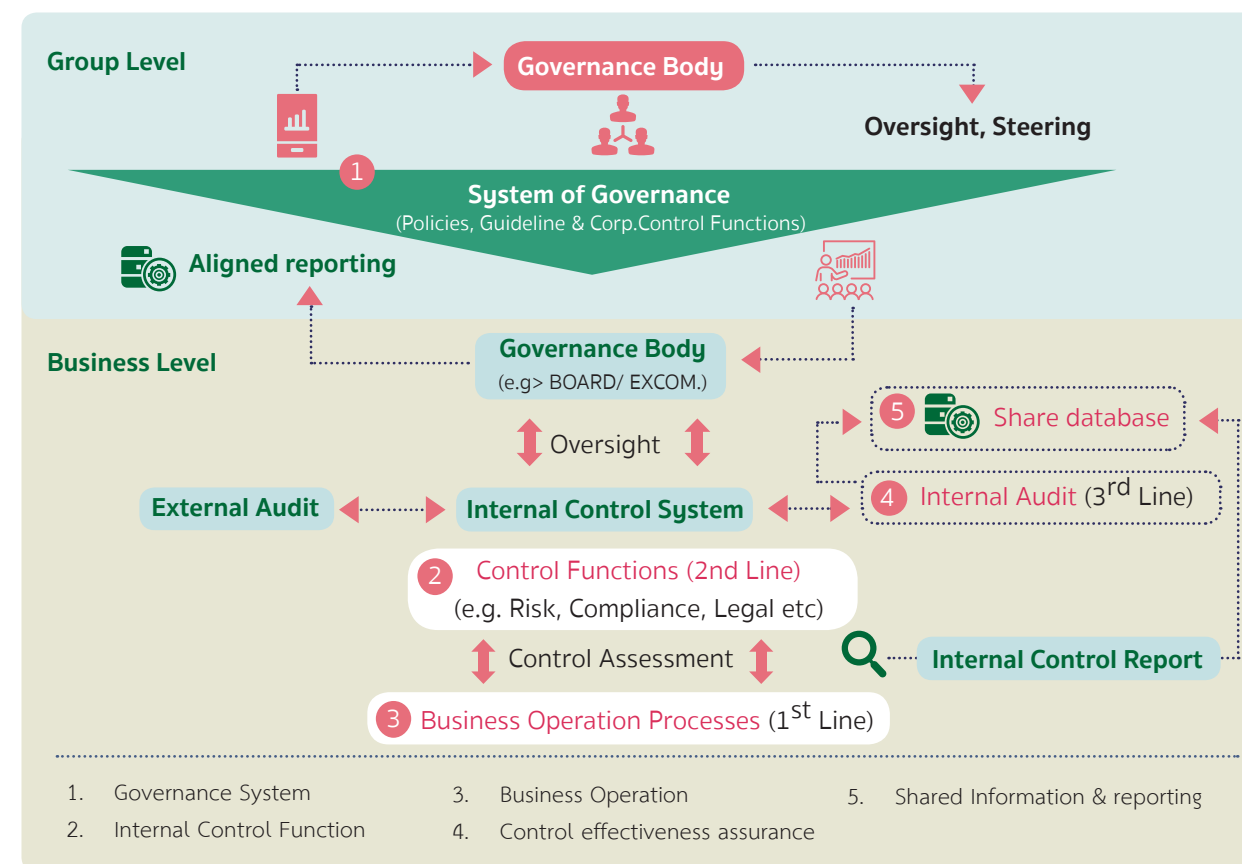
#Morality and honesty

CORPORATE GOVERNANCE

MANAGEMENT APPROACH



Our business believes that governance good business, risk management and compliance with relevant regulations and laws (Governance, Risk Management and Compliance - GRC) GRC is the cornerstone of the organization's sustainable success and confidence in management and stakeholders.



Learning and testing

E- Learning 100%

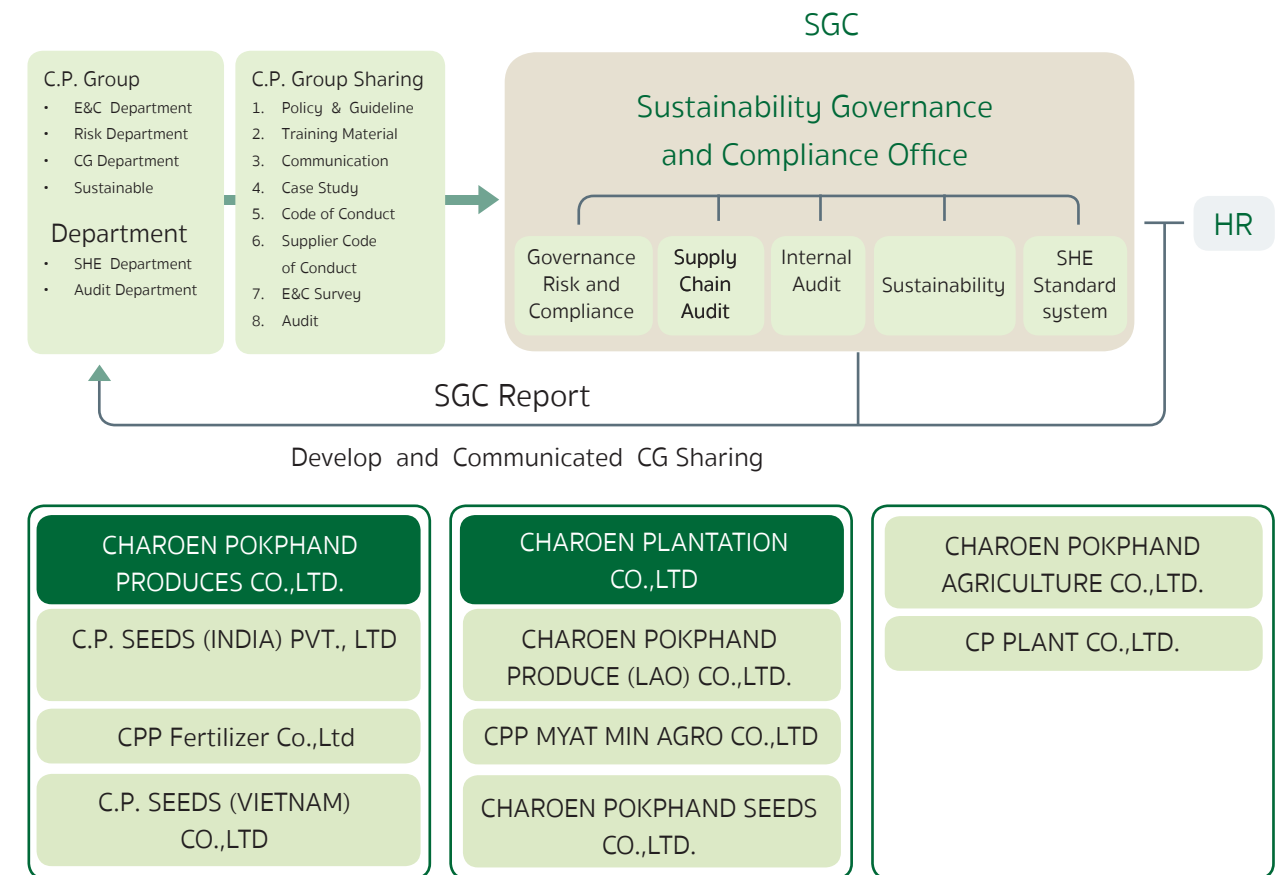
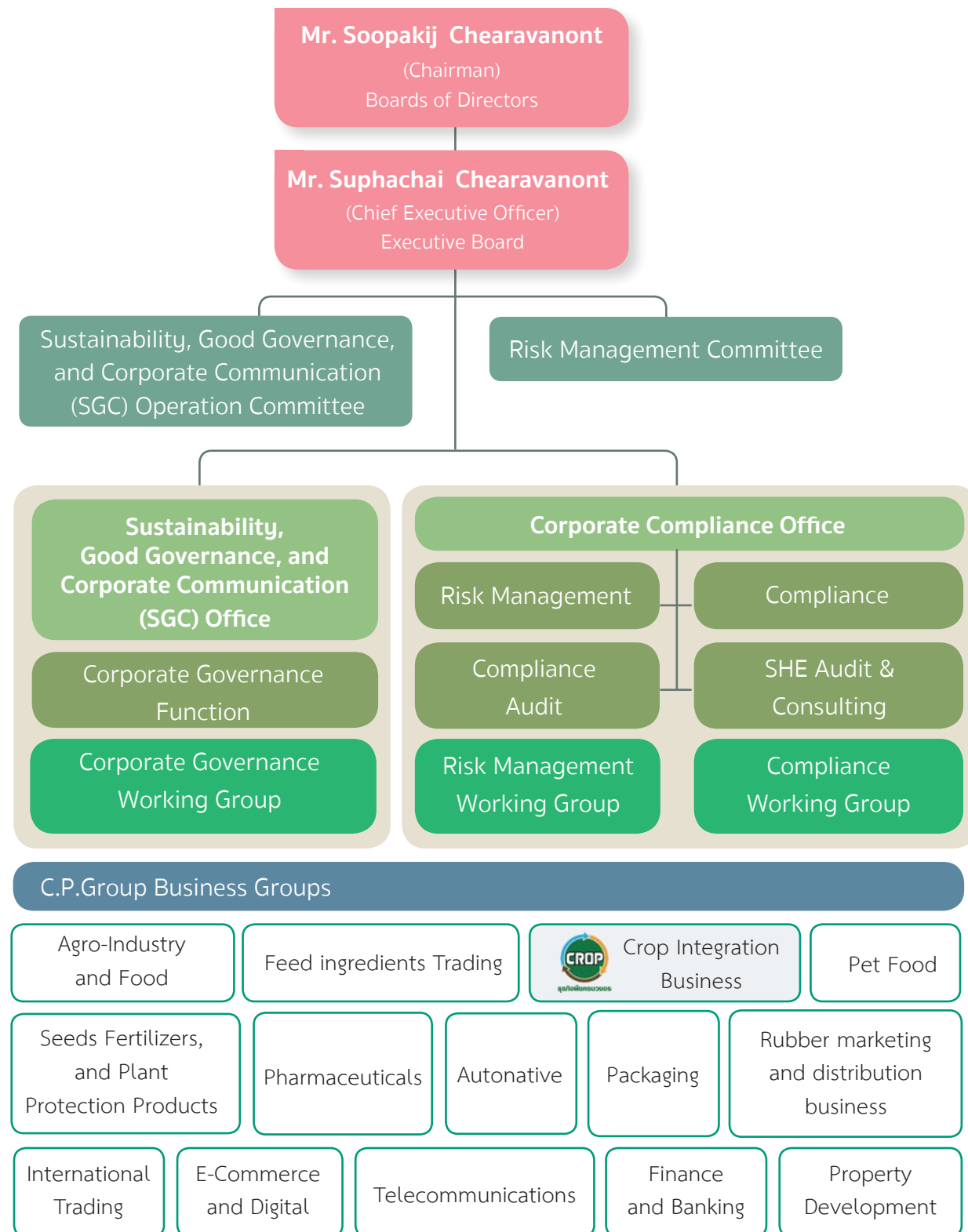


Total
2,283 persons

Tested & Passe
2,283 persons

100%

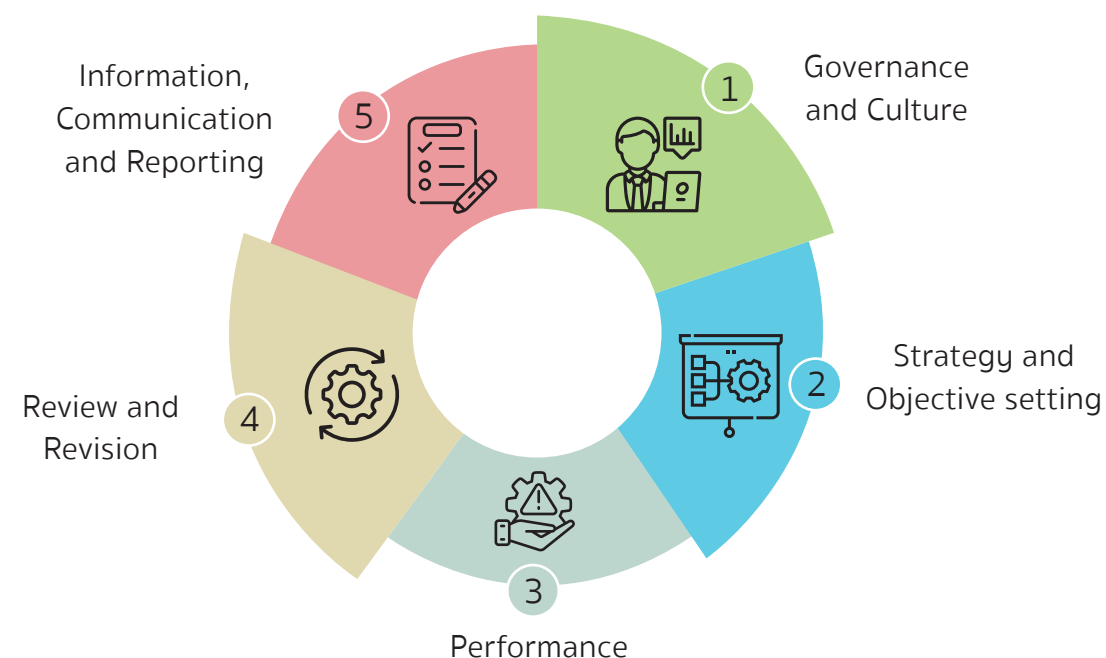
CORPORATE GOVERNANCE MANAGEMENT STRUCTURE



RISK MANAGEMENT

(GRI 102-11, 102-15, 102-20, 102-29, 102-30, 103-1, 103-2)

SUSTAINABILITY DEVELOPMENT ISSUES



Crop Integration Business has supervised risk management and compliance through the Corporate Governance, Risk and Compliance Committee. (GRC) with continuous review and monitoring. Including reporting results to the C.P. Group's Risk Management Committee, having a risk management framework used as a common standard within In line with internationally accepted management principles (COSO - Enterprise Risk Management 2017). It is also committed to managing risks by making a risk management plan that will lead to a crisis event and communicate the awareness risk awareness to executive and management levels (Risk Owners)

GRC Committee identifying risk from each unit in the CPP, prepared risk mitigation measures and control risks report and monitor risk management results from all departments as well as communicate the process in every step to executives and employees for acknowledgment And review the risks twice a year, including training to create a culture of organizational risk management for employees on an ongoing basis. In addition, CPP has proactively planned for potential critical conditions and prevent the potential impact of business interruption through Business Continuity Management (Business Continuity Plan: BCP), which is consistent with the business continuity policy Governance and Culture

COMPLIANCE MANAGEMENT

Now, changes is happening rapidly in terms of laws, rules, regulations and standards has significantly increased the concentration. Charoen Pokphand Produce Co., Ltd. and companies in Crop Integration Business Group are required to regularly evaluate their performance. To manage issues that are inconsistent with corporate and international directions as well as preparing for operations in 2 areas as follows :



Building capacity in the organization

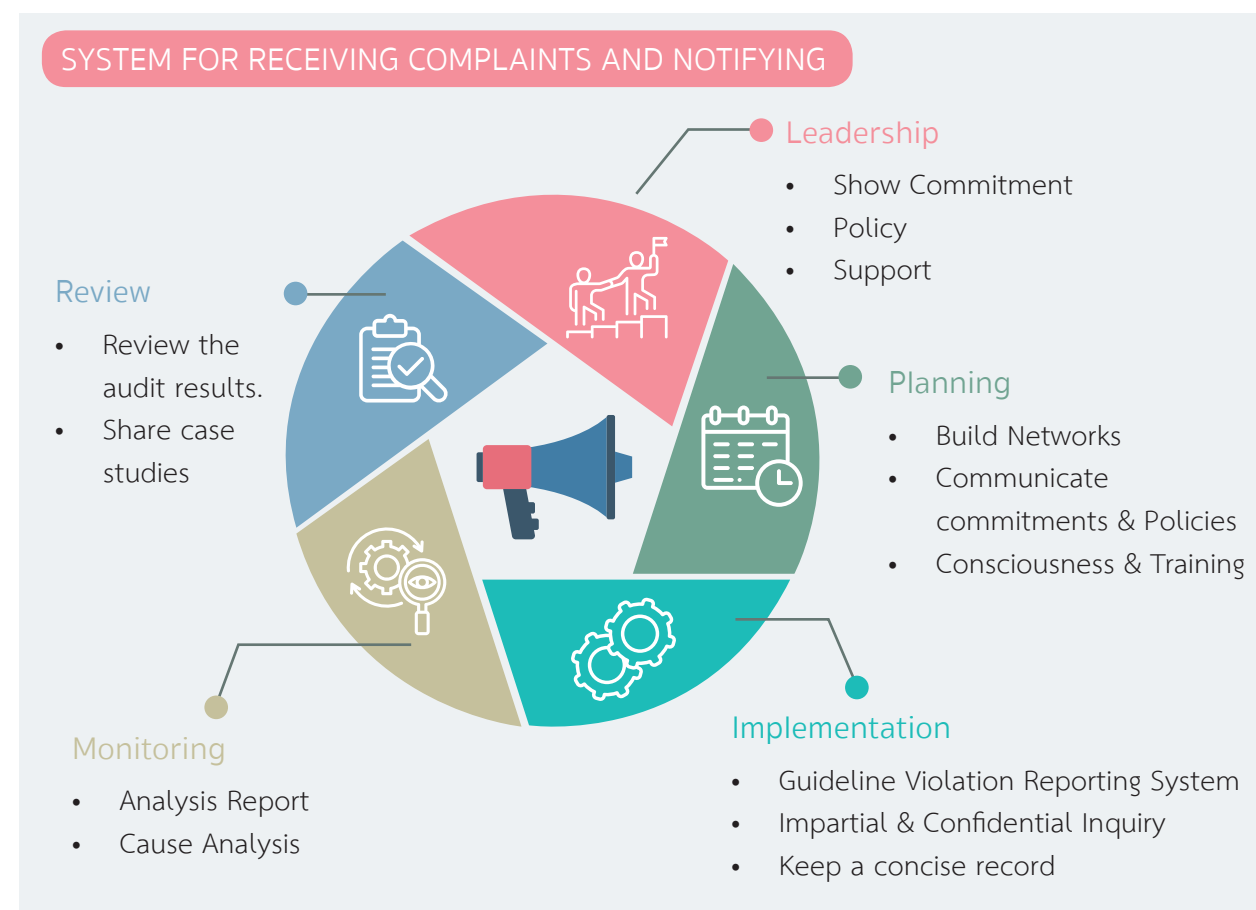
In addition to developing responses to assessment results, CPP plans to achieve compliance governance objectives effectively within company. This will be accomplished through projects such as the Compliance Ecosystem, collaboration among C.P. Group companies to prepare for the inclusion of compliance governance into operational processes in a systematic way, where integration will be encouraged between each unit. CPP's efforts in this area have received the 'Tone at the top' and the support of executives from Group companies, who have mandated that there be a **"Compliance Network"**. That will take on a coordinating role in this Network to liaise with C.P. Group and create awareness, oversee compliance, and establish a system to report performance data to executives. In 2020, C.P. Group organized workshops on compliance governance for management and relevant employees.

These workshops helped build their knowledge and understanding of how to operate according to compliance governance guidelines. C.P. Group also arranged trainings on the topics of Compliance & Compliance Audit, Ethical Audit, and Control Self-Assessment Introduction.



WHISTLE BLOWING SYSTEM

Crop Integration Business has created channels for reporting clues and receiving complaints in order to listen to opinions. Various suggestions or complaints both from executives Employees at all levels and affected third parties or behavior that risks business ethics and dishonesty. It is also a tool for tracking and monitoring business operations and a resource used to improve management and services to be tighter and more efficient.

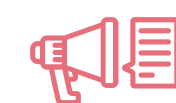


Receiving complaints and report clues

Crop Integration Business created channels for reporting clues and receiving complaints in order to listen to opinions. Various suggestions or complaints both from executives Employees at all levels and affected third parties or behavior that risks business ethics and dishonesty or behavior that is considered fraud, corruption, and misconduct of personnel of the business group.

To prevent damage that will occur to stakeholders. and is a database for monitoring and improving service management of the business group to be more efficient. Provide channels for reporting clues and a process for receiving complaints according to international standards. As well as issuing policies and guidelines regarding reporting clues and receiving complaints.

Complaints in 2023



Complaints

14 cases

Inside 9 cases

Partners 5 cases

Complaint management was completed within 30 days, totaling 7 cases.



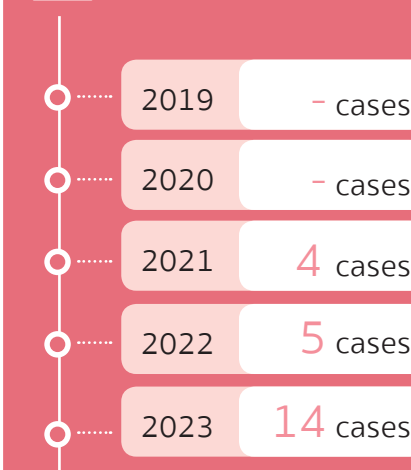
Complaint issues

Corruption 6 cases

Conflict of Interest 3 cases



Complaint stats



CASE STUDY

RECEIVED A CERTIFICATE CERTIFY ANTI-CORRUPTION STANDARD FROM CAC



In 2023, Charoen Pokphand Produces Co.,Ltd. received a certificate of certification for anti-corruption standards from the Thailand Private Sector Collective Action Against Corruption (CAC). Organization of cooperation between the private sector in Thailand The main goal is to promote and support the fight against corruption in the Thai business sector.

The Anti-Corruption Standards Certificate from CAC confirms the company's commitment to strictly comply with anti-corruption standards. Including the intention to conduct business according to the business ethics of the Charoen Pokphand Group. Building confidence among customers and business partners To continue creating a better society and economy



CASE STUDY

CP GROUP JOINS IN EXPRESSING INTENT Anti-corruption in all forms

September 6, 2023, the executives and employees of the integrated factory business, along with 300 executives and representatives of CP Group businesses, together with government agencies, the private sector, and civil society, showed their intention to fight corruption by organizing the “2023 Anti-Corruption Day” activity at Bangkok Central Railway Station.

In 2023, the Anti-Corruption Organization of Thailand (ACT) used the concept of organizing the event “WHAT THE FACT” Finding sincerity in fighting corruption to encourage Thai people to be aware and join in showing their power to fight against corruption in all forms.



HUMAN RIGHTS AND LABOR PRACTICES

GRI 103-1, 103-2, 103-3, 406-1, 408-1, 409-1,
411-1, 412-1



OPPORTUNITIES

Crop Integration Business focuses on promoting the human rights of the foundation of grayness, rights, freedom and equality of ideas. Acts that can not be offensive and must respect the Local laws of each country in order to comply with the way of life, traditions, culture and the practice of good Governance. By avoiding involvement in all forms of human rights violations.

CHALLENGES

The challenge in our company is the expectation of equal treatment in the labor force of companies, partners or other stakeholders of the supply chain in all dimensions related to human rights. This includes periodic human rights risk assessments.



Goal 2030

Businesses that regularly assess the human rights impacts of their activities and their high-risk direct suppliers.

SUPPORTING THE SDGs



SDG 3

Good Health and Well-Being



SDG 5

Gender Equality

5.1

End all forms of discrimination against all women and girls everywhere



SDG 8

Decent Work and Economic Growth

8.5

Achieve full and productive employment and decent work for

8.7

Take immediate and effective measures to eradicate forced labor, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labor

8.8

Protect labor rights and promote safe and secure working environments for all workers, including migrant workers



SDG 10

Reduced Inequalities

10.3

Ensure equal opportunity and reduce inequalities of outcome

10.7

Facilitate orderly, safe, regular and responsible migration and mobility of people, Including through the implementation of planned and well-managed migration policies

KEY OPERATING RESULTS IN 20233

Human Rights



Human rights impacts from the activities of high-risk organizations and direct suppliers are regularly assessed.

100%



Declare commitment to respect human rights

According to the United Nations Guiding Principles on Business and Human Rights



Female Executive

8.82% of senior management are women 3 persons accounting for 8.82 %

14.66% of middle management are women 17 persons accounting for 14.46 %



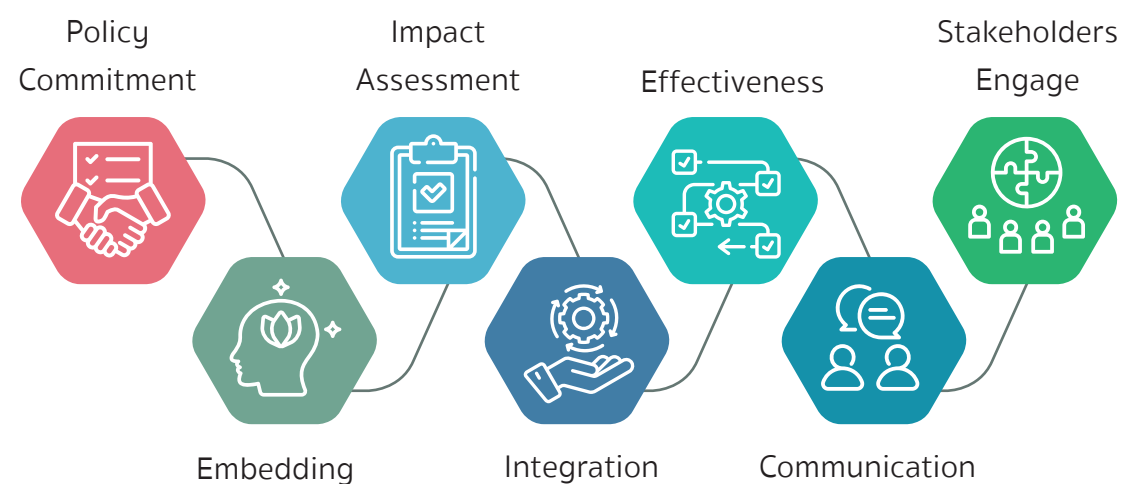
Disabled Staff

1.03% of employees are disabled. 13 persons accounting for 1.03 %

MANAGEMENT APPROACH

Crop Integration Business conduct business by adhering to the philosophy of 3 benefits (benefit to the country, people and the company) and operating with fairness. It is assumed that the personnel is a valuable resource of the organization. The company therefore provides opportunities for everyone to show their talents and be open to advancement opportunities. Create equality for everyone in every country, in which the company has invested. Along with developing everyone to have knowledge and skills to work. There is respect for each other's rights and duties. Appreciate the gratitude of your own boss, and subordinates to create value for everyone in the organization.

Our company is part of the global community. Therefore, it is of great importance to maintain a philosophy and good practice in taking care of personnel within the organization, as well as striving to expand the scope of operations in respect of human rights. The dignity and equality of all people including customers and partners, and everyone in the supply chain. According to international guidelines, which include the Universal Declaration of Human Rights (UDHR) of the United Nations (United Nation) and the Declaration on the Principles and Fundamental Rights at Work of the International Labor Organization. Country (International Labor Organization: ILO) to practice in order to prevent violations, or create human rights impacts both in community and social organizations from the operation of the business, the human rights policy has been established, and labor practices as follows:



Policy Commitment



- Announce Human Rights and Labor Practices Policy
- Announce Code of Conduct
- In the process of developing specific policies, such as a Migrant Workers Employment Policy

Embedding



- Conduct awareness training on human rights, encompassing employees at all levels
- In the process of developing e-learning curriculum to more efficiently educate employees

Impact Assessment



- Assess the severity of human rights risk issues. Cover current activities and that might happen
- Identify key human rights risks of businesses in the countries they invest in.

Integration



- Integrated risk assessment and the normal work processes of the organization
- Develop and communicate guidelines such as responsible supply chain management.

Effectiveness



- set up key indicators human rights
- Monitoring the progress of human rights actions

Communication



- Report on the progress of implementing Human Rights Due Diligence in the Sustainability Report.

Stakeholders Engage



- Meet and survey needs and expectations of stakeholder groups
- Become a member Network Association UNGC Thailand by 2021 Remedies and Complaints
- Establish a channel for making complaints (Whistleblowing)



HUMAN RIGHTS PERFORMANCE



OCCUPATIONAL HEALTH

Approach

- Occupational Health and Safety Policy
- Zero Accident Target
- Organize trainings for executives and employees of all levels to help them understand the importance of good governance throughout the supply chain.
- Safety assessment project of business group level
- Automotive management

Results

Our organization recognizes and places importance on cooperation to drive safety work.

In 2023 Lost time injury rate

- Employees : 2.34 no. per 1,000,000 working hours (5 people) Number of employee working hours: 1,842,441 hours
- Contractor : 1.73 no. per 1,000,000 working hours (1 people)



FORCED LABOR AND FOREIGN WORKER

Approach

- Human rights and labor practices Policy and Guideline
- Operate according to labor standards to provide workers with equal protection
- Assessment of compliance with labor laws, certified by Thai Labor Standards
- Responsible Supply Chain Management Policy and encouraging key business partners to self-assess their sustainability

Results

Established operating and governance standards on foreign workers Ethical Recruitment



DISCRIMINATION

Approach

- Code of Conduct
- Training to educate employees about rights, equality and coexistence practices.

Results

- Communicated through an e-learning system to every employee in all business groups to raise awareness and verify
- Employed 13 people with disabilities in the business group



ENVIRONMENTAL IMPACT

Approach

- Policy and Target on Environmental Management
- Environmental Plan
- Raising awareness and environmental knowledge
- Surveys to identify community opinion and concerns

Results

- Performed according to policy and standards
- Developed action plans to respond to community concerns
- No environment-related grievances reported

CARING EMPLOYEES

MANAGEMENT APPROACH

“People are the souls that bring the organization to life” Crop Integration Business respect and appreciate the values of all people in the organization. Cultivate and develop to be a good person which will be a role model for those around them at work, family and society overall lead to love ties to the countries, communities and lastly the company according to the three benefits, with guidelines Operations as follows



Building a working society

- Attention to ability and Assign valuable and challenging tasks.
- Make people in the CPP understand their roles, treat colleagues with respect understand the difference Respect and build good relationships with each other in the team.
- Support for the creation of interest-based clubs to create good relationship
- Encourage people in CPP to be considerate, caring, and caring each other both at work and outside of work, including sharing knowledge, experience, etc. to those who need it. appropriately, creating a feeling of belonging to one family.



Mind and soul care

- Promote morality in the mind.
- Promote a mindfulness.
- Promote Gratitude

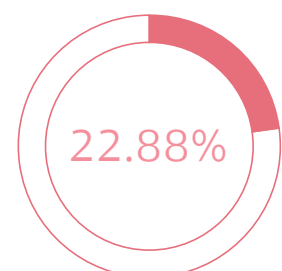


Building stability in life

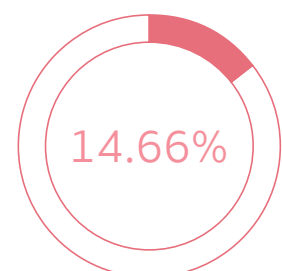
- Encourage employees to have good physical and mental health
- Encourage employees to use “Rationality, Moderation, Immunity, use of knowledge Virtue couple” to create stability in life and family.
- Extending the way of building security in life to the family and community of people in the CPP.

Empowerment of female employees

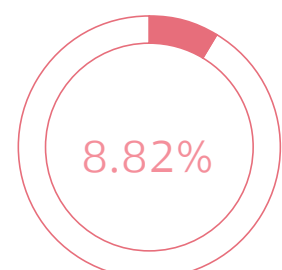
PROMOTING THE POTENTIAL OF FEMALE EMPLOYEES, 2023



All Executives :
The proportion of
female employees at
the level

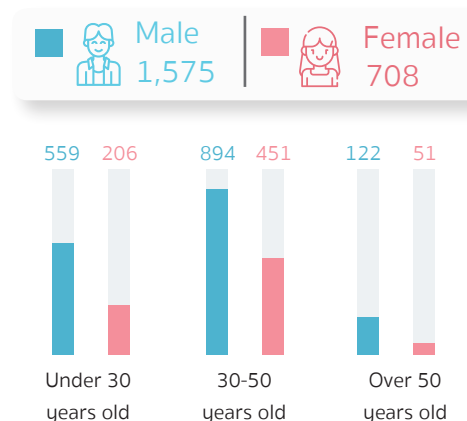
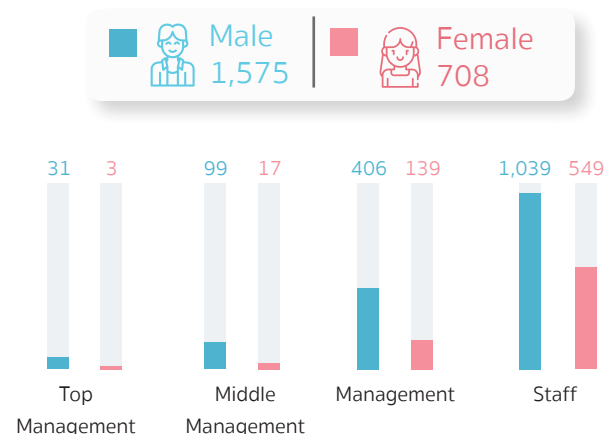


Middle Management :
The proportion of
female employees
at the level

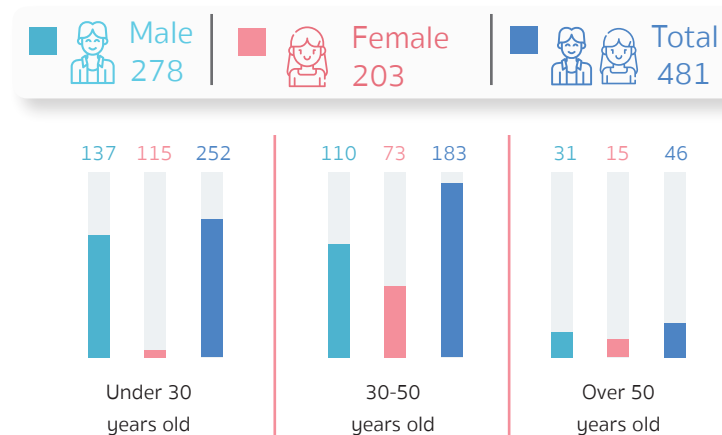


Senior Management :
The proportion of
female employees
at the level

DIVERSITY OF EMPLOYEES



EMPLOYEE TURNOVER: 481 PEOPLE



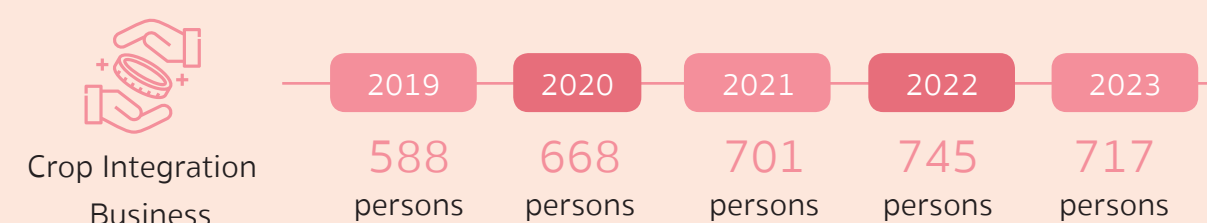
PROVIDENT FUND

Crop Integration Business recognize that employees need financial security. Especially having savings to spend after retirement, leaving work, disability or as a guarantee for the family in the event of death. Therefore, in order to create morale Motivation to work for employees It also creates a bond with the organization. as well as being an incentive to attract good people talented people to stay with the organization the business group therefore agrees to have a provident fund welfare for employees in 2019, which is operated in a way that both employers and employees jointly established voluntarily.



Employees will pay contributions to the fund in proportion appropriate to themselves by deducting from the salary account and the company contributes part of the money to the fund with the fund management committee Supervise the operations of the selection and management of asset management companies. and various funds to provide information for decision-making for employees on an ongoing basis as well.

Number of employees participating in the provident fund





EDUCATION & INEQUALITY REDUCTION

| GRI 103-1, 103-2, 103-3, 201-1, 413-1

OPPORTUNITIES AND CHALLENGES

Crop Integration Business believe that innovation and technology It is an important basis for changing the educational model. including upgrading necessary skills It is very important to working in the present era. Therefore, we strive to be an example organization that can adapt to the changes that occur. Including bringing innovation and various technologies are used to reduce inequality.

Our organization also supports the development of basic education structures. and upgrading learning styles that can occur continuously at every age. Using innovation for education

Goal 2030

supported through educational support, lifelong learning, and upskilling

SUPPORTING THE SDGs



SDG 4 Quality Education

4.3

Eliminate gender disparities in education

4.B

Substantially expand globally the number of scholarships available to developing countries



SDG 8 Decent Work and Economic Growth

8.6

Substantially reduce the proportion of youth not in employment, education or training



SDG 9 Industry, Innovation and Infrastructure

9.C

Significantly increase access to information and communications technology

KEY OPERATING RESULTS IN 2023

Education



Number of children, youth and adults are encouraged to access education and develop necessary skills.

9,546 persons



Number of scholarships sponsored

83 scholarships



Numer of school receives support for education and sustainability.

1 school

EDUCATION MANAGEMEN

MANAGEMENT APPROACH

Crop Integration Business believes that building an inclusive culture for education and creating opportunities for knowledge access involves developing the potential of Thai youths and adults of all ages. This will prepare them to tackle various challenges, reduce inequalities, and increase Thailand's competitiveness. CPP adheres to five key strategies in our effort to sustainably enhance the quality of education management in Thailand, in accordance with global megatrends. These are: transparency; market mechanisms and an inclusive culture; developing high quality principals and teachers; creating value and a child-centric curriculum; and providing access to basic digital education infrastructure.

Our company is committed in supporting the UN Sustainable Development Goals (UNSDGs), and has developed an implementation plan for UNSDGs alignment with targets that focuses on eliminating inequalities in education, providing opportunities and expanding access, and improving the capabilities of students and teachers to improve the quality of life for all.

EDUCATION DEVELOPMENT FRAMEWORK



CASE STUDY

National Children's Day 2566



Crop Integration Business realizes the importance of children and youth. Therefore, there has been a continuous National Children's Day event for the 17th year to promote children and youth who will be an important force for the development of the country in the future. In 2023, under the concept of "Rak Thai" To stimulate pride in being Thai Through various learning bases such as drawing and painting write an essay Compete to answer various knowledge questions and have a booth with omelet rice. and support stationery envelopes School supplies, snacks and electrical appliances for children and youth.



In 2023, National Children's Day activities were organized for 48 areas from 20 BU in 19 provinces, with a total of 7,520 children and youth participating in the activities.



CASE STUDY National Children's Day, Bangkok 2023

Children are the future of the nation. Supporting them to be aware of their duties and contributions to society is therefore important. On the occasion of National Children's Day 2023, the CSR SPIRIT volunteer team joined the "Chatra Omelet Rice" booth with 1,000 plates at the Bangkok Youth Center (Thai-Japan). Mr. Chadchart Sittipunt, Governor of Bangkok, visiting and joining in cooking food to satisfy the children and parents who attended the event.



During the event there was also a Lucky Draw activity for children and youth. Gain knowledge and have fun with various activities Amidst an atmosphere filled with liveliness and smiles



CASE STUDY

Nam Jai nee jak Pee soo Nong Project 17th

Crop Integration Business create educational opportunities and reduce inequality by supporting youth to have equal access to basic education by “Nam Jai nee jak Pee soo Nong Project” to provide scholarships to students in the area surrounding the establishment. which has good behavior and volunteer spirit in remote areas that lack funds and are at risk of falling out of the education system By raising funds from executives and employees. To provide educational opportunities to receive 83 scholarships of 2,000 baht each, totaling 166,000 baht. Ready to support the lunch project to encourage students who have good behavior and have volunteered for the past 17 years.



Targeted areas for delivering funds include:

1. Breeding research and development (5 scholarships)
2. Main seed production line (5 scholarships)
3. Expanded seed production line (8 scholarships)
4. Seed conditioning factory (5 scholarships)
5. Chemical fertilizer factory (5 scholarships)
6. Organic fertilizer factory (5 scholarships)
7. Rubber factory (5 scholarships)
8. Kamphaeng Phet Research Center (5 scholarships)
9. Farm Pro (10 scholarships)
10. Sales team (30 scholarships)



CASE STUDY

CONNEXT ED

Crop Integration Business and Connext ED Foundation join together to develop English language skills The main objective is to develop students' knowledge, understanding and awareness. As well as develop skills in listening, speaking, reading and writing English. To support students to apply it in their daily lives and future work, for students from Soi 26 School, Sai 4 Left, Lopburi Province, through 3 main activities:



English Day Camp

By preparing English language skills for students before entering Tour Online through creating participation of administrators. and employees within the network



Tour Online

Collaborating with volunteer employees to teach English online through Microsoft Teams, creating an English conversation experience and 14 fun learning activities, with teaching time of 40 minutes per session, through the joining of executives and employees of the group to act as volunteer English teachers.



English On Tour

Encourage students to practice using English with native speakers, study and learn about Thai literature from murals, exquisite art objects of Rattanakosin and important royal palaces, and conclude with conversation activities with foreigners to promote courage in communicating, creating learning and developing English skills from real experiences.





LEADERSHIP AND HUMAN CAPITAL DEVELOPMENT

GRI 102-41, 102-43, 102-44, 103-1, 103-2, 103-3,
401-1, 401-2, 404-1, 404-2, 404-3, 405-1

OPPORTUNITIES

Crop Integration Business committed to developing integrated business by elevating business operations from B2B to B2C (C means farmers) in order to reach farmers, listen to problems, use information to develop various products, and use modern technology increases production potential. and conveyed to farmers Because farmers can be compared to “life partners” that the company must take close care of. and will move forward together in a sustainable way.

Our organization defines mission, vision, direction and strategy to develop potential. and increasing the capabilities of “personnel”. In addition, it is important to prepare personnel to cope with changes effectively.

AND CHALLENGES

The challenge is Creating engagement and participation for employees at all levels To maintain talented personnel to stay with the organization and support the new generation of leaders learn and grow with the company.



Goal 2030

Employees engaged in sustainability training and initiatives.

KEY OPERATING RESULTS IN 2023

Leadership and human resource development



Leader and staff

100% Trained to develop knowledge and understanding in sustainability and business ethics



Employee training hours

19.15 hours/person/year



Employee training costs

23.45 Million baht

SUPPORTING THE SDGs



SDG 4

Quality Education

4.4

Increase the number of youth and adults who have relevant financial skills

4.7

Ensure that all learners acquire the knowledge and skills needed to promote sustainable development and global citizenship



SDG 5

Gender Equality

5.5

Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making.



SDG 17

Partnership for the Goals

17.6

Enhance cooperation and access to science, technology and innovation, and enhance knowledge sharing

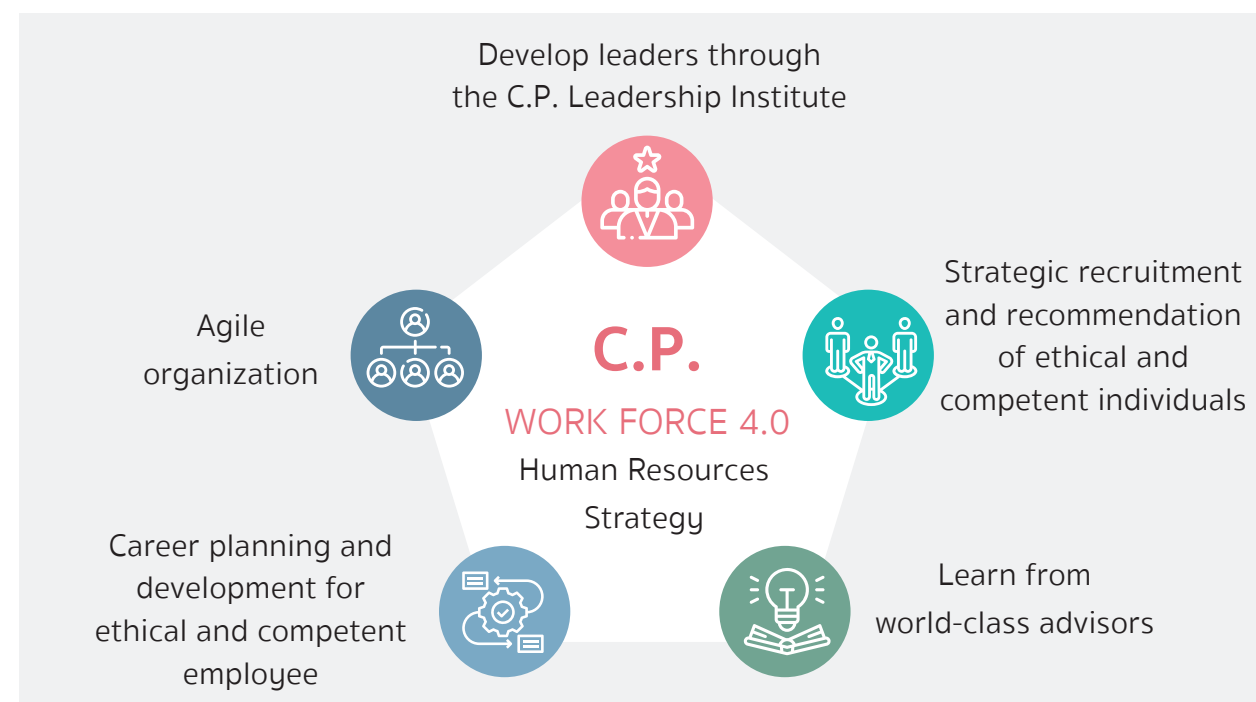
HUMAN RESOURCES MANAGEMENT

MANAGEMENT APPROACH

Crop Integration Business believes that our people are the most valuable asset - they are the driving force behind the achievement of our aspirations. This is especially the case today, as CPP is committed to growing its business and expanding investments globally. There now arises the challenge of creating “**New Generation Leaders**” who will carry forward the organization’s values, while preparing and developing over 300,000 employees across our diverse businesses with the necessary knowledge and skills, and mindsets to embrace and adapt to changes, as well as to reinforce positive experiences for our employees to be proud for taking a part in CPP’s success.



Central to this is CPP “**Workforce 4.0**” Human Resources Strategy, which is guided by the 6 Core Values, digital information, and technology. The strategy consists of five core pillars, and focuses on developing up a new generation of leaders through real-life learning experiences, with the CPLI being central to these efforts. It also focuses on creating a human resources management ecosystem to promote recruitment of ethical and competent individuals, learning from various world-class advisors, career planning and development, and transforming to an ‘agile’ organization to enhance the Group’s adaptability to business changes and changes prompted by generational gaps.



LEADERSHIP DEVELOPMENT TRAINING

Development through Leadership Development Courses

Human resources development at C.P. Group aims to develop leaders at all levels. With Charoen Pokphand Leadership Institute (CPLI) at the center, courses are designed to suit the qualifications of all participants. All courses are developed based on real-life applications, focusing on learning through practicing by implementing cross-business and cross-function projects. The projects reinforce trainees to enhance business problem-solving skill and learn from experiencing actual impacts.

OPERATIONAL PROGRAM

STRATEGIC PROGRAM

COURSE OVERVIEW

The first training course for the Group’s ‘Young Talents’ in Thailand and overseas, which aims to build well-equipped leaders according to the Group’s leadership model.

A leadership development course for employees with proven leadership potentials focuses on business development and integrated management within the scope of their responsibilities, aiming to generate profit and revenue for the sustainable business growth.

The course focuses on enhancing and sustainably developing C.P. Group through the formulation of strategic projects that execute C.P. Group’s vision.

A development course for leaders at the operational level is designed to help them manage strategic operational projects. It focuses on reforming processes for efficiency and quality, stimulating cross functional actions, and maximizing resources used.

PARTICIPANT QUALIFICATIONS

New graduates and young talents from business groups

Graduates of the FLP Program and employees from business groups

Managing directors and mid-level executives

Top-level executives

PROJECT SUPPORTS

CEO and CEO-1

→ CEO and CEO-1

→ CEO and CEO-1

→ CEO and Group Chairman

CASE STUDY

CP FUTURE LEADER DEVELOPMENT

Program 2023

Crop Integration Business supports the creation of new leaders by sending new employees to attend the CP Future Leader Program or Tao Kae Noi Project of the Charoen Pokphand Leadership Institute, which is a program that allows participants to learn and develop themselves through real business operations for a period of 6 months.

Create leaders who are well-rounded in the Group's style, capable, good people, disciplined in self-management, and able to use their own and their team's potential to the greatest benefit.

“Three benefits project
creates income for farmers”



Study and learn



Take action



FLP					
Start operation	Strategic focus	Agency	Locotion	Number (person)	Current status
April 2023	B2C	Manage the upstream supply chain, white rice	Kamphaeng Phet	6	PLP
April 2023	B2C	Manage the upstream supply chain, maize	Nong Bun Mak District, Khro Buri District Nakhon Ratchasima	6	PLP
April 2023	News Business	Vegetable Business	Nakhon Luang District, Ayutthaya	4	PLP
July 2023	People	Complete Upstream Learning Center White Rice Cycle	Nakhon Luang District, Ayutthaya	6	PLP
July 2023	People	Complete Upstream Learning Center Cycle Maize	Nakhon Luang District, Ayutthaya	6	PLP
July 2023	B2C	Corn for complete animal feed	Northeastern area	6	End the project



CASE STUDY

CPP TOWN HALL 2023



April 25, 2023 Crop Integration, Rice, Transportation and Service Business organized a sharing event for the vision, strategy, group goals, and business plan direction for 2023 by Mr. Prasit Damrongchitanon, Vice Chairman of Crop Integration, Rice, Transportation and Service Business, Mr. Sumet Pinyosanit, Chief Executive Officer of Crop Integration Business, Mr. Chana Laowirakul, Chief Executive Officer of Transportation Business, Mr. Thiti Luchintanon, Chief Operating Officer of Rice Business, and Ms. Tachacha Phuangprasri, Senior Director of Human Resources to share policies and business strategies, as well as personnel development in the organization, aiming for the path of development, Crop Integration, Rice, Transportation and Service Business as well as sustainable care for business partners.





CYBER SECURITY AND DATA PROTECTION

| GRI 103-1, 103-2, 103-3, 410-1

OPPORTUNITIES AND CHALLENGES

Crop Integration Business commitment to operations includes technologies, processes, and practices designed to protect networks, devices, programs and data from attacks or intentional unauthorized access.

To protect business assets from all threats of cyberattacks, including securing personal information of employees and customers. The goal is to have the business group be certified in accordance with international cybersecurity and data protection standards.

SUPPORTING THE SDGs



SDG 16
Peace, Justice, and Strong Institutions

16.7

Ensure responsive, inclusive, participatory and representative decision-making at all levels



Goal 2030
Businesses certified on international standard of data security and data privacy

KEY OPERATING RESULTS IN 2023

Cyber Security and Data Protection



Cybersecurity Training : of all employees have been trained or raise cybersecurity wareness.
100%



Risk Assessment Cyber Security : the company's access channels have been assessed for cybersecurity risks
100%

CYBER SECURITY & DATA PROTECTION

Security Operations and Cyber Security It is important for every organization. Whether it is the public or private sector To prevent data loss violation of privacy or being attacked by someone who does not wish well Our company has a systematic management approach in this area. By considering the nature of the business and the needs of customers.

MANAGEMENT GUIDELINES ARE FOLLOWS

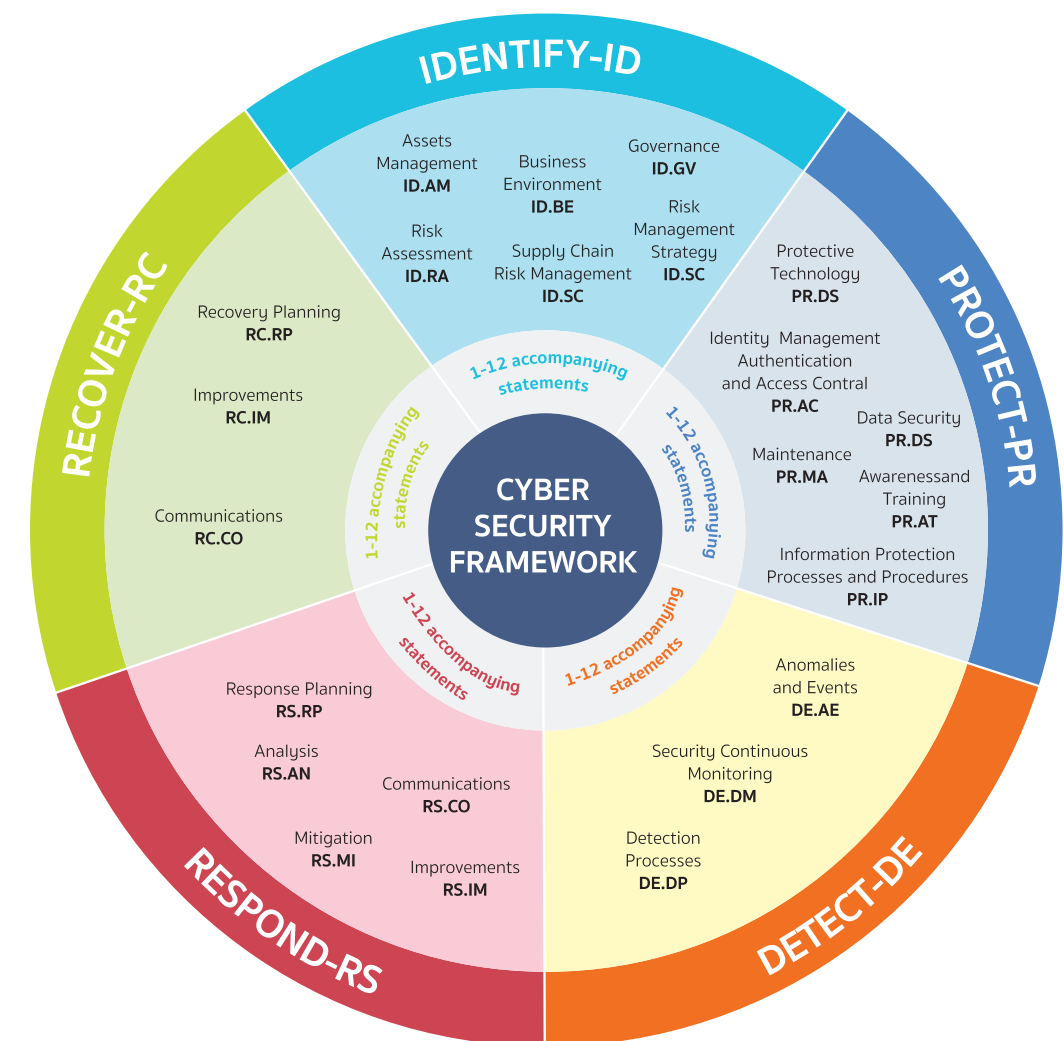


CYBERSECURITY AND DATA PROTECTION PRACTICES

Create cyber security stability Cybersecurity risk management It is a matter that the organization pays attention to the shortcomings of the system. Threat trends and the most important attack on the business first Cyber security framework of the National Institute of Standards and Technology (NIST) is one of the frameworks for cyber security. which is very popularly used nowadays.



Frameworks are widely used all over the world. And many organizations in Thailand Starting to use it to deal with cyber threats. Framework brings together a wide range of best practices. To help business organizations determine guidelines for enforcement. and improves security guidance. NIST Cyber Security Framework Functions help create cyber risk prevention strategies.



Identify

Identification helps develop a business and organization's understanding of how to manage risks to systems, people, assets, information, and capabilities. The main objective is to identify all people, processes, or systems that may be vulnerable to this type of threat.

Protect

Prevention supports the ability to limit or control the impact of a threat. The main objective is to limit the threat of attacks by eliminating or closing vulnerabilities.

Detect

Detection schedules activities to identify timely occurrences. The main objective is to stop the threat. But you must know what to do and businesses and organizations are facing dangers from cyber threats.

Respond

Respond to activities related to cyber threats to reduce the impact and prevent damage that occurs especially damage to reputation and violations of privacy

Recover

Prepare various data recovery plans. In the event of a cyber threat problem to return to normal and find a better way to prevent it before an incident occurs

Ref : NIST-Framework-Visual-with-Functions-and-Categories(expertip.net)

CYBER SECURITY & DATA PROTECTION

Crop Integration Business consider the importance of personal data management (PDPA) of employees at all levels to meet standards International and personal data protection from unrelated people Both about requesting information Data collection Data transmission and destruction.



Organized training to provide knowledge to employees on the topic of preparing to support the Personal Data Protection Act on 25 May 2022 with the objective of making each agency aware of their roles and methods of dealing with various cases according to the Act. Including clarification of the following matters:

- Guidelines for managing relevant information in the case of customers or employees exercising their rights. According to the Personal Data Protection Act
- Guidelines for management in the case of personal information being violated or leaked.

Organize knowledge training and take annual PDPA tests for all employees through the Group's online system.

Set PDPA guidelines on Data Subject Request / Data breach for use within the organization.



HEALTH

Crop Integration Business committed to driving society toward sustainability through innovations that help promote good health for consumers. In addition, we implement projects aimed at improving the quality of life and health of people through our shared experiences and knowledge with a focus on comprehensive development in economic, social and environmental aspects.



To achieve the vision of being a leading company Integrated agribusiness and industrial agriculture Under the framework of vision, mission and policy, it is determined Social sustainability goals include:



Social Impact



Health & Well-being



Occupational Safety



Innovation



Relationship with Stakeholders



SOCIAL IMPACT & ECONOMIC CONTRIBUTION

| GRI 103-1, 103-2, 103-3, 201-1, 413-1

OPPORTUNITIES AND CHALLENGES

Crop Integration Business sees the problem of inequality as one of the causes of discrimination in society, and lack of trust. This puts the business at risk for reputation, and more supervision from official agencies as well as may affect the performance of the business in the long run. Therefore, the problem of inequality is no longer just a social problem that is nearby. But it can become a business risk.

Our organization integrates stakeholder expectations as part of our corporate goals to connect business and society.

Goal 2030

100,000 farmers, small entrepreneurs and vulnerable groups receive career promotion and quality of life.

SUPPORTING THE SDGs



SDG 1

No Poverty

1.2

Reduce poverty by at least 50%

1.4

Equal rights to ownership, basic services, technology, and economic resources



SDG 4

Quality Education

4.4

Increase the number of people with the necessary financial skills



SDG 8

Decent Work and Economic Growth

8.6

Substantially reduce the proportion of youth not in employment, education or training



SDG 10

Reduced Inequalities

10.1

Reduce income inequality

KEY OPERATING RESULTS IN 2023

Social Impact



Farmers who received occupational and income promotion

26,049 persons



Vulnerable groups that receive career and quality of life support

14,000 persons



Investment in social development and support

2.48 million baht

MANAGEMENT GUIDELINEARIOUS SECTIONS



NUMBER OF BENEFICIARIES (PERSONS)



26,049 persons
farmers supported



14,000 persons
members of vulnerable groups
supported



SOCIAL ACTIVITIES



2.99 million baht
Charitable Donations



2.48 million baht
Community Investment



1.79 million baht
Support community
& society



109.86 million baht
Tax paid to the
government

CREATING A GOOD IMAGE
FOR THE ORAGANIZATION

Media Value
5 million bath



CSR SPIRIT CSR SPIRIT

2,976
persons

10,483
hours

GUIDELINE FOR MANAGEING FARMER SUPPORT

SUPPORTING FARMERS

Crop Integration Business aware of and prioritizes business operations that may be affected by economic and social roles. by supporting farmers small entrepreneur and vulnerable groups to be part of the business. Encourage participation and creativity with continuous operation to be able to solve problems and help promote the quality of life for the community as well as vulnerable groups to be able to live sustainably

MANAGEMENT APPROACH



Provide farmers
with groups.
(Market leading
production) and
operating in an
integrated manner
between
the relevant
departments



Training to farmers
until they can
reduce production
costs, increase
productivity and
produce good
quality.



Let the farmers
be managers:
manage production,
produce and
market knowledge.



CPP as the market
for hedging the risk
of price fluctuation,
which can help
members reduce
their debt condition





CASE STUDY

PROMOTE THE CULTIVATION OF “Hom Mali RICE” IN THE ANNUAL SEASON



“Thai Hom Mali Rice” is a rice variety that is popular in the international market. However, due to increased competition because many countries have improved long-grain rice varieties to be similar to Thai Hom Mali Rice, Thailand must maintain production standards, strictly enforce contamination inspection measures, and find ways to increase yield per rai in order to increase the competitiveness of Thai Hom Mali Rice in the world trade arena.

Promote planting corn behind rice fields project created The “2023/2024 Hom Mali Rice Planting Promotion Project” has been implemented to develop the Hom Mali planting area in the project into a source of quality Hom Mali rice with a traceability system to build confidence among consumers by supporting knowledge on appropriate production management to reduce production costs and increase sustainable income for farmers. The pilot project is being implemented in 2 areas: 1. The Northeastern region: 4 provinces: Sisaket, Yasothon, Buriram, and Ubon Ratchathani; and 2. The Northern region: 2 provinces: Phayao and Chiang Rai.

The company sends staff to the target areas to hold meetings to understand and register farmers who are interested in joining the project. They must be farmers who are ready to learn about the processes and technologies and are in the irrigation area.

In addition, the Upstream Rawmaterials Development (URD) system was introduced to support farmers in the project by providing training on the cultivation of high-quality jasmine rice and safe agricultural standards (Good Agriculture Practices: GAP), as well as providing advice and sourcing production factors that are in line with the area’s conditions, including rice seeds, fertilizers, and pesticides, in order to raise the production standards of jasmine rice in the project and reduce production costs from the use of fertilizers or chemicals that are more than necessary for plants.

The company’s staff also visit the area to provide advice and inspect the fields continuously throughout the production season. The company also has a policy to buy back products at the price and agreements specified.

After the end of the season, it was found that there were 5,529 farmers participating in the project, covering a total area of 127,453 rai. Farmers had an average income of 6,667 baht per rai, an average cost of 3,620 baht per rai, and an average profit of 3,047 baht per rai.

	Hom Mali RICE	Hom Mali RICE (B2C)
Cost (baht/rai) ^{1/}	4,175	3,620
Average yield per plot (kg./rai) ^{2/}	446	551
Price (baht/kg.) ^{2/}	12.0	12.1
Income (baht/rai)	5,352	6,667
Income (baht/rai)	1,177	3,047

Source: Hom Mali Rice^{1/} Office of Agricultural Economics^{2/}
Department of Agricultural Extension, Hom Mali Rice (B2C)
Sample count 1,183

Note: Data from 6 provinces: Sisaket, Yasothon, Buriram, Ubon Ratchathani, Phayao, and Chiang Rai



Visit the farmer’s fields in the project.



Harvesting and repurchasing of produce

CASE STUDY “CP THE WINNER II PROJECT”

Selecting excellent farmers as models for improving corn production



Crop Integration Business committed to developing production standards and improving the quality of life of corn farmers because farmers are life partners. The success of farmers is our success.

In addition to giving importance to research and improving corn varieties, including developing fertilizer formulas that are suitable for soil conditions to increase yield per rai, in 2023, the Thailand Seed and Fertilizer Sales Agency (B2B2C) also collaborated with dealers nationwide to organize the “CP The Winner II Project” to select excellent farmers who can increase CP corn yields to the highest level and expand the practices of model farmers to CP corn farmers in various areas.

The CP corn varieties used in the competition in the project, all 4 varieties, namely CP-16, CP-M-26, CP 303 and CP 508, are corn varieties that have been selected by the company’s research team as high-yielding corn varieties that adapt well to soil conditions in many areas.



Farmers who will join the project must have an area with a valid land title deed and grow CP corn on at least 5 rai. The company will provide training on growing quality corn according to the principles of safe agriculture (Good Agriculture Practices: GAP) and sustainable farming, including advice on choosing fertilizers that meet the needs of the corn. In addition, the company’s staff will visit the area to follow up and provide advice to farmers continuously.

Contest results, CP The Winner II project

No.	Name-Surname	Province	Planting area (rai)	Total (kg)	Avg. Yield (kg) Harvest Moisture	Avg. Yield (kg) Moisture 14.5%
C.P. F-16						
1	Anan Yusamran	Nakhon Ratchasima	11	26,220	2,384	2,091
2	Boonpeng Phukongchai	Chiang Rai	9	23,540	2,616	1,988
3	Thiraphol Singhrak	Phetchabun	5	13,025	2,605	1,980
C.P. M-26						
1	Ar Phaosook	Lop Buri	5	12,840	2,568	2,283
2	Wilasinee Phakham	Phetchabun	15	35,915	2,394	1,960
3	Saeng-Arun Wongsas	Phetchabun	5	10,730	2,146	1,770
C.P. 508						
1	Chanphen Somwan	Chiang Rai	15	29,380	1,959	1,535
2	Jamras Bunruang	Tak	15	17,880	1,859	1,413
3	Duangjai Chaipanha	Chiang Rai	8	14,580	1,823	1,386
C.P. 303						
1	Salit Chanhom	Uthai Thani	40	87,900	2,198	1,671
2	Songkran Niyomsook	Kanchanaburi	5	8,060	1,612	1,512
3	Duangkamol Khaki	Kanchanaburi	6	9,360	1,560	1,430

In addition, we have collaborated with Bangkok Produce Public Company Limited and AXONS to develop the F.Farm APP to help farmers access knowledge sources, research, and modern agricultural innovations, as well as track crop price situations online to improve production standards and increase the competitiveness of Thai corn farmers.



CASE STUDY ACTIVITIES TO PROMOTE RUBBER FARMERS

1. Providing training to provide knowledge on quality rubber production to farmer members



Annual farmers meeting

- Knowledge of increasing productivity
- Recommend products suitable for the age of rubber trees.
- Analyze soil and promote the use of fertilizers appropriate for the area.
- Introducing EUDR standard rubber

2. Provide knowledge on fertilizer use (compare yields before and after the project)



Selecting excellent farmers

- Create model farmers who produce good quality rubber with high yields per rai to serve as examples for other farmers.



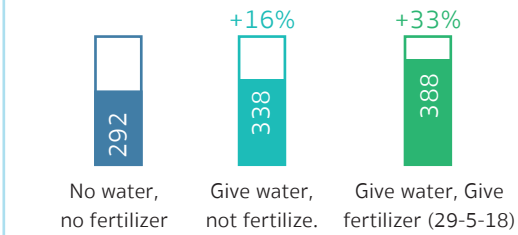
Productivity before and after project entry

- Recommend the use of appropriate fertilizer formulas, analyze soil, age of rubber trees, compare yields before and after joining the project.

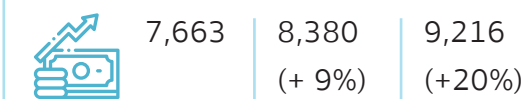
3. Developing member productivity with irrigation systems

Developing agricultural productivity with irrigation systems

Effect of watering and fertilizer on rubber yield (kg/rai/year)



Profit/Rai (baht/year)



Irrigation system in rubber plantation

- ✓ Consistent output
- ✓ Increase production
- ✓ Add 20 tapping days/year

Summary of experiment results

During the dry season, the installation of a system to help increase rubber production.

4. Increasing the value of farmers' produce by extending it to EUDR standards.

Promotion work towards EUDR measures

3-Benefit Policy

Increase the value of Thai rubber market.

Farmers have more income.

Factory exports rubber prices increase.

EUDR farmer field data collection.



Farmers join EUDR project

17,831 rai

International Rubber Platform

- ✓ Manage promotion area data.
- ✓ Traceability.
- ✓ Enter the trade certification system.

5. Creating sustainability with carbon credit standards.

Push forward promotion work towards carbon credit standards.

Rubber plantations that join the project 3,632 rai.



Project outcome is expected to be
101,748 tCO₂eq
worth 15 million baht.

Expand the project to
12 major members, area 5,793 rai
(171,125 tCO₂eq)

Expected to reduce carbon dioxide by
a total of 272,873 tCO₂eq,
worth 40 million baht.

**Expected selling price at 150 baht/ tCO₂eq.

CASE STUDY

CORN SEED PRODUCTION PROMOTION PROJECT, VIETNAM.



Charoen Pokphand Group invests in businesses in various countries, adhering to the philosophy of 3 benefits: the investment must first benefit the country and its people, and then the company's benefits will follow. Because CP Group believes that in order to conduct business sustainably, all parties must grow together.

C.P.Seeds Vietnam Co.,Ltd. has applied it to business operations and is the origin of the project to promote corn seed production in Vietnam to increase stable income for farmers in Tay Ninh, Dak Nong and neighboring provinces in the southern part of Vietnam. The project has been in operation since 1998.

Farmers must have their own farming area and be in an irrigation area. The company provides soil analysis services to assess the fertility of nutrients in the soil. The results of the analysis will then be used to create a plan to promote corn production, starting with recommendations for corn strains and fertilizer formulas that are suitable for the area, as well as knowledge on how to apply fertilizer in line with the timing and needs of the plants, in order to reduce unnecessary fertilizer application costs and increase production yields

The company also provides training on knowledge of field management and corn production according to academic principles, watering systems, and provides advice on the use of small machinery to increase corn production efficiency, as well as purchasing products from farmers at a guaranteed price according to agreed conditions, which is approximately 150% higher than the price of corn outside the project. If farmers produce quality corn that meets the specified conditions, they will have more income.

Currently, there are 1,700 farmer families participating in the project, covering a total area of 2,100 hectares or approximately 13,125 rai.

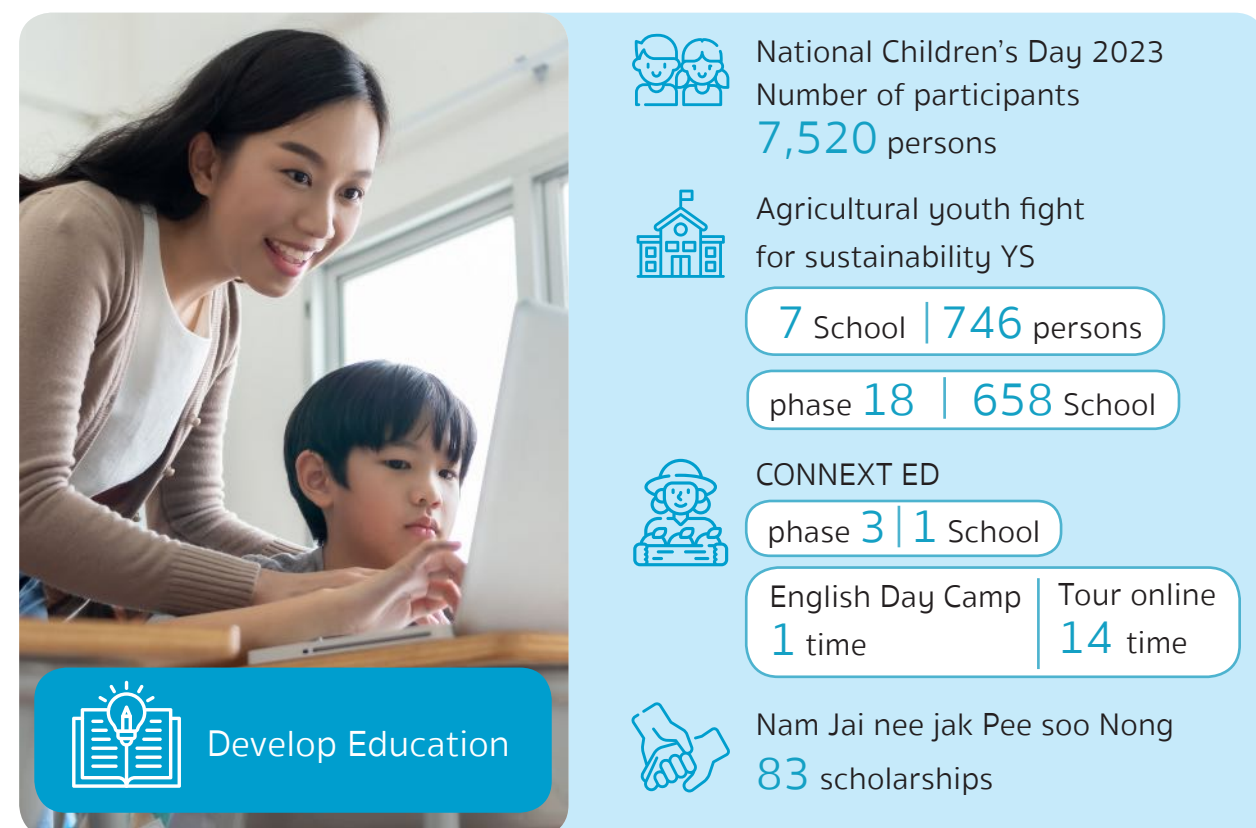


SUPPORTING THE VULNERABLE GROUP

MANAGEMENT APPROACH

Crop Integration Business committed to conducting business in accordance with the C.P. Excellence approach based on the awareness of social responsibility according to the philosophy of 3 benefits to sustainability of the Charoen Pokphand Group. Ready to drive sustainable development goals Sustainable Development Goals (SDGs) in all 3 areas, consisting of society, economy and environment. to eradicate poverty promote food security build quality of life share educational opportunities gender equality, Sustainable Water Management access to modern renewable energy Support decent work in line with economic growth Develop industry and infrastructure through innovation. Reduce income inequality have a safe settlement of communities and cities Suitable consumption and production plans take care of the climate marine resources and terrestrial ecosystems Fairness and peace, enhancing cooperation towards the Sustainable Development Goals

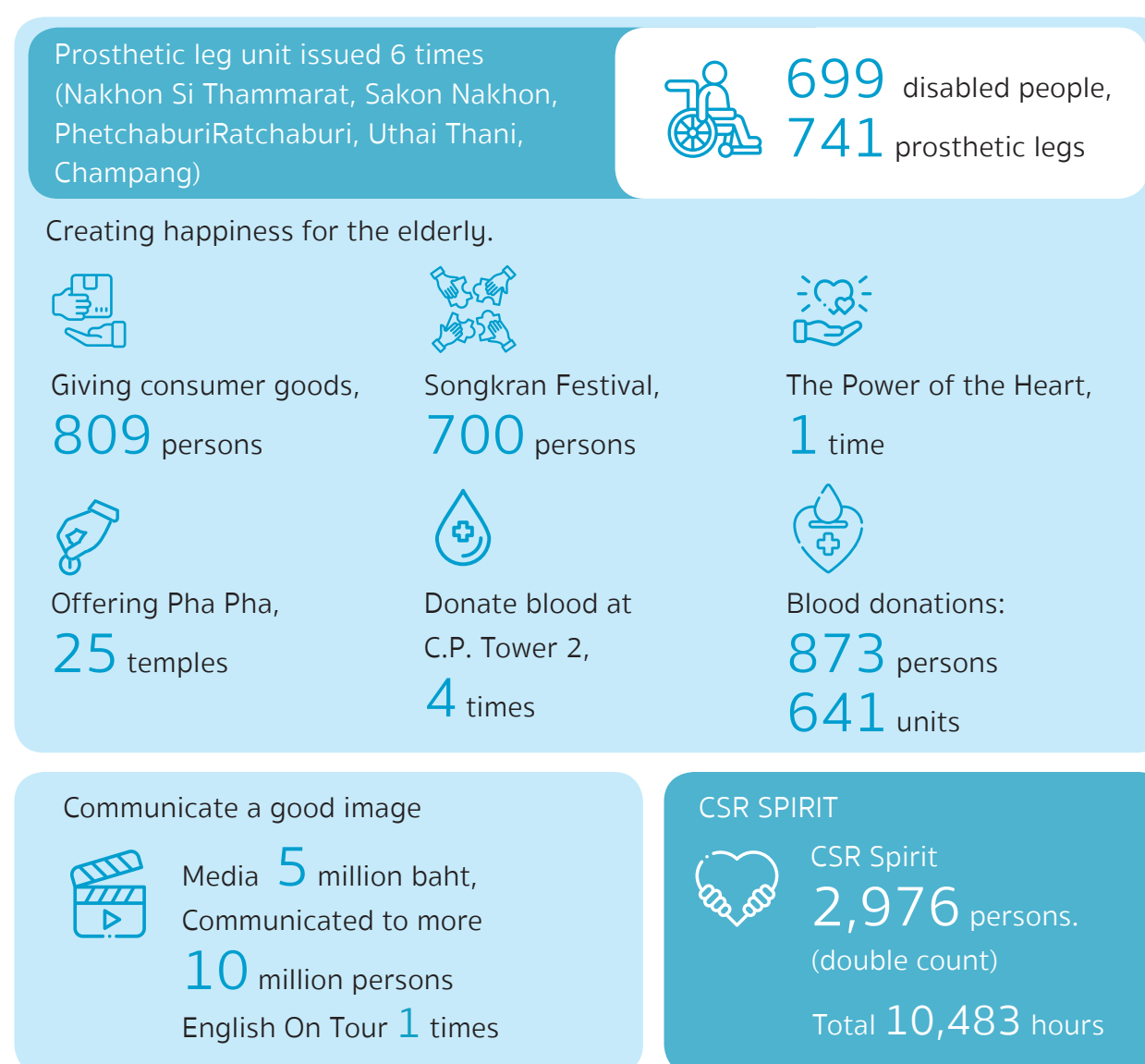
PERFORMANCE 2023



CONSERVATION NATURAL AND ENVIRONMENT



Develop the community economy and society.



CASE STUDY

CREATING HAPPINESS FOR THE ELDERLY.



Crop Integration, Rice, Transportation and Service Business caring for the elderly and the impacts of an aging society, we have joined with government agencies to provide health screening services and basic well-being care, creating value and passing on happiness to the elderly, including bedridden patients, the disabled, and vulnerable groups, as well as providing consumer goods to alleviate distress, build morale and encouragement in living life, in accordance with the 3 Benefits philosophy of Charoen Pokphand Group, a total of 809 people.

CASE STUDY

CREATING HAPPINESS FOR THE ELDERLY DURING THE SONGKRAN FESTIVAL.

Crop Integration, Rice, Transportation and Service Business organized merit-making activities, bathing Buddha images, giving alms to monks, pouring water to ask for blessings and giving Chatra rice to 809 elderly people who participated. This was a way to preserve good Thai traditions, alleviate hardships and provide encouragement for living.



CASE STUDY

PROJECT FOR UNDERPRIVILEGED CHILDREN.



Youth Agriculture for Sustainability, Year 5

Crop Integration, Rice, Transportation and Service Business wants to pass on agricultural knowledge, which has long been the foundation of Thailand's economy, to the new generation of youth through the transfer of agricultural knowledge to the youth, which has been continuously implemented for the 5th year.

The target group is the youth around the business establishment through training in agricultural knowledge and support for the creation of agricultural plots, promoting the creation of food storage in schools, resulting in the “Youth Agriculture for Sustainability Project” to create products to supply as lunch for students and to generate additional income for the students.

The target schools are:

1. Wat Lamut School (R.S.P. Rat Bamrung), Phra Nakhon Si Ayutthaya.
2. Wat Thong School (Samakkhiyanusorn), Phra Nakhon Si Ayutthaya.
3. Wat Wang Daeng Nuea School (Chaem Witthayakarn), Phra Nakhon Si Ayutthaya.
4. Phatthana Pak Nam School, Suphan Buri.
5. Soi 26 School, Line 4 Left, Lop Buri.
6. Ban Khondee Community School (Prasit Upatham), Kamphaeng Phet.
7. Ban Nong Bua Khok Community School, Buriram.



CASE STUDY

BLOOD DONATION.



Crop Integration, Rice, Transportation and Service Business in collaboration with the National Blood Center, Thai Red Cross Society and CP Tower 2 (Fortune), we accept blood donations outside the premises for employees and those interested in donating blood to store as reserve blood for patients who need a lot of blood. In 2023, we organized 4 off-site blood donation activities, with 873 blood donors and 641 units of blood received.



CASE STUDY

SHARING KINDNESS TO THE DISABLED.

Crop Integration, Rice, Transportation and Service Business has supported the Princess Mother's Prosthetic Leg Foundation in setting up a mobile prosthetic leg unit to make prosthetic legs for amputees of all ages and genders, regardless of race, without charge for 16 consecutive years to create opportunities for the disabled to help themselves, be able to work, and encourage the disabled to live a valuable life.

In 2023, it joined the mobile prosthetic leg unit 6 times in the provinces of Nakhon Si Thammarat, Sakon Nakhon, Phetchaburi, Ratchaburi, Uthai Thani and Lampang, with 699 disabled people participating in the prosthetic leg service and receiving a total of 741 prosthetic legs. It also supported Chat brand rice to the foundation and local agencies, as well as setting up a booth for omelet rice for participants, totaling 3,600 plates.



Donated 741 prosthetic legs





HEALTH AND WELL-BEING

| GRI 103-1, 103-2, 103-3

OPPORTUNITIES AND CHALLENGES

Crop Integration Business dedicated to research and develop products to meet agricultural product standards. By controlling and inspecting quality throughout the value chain, along with promoting knowledge and technology to farmers. Along with implementing projects to promote the health and well-being of employees and people in the community.



KEY OPERATING RESULTS IN 2023

Good health and well-being



Sales generated from B2B2C and B2C products and services that promote health and well-being.

Organic fertilizer products with sales of 0.84 %

SUPPORTING THE SDGs



SDG 2
Zero Hunger

2.1

Access to food that is nutritious and safe based on international standards

2.2

End all forms of malnutrition



SDG 3
Health and Well-being

3.4

Reduce mortality from non-communicable diseases and support good well-being

3.B

Support research, development, and access to affordable essential medicines and vaccines

MANAGEMENT GUIDELINES



MANAGEMENT OF HEALTH PRODUCT INNOVATION



The health and well-being of all citizens in each country is an important issue for will help increase the limit capability of that country in the future, as well as reducing the burden of medical expenses at the national level, CPP, as an upstream company of agribusiness, recognizes that it is a part that can help alleviate such problems effectively. by using the potential of presenting products and services that promote quality of life promote the health and well-being of the people

Our company committed to investing in research and development, operating in accordance with international standards and monitoring quality throughout the value chain, and promoting understanding of good nutrition. We focus on development based on the 4Ps management principle to empower our employees (People), develop processes in accordance with international standards (Processes), offer products to promote good health and well-being (Products), and promote understanding of health issues (Health Promotion).



1 PEOPLE

- Recruiting personnel with specific expertise
- Training and developing the necessary skills

2 PRODUCT

- Research and develop products and innovations to create a variety of products
- Invent food products for consumers in each age and food for specific patients



4 PROMOTION OF HEALTH

- Clear and accurate product information
- Traceability system

3 PROCESS

- Systems and management standards
- Analysis System and check the quality of raw materials by a laboratory that meets ISO/IEC17025 standards
- Automated and robotic technology systems
- Traceability system

OPPORTUNITIES AND CHALLENGES

Our organization aware of safety, occupational health and the environment no less than the quality of the product. Therefore, we have established a process to identify hazards and assess risks in the work process. In addition, if there are new machines, it is necessary to identify hazards and assess risks before starting work every time in order to be aware of the potential hazards and find ways to improve, correct and prevent those hazards.

Goal 2030

Zero Accident

Achieve zero lost time injury frequency rate.

KEY OPERATING RESULTS IN 2023



Safety Awards

Business Award for Safety, Occupational Health and Working Environment, Zero Accident Campaign Award

Work-related injury rate



Employee

2.34 persons/ 1,000,000 working hours



Contractor

1.73 persons/ 1,000,000 working hours

SUPPORTING THE SDGs



SDG 3

Good Health and Well-Being

3.4

Reduce mortality from non-communicable diseases and support well-being



SDG 8

Decent Work and Economic Growth

8.8

Protect labour rights and promote safe and secure working environments for all workers, including migrant workers

OCCUPATIONAL HEALTH AND SAFETY

| GRI 103-1, 103-2, 103-3, 403-9, 403-10

OCCUPATIONAL HEALTH & SAFETY

MANAGEMENT DASHBOARD



OCCUPATIONAL HEALTH, SAFETY AND WORK ENVIRONMENT MANAGEMENT

MANAGEMENT APPROACH

Crop Integration Business focuses on and prioritizes work safety by adhering to the care of employees, contractors, visitors. As well as stakeholders in the business as well as the supply chain, the Company has established a policy of safety, occupational health and work environment as a guideline and enhance the safety operations of the organization with guidelines for do as follows:

1. Safety, occupational health and working environment It is the duty and responsibility of the executives. and employees at all levels and consider the success of the operation as part of the performance evaluation.
2. Support the budget. and resources for the development of safety operations to allow all employees to participate in the implementation of the policy. Including communicating to related parties to acknowledge the results of the operation.
3. Let employees at all levels receive training, knowledge, ability to work. to meet the standards of safety at work To realize the importance of having a good safety system to participate in the efficient use of resources. It is a culture of safety, occupational health and working environment.
4. Manage safety risks properly according to international standards. And integrate with all activities of business operations at all levels throughout the supply chain. for protection And reduce the impact from harm, reduce injuries, illnesses of employees. and those involved Including damage to reputation and property and does not affect external communities.
5. Comply with the laws related to safety, occupational health and working environment both nationally and internationally. local level and complies with international standards Requirements of customers and agencies.
6. Monitor and report effectiveness Management of safety, occupational health and working environment for executives at all levels to be continuously improved in accordance with the reporting format according to international standards

ZERO ACCIDENT OPERATION STRATEGY

1. Upgrading the operational standards for safety, occupational health and the environment to be the same standard in every country (SHE STANDARD)
2. Occupational safety, health and environment contest for business groups through the CEO AWARDS project.
3. Outstanding Safety Establishment Contest Occupational health and working environment at the national level
4. Zero Accident Campaign Contest with NSO



CASE STUDY

CPP FACTORY SAFETY ACTIVITIES.

Charoen Pokphand Produce Co., Ltd. aware of safety, occupational health and working environment with the goal of becoming a zero accident organization. Therefore, we have applied various technologies and innovations to increase work safety, reduce factory accidents and reduce the rate of employee injuries to the point of having to stop working.

Our organization awareness campaigns and provides safety knowledge training to employees to build trust with employees and increase work efficiency to achieve the set goals.



ORGANIZAING TRAINING AND MONITORING SAFETYSYSTEM OCCUPATIONAL HEALTH AND WORKING ENVIRONMENT.

TRAINING	Seed Processing Plant Soi 19, 12	Chemical Fertilizer Packing and Mixing Plant	Organic Fertilizer Plant
Training on general safety at work and related laws, regulations and welfare, and promoting energy conservation in the factory.	●	●	●
Automotive Safety Attitude Review Course	●	●	●
General safety course, safety regulations and related laws for new employees before starting work.	●	●	●
General occupational safety course and risk factors with contractors before starting work	●	●	●
Safe Forklift Driving Review Course	●	●	●
Practice emergency plans for chemical spills, electrical shocks, falls from heights, abnormal boilers, gas leaks.	●	●	●
Basic fire fighting and evacuation drills	●	●	●

SAFETY, OCCUPATIONAL HEALTH AND WORKING ENVIRONMENT KNOWLEDGE ACTIVITIES.

ACTIVITIES	Seed Processing Plant Soi 19, 12	Chemical Fertilizer Packing and Mixing Plant	Organic Fertilizer Plant
Activities to meet supervisors and executives	●	●	●
Car inspection activities and motorcycle	●	●	●
Safety Q&A Activity from the Public Relations Board	●	●	●
Suggestion activities	●	●	●
Outstanding Safety Agency Contest Activity	●	●	●
Photo safety activities	●	●	●
Public Address Activities	●	●	●
Monthly safety check	●	●	●
Safety Day Activities	●	●	●

CASE STUDY

CPA&CPS FACTORY SAFETY ACTIVITIES

Charoen Pokphand Agriculture Co., Ltd. aware of safety, occupational health and working environment with the goal of becoming a zero accident organization. Therefore, we have applied various technologies and innovations to increase work safety, reduce factory accidents and reduce the rate of employee injuries to the point of having to stop working.

Our organization awareness campaigns and provides safety knowledge training to employees to build trust with employees and increase work efficiency to achieve the set goals.



ORGANIZING TRAINING AND MONITORING SAFETY SYSTEM OCCUPATIONAL HEALTH AND WORKING ENVIRONMENT.

TRAINING	Rubber factory, Loei	Rice mill, Chainat	Trok Chan Office	fruit juice steam plant
Basic firefighting	●	●	●	●
First aid and resuscitation Using an AED	●	●	●	●
Work safety	●	●	●	●
Executive Security Officer Course			●	
Occupational Safety, Health and Working Environment Committee			●	
Office syndrome	●		●	
Knowledge of driving attitudes and behavior	●	●	●	
Safe Forklift Driving Course	●	●		

SAFETY, OCCUPATIONAL HEALTH AND WORKING ENVIRONMENT KNOWLEDGR ACTIVITIES.

TRAINING	Rubber factory, Loei	Rice mill, Chainat	Trok Chan Office	fruit juice steam plant
Safety talk / KYT activities to stimulate safety awareness	●	●		●
Certification as required by law	●	●	●	●
Practice emergency plans according to risks and as required by law.	●	●	●	●
SHE DAY	●	●		
Campaign for safe driving at various festivals	●	●	●	●
Explore impacts and create understanding among surrounding communities.	●	●		●
Community engagement activities	●	●		●



OPPORTUNITIES AND CHALLENGES

Business challenges in the digital age is a change in technology and innovation happens quickly. Therefore, to keep up with the changing behavior, our organization is innovating by using new technologies and innovations in research and product development, as well as being aware of social and environmental responsibility because we believe that creating new things will help drive the business forward sustainably amidst rapid changes, as well as create value for society and the environment at the same time.

100%

Goal 2030
 50 Registered patents and petty patents

KEY OPERATING RESULTS IN 2023

Number of registered patents and petty patents
 16 patents

Saving results from One Day Satisfaction Project
 120.81 million baht

SUPPORTING THE SDGs

SDG 8
 Decent Work and Economic Growt
 8.2 Achieve higher levels of economic productivity through diversifi cation and innovation

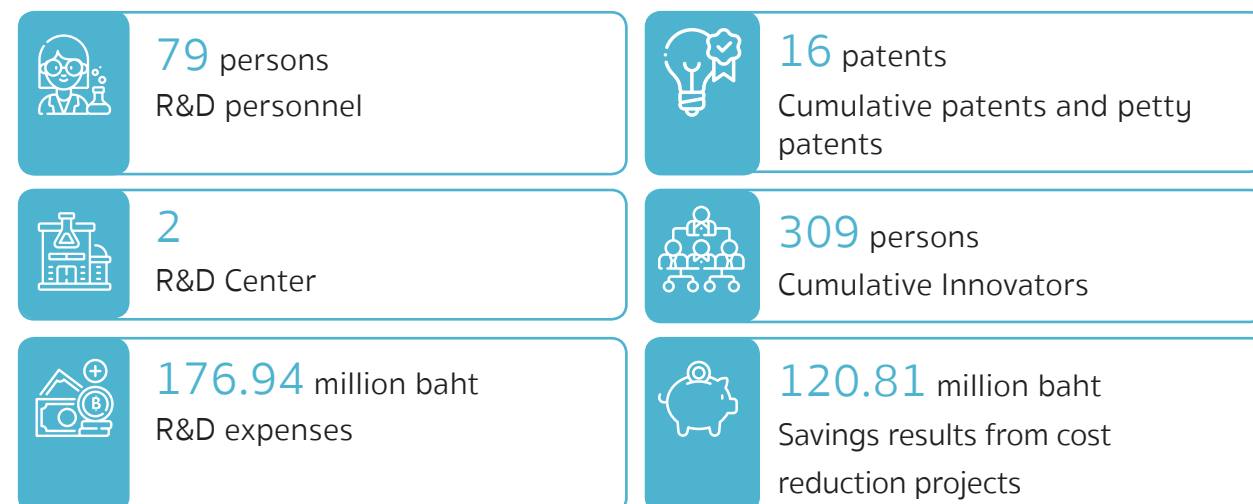
SDG 9
 Industry, Innovation and Infrastructure
 9.5 Increase research and technological capabilities of industrial sectors
 9.B Support domestic technology development and industrial diversification

SDG 17
 Partnership for the Goals
 17.17 Support effective partnerships

Number of innovators who have invented innovation project Reduce costs and increase efficiency
 309 persons

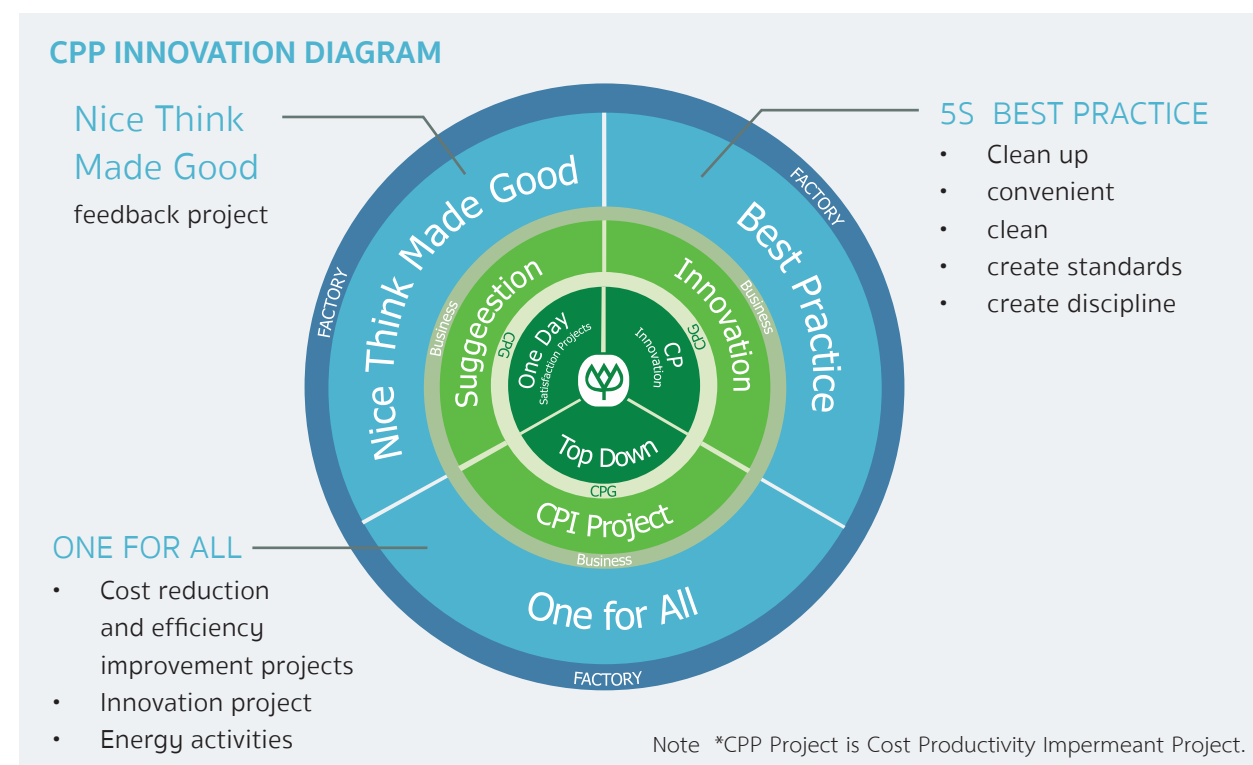
INNOVATION MANAGEMENT

Research and development investment



MANAGEMENT APPROACH

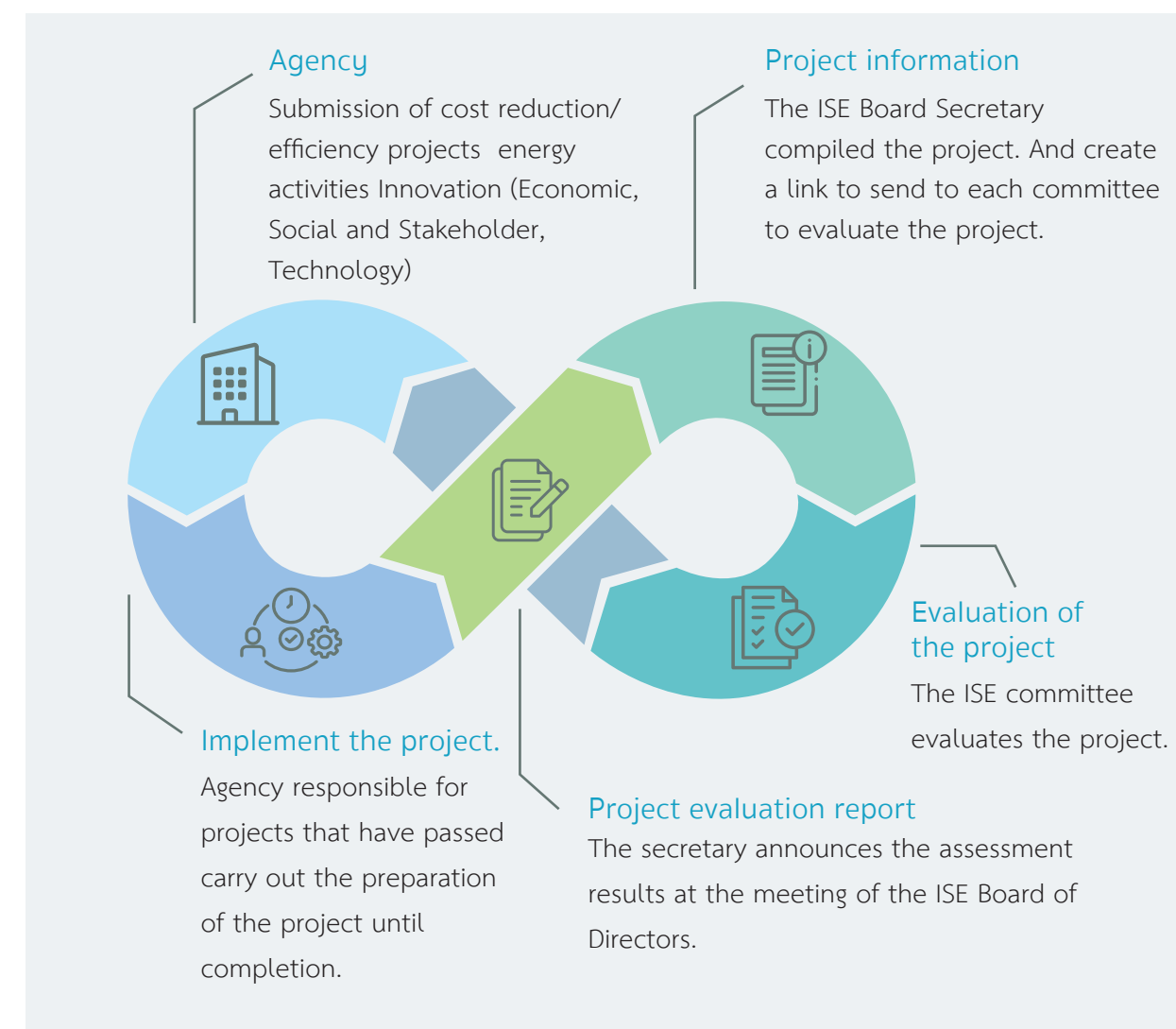
Support the changes that will enter the digital age, Crop Integration Business believes that Innovation will be an important tool that will keep us abreast of global changes or Mega Trends. Therefore, we have determined and implemented the company's innovation management framework, consisting of platform creation, personnel development, and organizational culture (People) process development (Process) including open innovation and management of intellectual property (Pipeline), the basis of which is the use of digital technology to transform the organization, to systematically drive innovation and is constantly evolving Aiming to be an organization-wide innovation organization



CREATING AN INNOVATION ORGANIZATION

Crop Integration Business importance to the creation of new things, to create opportunities and further innovation covering 3 areas: economy, technology and society. By focusing on employees to solve problems on their own. Therefore, a suggestion system (Suggestion) was created and incentives were created, by creating a platform for employees to present to the executives. When employees have developed and become a culture to some extent. Next, the goal is for employees to work together so teamwork is set up. By using the concept of QCC System for employees to group together. Solve more difficult problems. Decisions are made between teams to achieve common solutions through a "one for all" program that encompasses efficiency, cost reduction and continuous improvement.

Emphasis on cross-functional collaboration, developed into an innovation system process, sent to the Group's C.P. INNOVATION, at the business group level. Organized a forum for employees to show their potential in the CPP Award work contest with the objective of honoring innovators who invent works, and to share knowledge and exchange experiences of employees. Outstanding works will be developed and elevated to the Charoen Pokphand Group Innovation Contest.



CASE STUDY

USING SNIPS MOLECULAR MARKERS (SNPs)

TO CLASSIFY GENDER AND HIGH-LOW THC OF HEMP.

Hemp contains important substances, namely Cannabidiol (CBD) and Tetrahydrocannabinol (THC), which are used in medicine and cosmetics. The Plant Seed and Nutrient Research and Development Unit, Charoen Pokphand Produce Co., Ltd., has conducted research to develop hemp strains or hybrid strains with high CBD content. However, since hemp is a plant that takes a long time to flower and is a separate plant, i.e. male, female and hermaphrodite, the important substances are abundant only in the inflorescences of female plants. The harvest period is approximately 90-120 days. After reducing the humidity, the amount of important substances can be measured using the HPLC (High Performance Liquid Chromatograph) method for a total of 134 days.



Traditional method

Totals 134 days



The Cannabis seedlings are 7 days

The Cannabis seedlings are transplanted to grow in the greenhouse

Identification of Cannabis sexual phenotype exhibit

Harvesting of inflorescences of Cannabis

Reduce the humidity to inflorescence of Cannabis, totals 14 days

Finally, measure the THC and CBD contents in Cannabis

30 – 60 days

90 – 120 days

14 days

134 days

The Biotechnology Unit has come to help develop a method for selecting hemp plants that show a relationship with the production of THC at various levels and separating hemp sexes using modern biotechnology by extracting DNA from 7-day-old hemp seedlings and using a SNP marker to separate hemp sexes into 3 groups: male, hermaphroditic, and female, which can be separated according to the clearly expressed sex characteristics. In addition, hemp plants with low and high THC content can be separated accurately.

A new method by DNA technology,
Totals 5 days

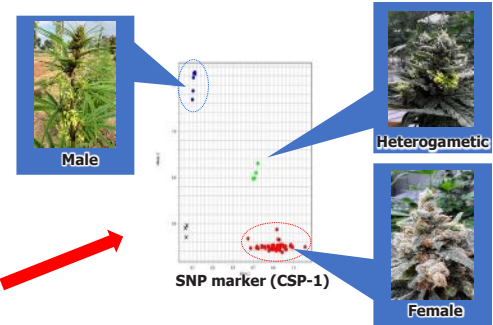
The Cannabis seedlings are 7 days



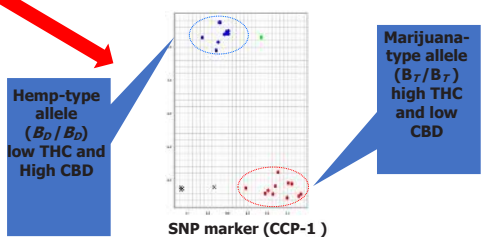
Identification of sexual and THC/CBD contents of Cannabis samples by SNP marker in only a total of 5 days

Cost of analyzing 20 Bath/plant

Identification of Cannabis sexual by SNP (CSP-1) marker



Identification of THC/CBD content by SNP (CCP-1) marker



In conclusion, the use of SNP molecular markers reduces the time spent examining hemp to separate sex and THC content from 7-day-old hemp plants to only 5 days from the original method that took 134 days. In addition, the original method still has high costs, such as planting, labor management, and plot or greenhouse management. The new method has an analysis cost of only 20 baht per sample and can select only female plants with low THC content for transplanting and further development.



CASE STUDY

REDUCE THE COST OF INSTALLING THE CENTER PIVOT SPRINKLER WATER PIPE SYSTEM.

Salang Phan Field Crops Farm uses a large irrigation system for corn cultivation. In 2023, another 2-span Center Pivot Sprinkler system will be installed in a 20-rai cultivation area. This irrigation system requires an underground water pipe from the water reservoir to the sprinkler head, a distance of 200 meters. The original plan used 50 6-inch PVC pipes with connectors at a cost of 68,360 baht, which is a high cost and has a high chance of leakage in the future.

To reduce potential future problems, the water pipe was replaced with two 3-inch PE pipes, which can deliver the same amount of water with fewer connection points. The advantage of PE pipes is that they hold up well even when the soil moves, reducing the cost to 33,072 baht.



Then, the original 3-inch PE pipes from the farm's drip irrigation system that were no longer in use were used instead of buying new pipes, reducing the cost of laying underground water pipes to only 5,805 baht, resulting in a total cost reduction of 62,555 baht.

ADJUSTING AGRICULTURAL EQUIPMENT INCREASE CONVENIENCE IN WORK.



seeds, Sunn hemp, which is a fibrous plant, decomposes slowly, sometimes affecting activities or the cycle of using the production plot.

In order to be able to use the plot in time for production, Sunn hemp plant waste must be removed from the plot before the next step of soil preparation, using labor and machinery, at a cost of 600 baht per rai.

Therefore, a sugarcane leaf sweeper is used to sweep the pile of Sunn hemp plant waste and remove it from the production plot. It was found that it can work faster, reducing the working time by 2 hours per rai and reducing costs by 520 baht per rai.



Plowing and burying legumes to improve the soil.



Convert before processing



Using labor to sweep up piles of legume plant waste costs 600 baht per rai.

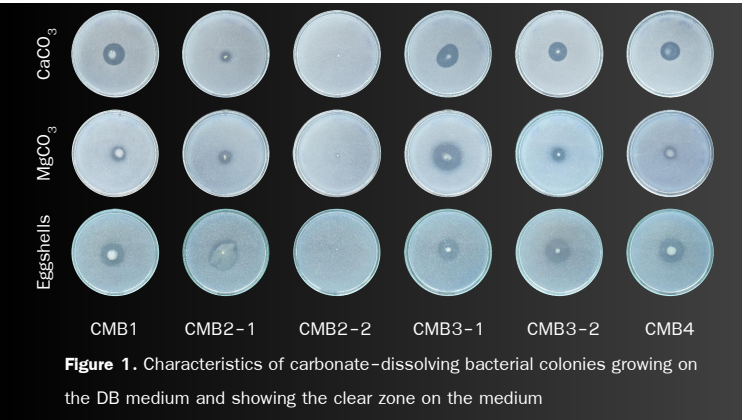


Using a sugarcane leaf sweeper Sweep up the remains of legume plants. Cost 80 baht per rai.



CASE STUDY

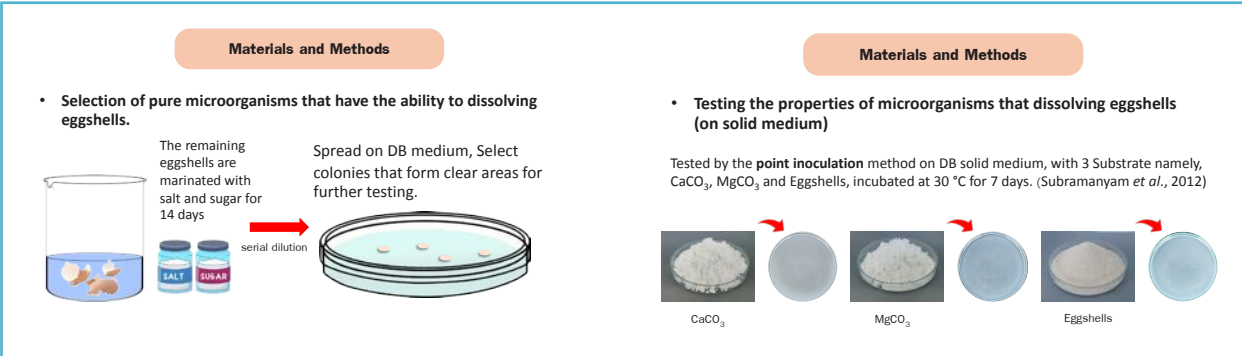
RESEARCH CENTER,SOIL QUALITY ASSURANCE AND FERTILIZER
sorting and testing microorganisms that have the potential to decompose eggshells
for use as a source of micronutrients.



Each year, the production of chicks requires the disposal of approximately 660 eggshells, resulting in a landfill cost of 8 million baht per year. In addition, there is a problem of insufficient landfill space and the creation of methane gas. Therefore, eggshell management is an urgent matter that needs to be solved. Because the main components of eggshells are 0.3% calcium carbonate and 0.2% magnesium, which are nutrients necessary for plant growth. The Agricultural Microbiology Research Team, Soil and Fertilizer Quality Assurance Research Center, Charoen Pokphand Produce Co., Ltd., has selected microorganisms that are capable of decomposing eggshells and releasing secondary nutrients.



The microorganism research team was able to separate 6 isolates of bacteria that have the ability to release Ca and Mg, which will be tested in the next step in the process of composting eggshells to add secondary nutrients and increase the value of organic fertilizers.




CASE STUDY

ONE DAY SATISFACTION
PROJECT (CPA)

“Accepting change” is one of the corporate values of Charoen Pokphand Group to encourage employees to accept and adapt to every changing situation.

To drive the organization’s values into practice, this is the origin of the “One Day Satisfaction Project”, which supports employees to cope with the changes that occur by creating new things, improving various processes to be consistent with current work. The use of new innovations or machinery, as well as reducing multiple work steps, not only increases work efficiency, but also helps reduce costs, reduce damage, and save energy.

One DaySatisfaction Project

In 2023, Charoen Pokphand Agriculture Co., Ltd. encouraged employees to participate in the “One Day Satisfaction Project” and provided various guidelines, which led to the submission of 47 projects from 193 employees, which not only made the work process more efficient and reduced duplication of work, but also helped the company save nearly 5 million in production costs per year.

One Day Satisfaction Project Result

No.	Work type	workings	institution
1	Outstanding Innovation	Improving the shelf life of aromatic coconut products	COCO POWER
2	Outstanding efficiency and cost reduction	solar roof	Rubber processing plant
3	Outstanding Suggestions	Create a material purchasing group via the LINE Openchat platform	Landscape industry
4	Excellent project of the Category	Increase efficiency by using replacement machinery	Coconut Garden Phran Kratai
5	Excellent project of the Category	Increase efficiency in loading goods onto the truck with stacker.	Fruit juice steaming plant
6	Excellent project of the Category	Increase efficiency in paying car rentals with the RPA system.	Administrative office
7	Excellent project of the Category	solar roof	Rubber processing plant
8	Excellent project of the Category	Create a material purchasing group via the LINE Openchat platform	Landscape industry

CASE STUDY

One Day Satisfaction Project (Soi 12 Factory)

One Day Satisfaction Project Award 2023, Excellent Project Category.

...SLIP...DOWN...FLOW...

From the corn cob process, it was found that while transporting corn through the conveyor belt to the corn cob oven, when it was flowing down the cob down path, there was a problem that some types of corn cobs were stuck at the corn cob down path, causing the corn to pile up on the path and unable to flow down to the conveyor belt on the cob oven.

From the inspection of the area (Success My by Walking), it was found that if the corn does not flow down the conveyor belt on the cob oven and the silk is stuck at the corner of the cob exit, the employee must leave the work to spread the corn cobs and the silk that is stuck down the conveyor belt by using a rake to spread the corn cobs and silk, which affects the efficiency of cob placement and is unsafe at work. Therefore, there is an idea to improve it so that the corn cobs can flow down the conveyor belt on the oven continuously without interrupting the production process, reducing the risky work of the employee.

ความคิดริเริ่ม (Initiative)

Explore the problem



1. One employee needs to take a break from their current job to flat ear corn
2. Silk is stuck at the corner of the chute.

Actual working situation

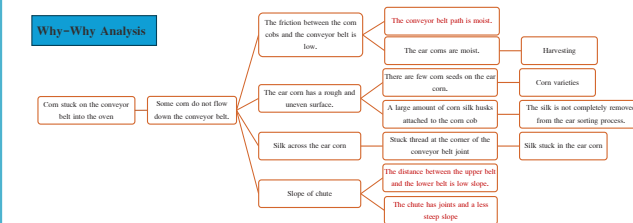


Reduce the chance = 0

- Reduce the risk of working at height.
- Reduce the wasted working time.
- Reduce the entanglement of silk, corn cob.

Methodology

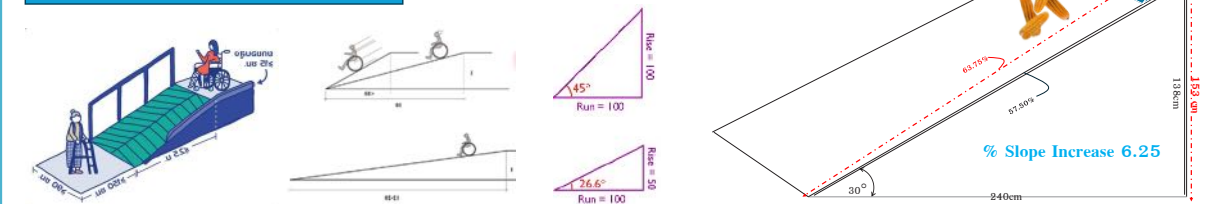
Why-Why Analysis



SCIM PRINCIPLES ARE USED TO DEVELOP PERFORMANCE



THE CONCEPT OF SLOPE MEASUREMENT

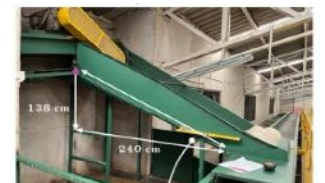


การพัฒนาด้วย DESIGN THINKING : IDEATE- PROTOTYPE - TEST

Improve #1 : Concept: Find the impact location and increase the slope.



Improve #2 : Concept: Non-slip, durable, strong .



PROTOTYPE 1,2 : Improve the problem by calculating the size and angle of the equipment that is suitable for the pod landing.



TEST : Installed on the chute according to the development concept.



By using the Why-Why Analysis tool, it was found that one reason why the corn cobs did not slide down the conveyor belt was the slope of the belt. The slope of the belt was measured using the mathematical formula arctan. The relationship between the angle and acceleration was found, which resulted in more power for the corn cobs. The SCIM (Success by My walking - Cooperation - Intrepidity - Make it Better) principle was applied to the development of the work, along with Design Thinking, which helped reduce the chance of a breakdown of silk/cobs stuck on the conveyor belt by 90%, while the number of employees using a rake to level the cobs decreased by 80%. Employee satisfaction increased.

CASE STUDY

ONE DAY SATISFACTION PROJECT (SOI 12)

ONE DAY SATISFACTION PROJECT AWARD 2023, EXCELLENT PROJECT CATEGORY

CHEMICAL MIXING TANK

Mixing chemicals to coat corn seeds requires putting chemicals in 6-liter tanks. It was found that moving chemicals from the chemical mixing room to the seed coating machine takes a long time and is unsafe for employees. Therefore, there was an idea to use a cart to transport and have a pump to suck out the chemicals in the tank by using a 200-liter water tank as a container for chemicals and designing a cart to move the water tank.

When tested, it was found that the tank could hold a sufficient amount of chemicals for coating the seeds in the 200-liter tank, and the cart could be moved easily, reducing the time it took to prepare chemicals by 10-20 minutes, so employees did not have to tire themselves out while moving, and it was also safe from moving chemicals.



Before renovation



After renovation

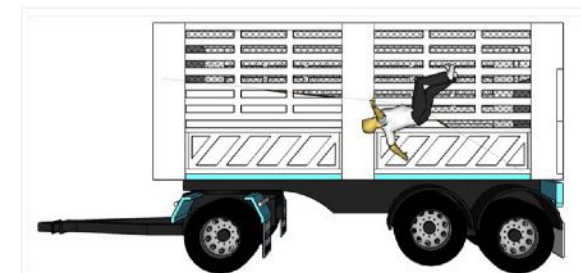
CASE STUDY

ONE DAY SATISFACTION PROJECT (SOI 19)

One Day Satisfaction Project Award 2023, Outstanding Project of the Agency category.

PLUG IN TO PREVENT FALLING

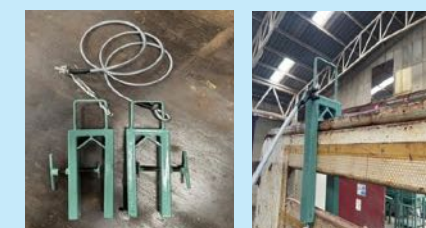
The method of lifting the jumbo bag to empty the corn cobs is by lifting the jumbo bag up and pouring it. A person is on the truck to pull the jumbo bag bottom strap to empty the corn cobs into the truck. When the corn cobs are almost full in the truck bed, the person pulling the jumbo bag bottom strap is at risk of falling backwards to the ground and being injured.



This is the origin of the clamp lock, which is used to hold workpieces between two surfaces tightly, and the U-strap as a prototype. However, since the U-strap is short, it cannot be locked to the truck bed, and there is no hook for the seat belt, so the clamp lock and the U-strap are combined.



When testing, it was found that installing 1 set of clamp locks required 1 worker. There was a problem of having to move the clamp locks, so it was adjusted to install 2 sets of clamp locks using 2 workers, which made the work easier. However, using 2 workers to pull the straps increased the labor cost. Therefore, the team adjusted the clamp locks to be in the middle of the vehicle to make it more convenient for the workers. In the case of scooping into jumbo bags, the jumbo bottom straps should face the workers. It was improved to be more convenient to use, without having to move the steel plugs by adding steel to increase strength and to fit at an angle so that the steel would not shake. The slings were changed to plastic-covered ones to prevent the slings from cutting the hands, resulting in workers being safer. In the event of a fall, the workers would not hit the floor, reducing the labor cost by 2,125 baht/year. The workers were happier at work.





STAKEHOLDER ENGAGEMENT

| GRI 102-21, 102-40, 102-42, 102-43, 102-44, 413-1

OPPORTUNITIES AND CHALLENGES

Crop Integration Business believes that good corporate governance is something that Charoen Pokphand Group places importance on in order to enhance its competitiveness and sustainable development, as well as help increase value for stakeholders in the long term. Because good corporate governance indicates an efficient, transparent and auditable management system, building trust among stakeholders, which requires commitment and cooperation from employees at all levels, with support from the Board of Directors and executives, in order for corporate governance to be tangible.



KEY OPERATING RESULTS IN 2023



SUPPORTING THE SDGs

- SDG 16**
Peace, Justice, and Strong Institutions

16.7 Ensure responsive, inclusive, participatory, and representative decision-making at all levels
- SDG 17**
Partnerships for the Goals

17.6 Enhance the global partnership for sustainable development

17.7 Encourage and promote effective partnerships











STAKEHOLDER ENGAGEMENT FRAMERWORK

MANAGEMENT APPROACH



Crop Integration Business has announcing policies and considering stakeholders involved in business operations in the scope of each company. Also analyze the stakeholder relationship of the organization to reflect the business context in a comprehensive manner. CPP identifies that business operations throughout the value chain are involves direct and indirect stakeholders and analyzes issues that stakeholders have an impact and expect the organization, including the issues that the organization has impact and expect to stakeholders who the company has given importance and increasing the positive impact and reducing the negative impact to maintain the competitiveness to develop the growth potential of long term business.

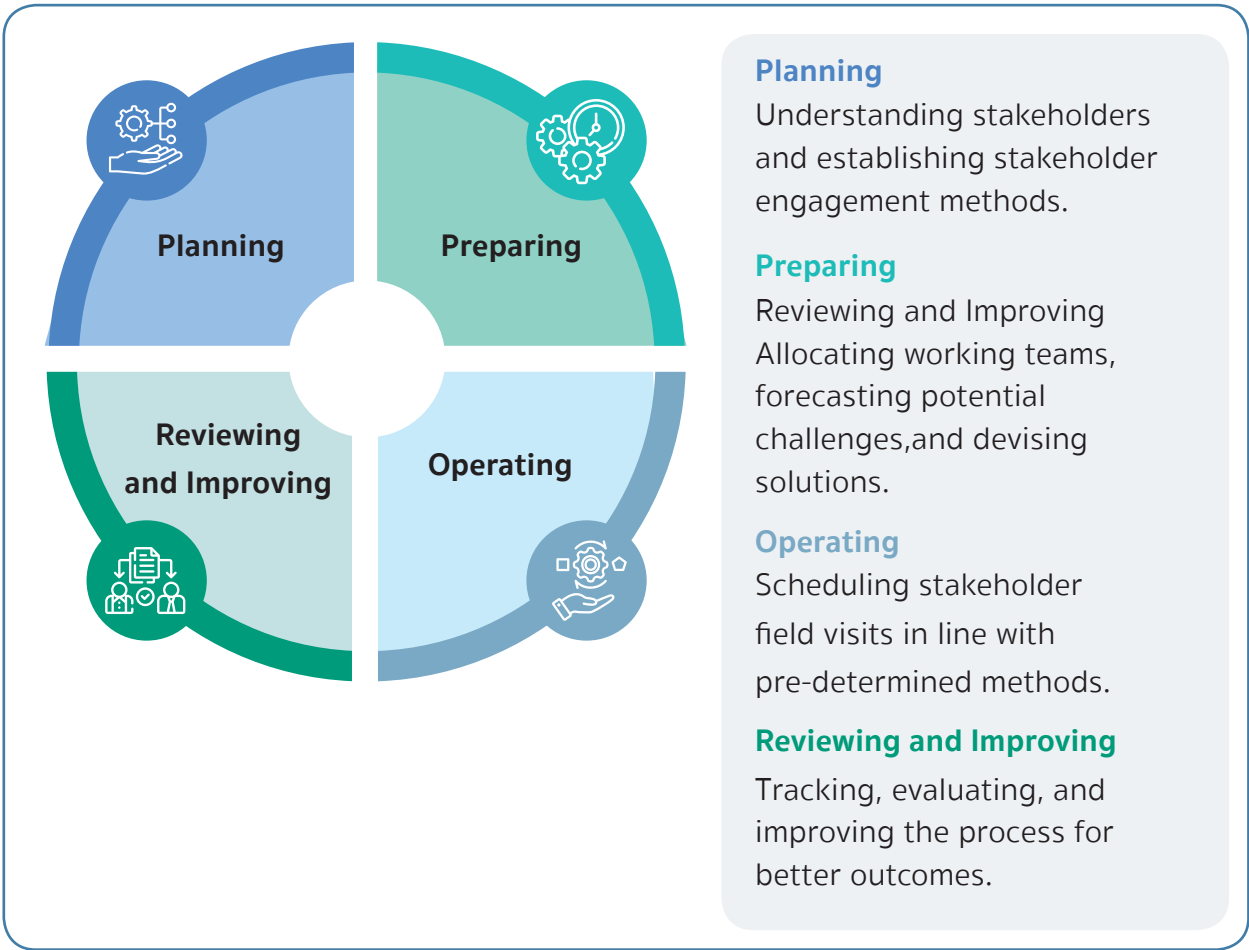
Our company determines how to engage with each group of stakeholders in order to communicate, manage and implement significant issues in formulating ways to meet stakeholders’ needs and create consistent bonds across the organization.

			
Investor	Employee	Farmer	Customer & Consumer
			
Supplier	Partner	Media & social online	Government
			
Bank	NGO	Community	Competitor

THE VOICE OF STAKEHOLDERS

Crop Integration Business has compiled issues and opinions covering the economic, social and environmental dimensions of stakeholders, as well as prioritizing them. Stakeholders on the sustainable development of the significant issues have been applied in formulating ways to meet stakeholders’ needs and create consistent ties across the organization

Building engagement with stakeholders in each area is considered the key to building the foundation for a sustainable organization. Stakeholders is a group of people who are positively and negatively affected by their business operations, both inside and outside the organization. CPP listens to stakeholders through a variety of channels that have analyzed those opinions and suggestions to understand expectations and needs before responding in a way that can manage issues that are important to both the business and all stakeholders appropriately.



2

questions

1. age

2. sex

15

questions

2. Performance level according to the sustainability goals of Crop Integration Business

10

questions

Stakeholders were asked to select 5 issues of interest from 23 issues.

What is your opinion on the impact of the company’s operations on that issue?

3.1 Assess the severity of the impact

3.2 Assess the likelihood of impacts

3

questions

4.1 Efficiency in communicating with stakeholders both inside and outside the organization.

4.2 Listening to the opinions of stakeholders

4.3 Respond to the needs and expectations of stakeholders

1

questions

5.1 Overall satisfaction with the company

83%

Media

82%

Business partners

56%

NGO

15%

Farmer

0%

Government

75%

Customers and Consumers

70%

Community & Societies

32%

Employees and Families

64%

STAKEHOLDER ENGAGEMENT FRAMEWORK



METHOD OF ENGAGEMENT	ISSUES OF INTEREST	MATERIALITY ISSUES	RESPONSE BENEFITS	BENEFITS RECEIVED BY STAKEHOLDER
STAKEHOLDER GROUP: Employee				
<ul style="list-style-type: none"> • Intranet, CPTG & CROP Connect Mobile Applications • E-mail and Social Media • Meetings with executives • Activities of the Welfare Committee and Safety Committee • Satisfaction and engagement surveys • Feedback and grievance channel 	<ul style="list-style-type: none"> • Compensation, benefits, and remuneration • Career progression • Work environment • Occupational health and safety 	<ul style="list-style-type: none"> • Corporate governance • Human rights & labor practices • Leadership & human capital development 	<ul style="list-style-type: none"> • Treat employees with respect for human rights principles • Continuously develop employees' capability • Retain good and talented employees • Develop a human resources management system • Comply with Thai labor standards • Enact the Safety, Occupational Health and Workplace Policy and Guidelines 	<ul style="list-style-type: none"> • Employees receive appropriate training • Leadership training and development • Grievances and whistle-blowing management • Assessments on safety, occupational health and work place environment



METHOD OF ENGAGEMENT	ISSUES OF INTEREST	MATERIALITY ISSUES	RESPONSE BENEFITS	BENEFITS RECEIVED BY STAKEHOLDER
STAKEHOLDER GROUP: Community and society				
<ul style="list-style-type: none"> Sustainability Report Opinion survey and listening to recommendations Grievance channel Dialogues and regular visits Activities to promote quality livelihoods 	<ul style="list-style-type: none"> Business impacts on societies, communities, and the environment Engagement in promoting community Livelihoods Fair complaints process Transparent and efficient communications on performance 	<ul style="list-style-type: none"> Social impact Climate change management Water stewardship Ecosystem & biodiversity protection 	<ul style="list-style-type: none"> Control efficiency of the pollution prevention system Support to increase the quality of life and generate income for the community Leverage the Company's competitive advantages as tools to create positive impacts and mitigate negative impacts on societies 	<ul style="list-style-type: none"> Initiatives that create values for society Climate change management Water stewardship Ecosystem and biodiversity protection
STAKEHOLDER GROUP : Consumer/ Customer				
<ul style="list-style-type: none"> Consumer center Feedback and grievance channels Customer surveys and interviews Meetings and site visits Websites, E-Mail and Social Media 	<ul style="list-style-type: none"> Good product quality and suitable price Food Safety Product traceability Post-sale information about products and services Personal data privacy 	<ul style="list-style-type: none"> Health & well-being Ecosystem & biodiversity protection 	<ul style="list-style-type: none"> Develop products and services that meet quality and safety standards Help consumers understand products and services through product labeling, and protect customer data privacy Develop a product traceability system 	<ul style="list-style-type: none"> Commitment to quality production processes Product labels, website, and direct consumer hotline Raw material sourcing and traceability

METHOD OF ENGAGEMENT	ISSUES OF INTEREST	MATERIALITY ISSUES	RESPONSE BENEFITS	BENEFITS RECEIVED BY STAKEHOLDER
STAKEHOLDER GROUP: Partner				
<ul style="list-style-type: none"> Site visits and joint meetings Partner development training courses Supplier capacity-building projects, partnerships, and joint innovation development Assessments, consultations, and technical Services Grievance channel 	<ul style="list-style-type: none"> Fair business practices Business Equality Supplier capacity-building Human rights and environmental impacts in the supply chain 	<ul style="list-style-type: none"> Corporate governance Responsible supply chain management 	<ul style="list-style-type: none"> Continuously develop supplier partnership projects Develop criteria for supplier assessment according to the Sustainable Procurement Policy Communicate with suppliers to help them understand requirements Treat all suppliers equally and fairly according to business agreements / Business Code of Conduct 	<ul style="list-style-type: none"> Supplier capacity-building Communications on the Supplier Code of Conduct Operations based on the foundations of ethics and transparency
STAKEHOLDER GROUP: Shareholder / Investor				
<ul style="list-style-type: none"> Meetings and roadshows Site visits to operational units Sustainability Report Grievance channel 	<ul style="list-style-type: none"> Corporate Governance Complete, transparent, and efficient performance disclosures Enhancing competitiveness and business direction 	<ul style="list-style-type: none"> Corporate governance 	<ul style="list-style-type: none"> Operate in compliance with laws, corporate governance principles, objectives, company's regulations, and decisions of the Shareholders Comply strictly with the creditor's conditions Listen to the recommendations and reflections from shareholders and investors Collaborate with relevant agencies to improve operational efficiency 	<ul style="list-style-type: none"> Good corporate governance Corporate sustainability management



METHOD OF ENGAGEMENT	ISSUES OF INTEREST	MATERIALITY ISSUES	RESPONSE BENEFITS	BENEFITS RECEIVED BY STAKEHOLDER
STAKEHOLDER GROUP: Media / Online media				
<ul style="list-style-type: none"> Communications through all formats/channels Media visits to operational units Press conferences and regular media interviews Support and engagement in media activities Grievance channel 	<ul style="list-style-type: none"> Corporate governance Complete, transparent, and efficient performance disclosures Business impacts on societies, communities, and the environment Social projects 	<ul style="list-style-type: none"> Corporate governance Stakeholder engagement 	<ul style="list-style-type: none"> Engage media to strengthen good relations Provide factual, useful, and timely information for Official communication to the public. Monitor news reports to inform future operational approach 	<ul style="list-style-type: none"> Useful and timely information based on facts Useful and timely information based on facts Support and participate in media activities
STAKEHOLDER GROUP: Government Auditor				
<ul style="list-style-type: none"> Meetings and visits on various occasions Collaboration and support for initiatives, project development, and beneficial activities Grievance channel 	<ul style="list-style-type: none"> Compliance to relevant laws and regulations Being a model business for social and environmental responsibility Complete, transparent, and efficient performance disclosures 	<ul style="list-style-type: none"> Corporate governance 	<ul style="list-style-type: none"> Monitor and strictly comply with all relevant laws and operating guidelines Collaborate on and support initiatives, and develop projects and activities that will benefit the country Communicate and disclose performance in a complete, transparent, and efficient manner, and receive recommendations for improving operational plans 	<ul style="list-style-type: none"> Good corporate governance Oversight of compliance across the Group Partnerships for sustainable development
STAKEHOLDER GROUP: Supplier				
<ul style="list-style-type: none"> Site visits and joint meetings Supplier development training courses Grievance channel 	<ul style="list-style-type: none"> Transparent and fair procurement contracts Organize capacity-building training courses Human rights and labor practices throughout the supply chain 	<ul style="list-style-type: none"> Good corporate governance Oversight of compliance across the Group Partnerships for Sustainable development 	<ul style="list-style-type: none"> Fair and transparent contracts Organize a course to increase the potential for supplier development Operate in accordance with human rights policy and labor practices throughout the supply chain 	<ul style="list-style-type: none"> Supplier capacity-building Communications on the Supplier Code of Conduct Operations based on the foundations of ethics and transparency

METHOD OF ENGAGEMENT	ISSUES OF INTEREST	MATERIALITY ISSUES	RESPONSE BENEFITS	BENEFITS RECEIVED BY STAKEHOLDER
STAKEHOLDER GROUP: Competitors				
<ul style="list-style-type: none"> Meetings with third party organizations such as the Federation of Thai Industries News and information obtained through public media and forums Grievance channel 	<ul style="list-style-type: none"> Compliance with ethics of competition, laws, and trade regulations Equitable, transparent and fair competition 	<ul style="list-style-type: none"> Corporate governance 	<ul style="list-style-type: none"> Adhere to the rules/ethics of competition and establish a monitoring mechanism to ensure that there is no conduct associated with gaining trade secrets from competitors Prohibit any actions to defame competitors' reputation based on unfounded facts 	<ul style="list-style-type: none"> Good corporate governance Anti-corruption
STAKEHOLDER GROUP: Non-profit organization				
<ul style="list-style-type: none"> Regular feedback and dialogues Support collaboration through networks as appropriate Site visits to operational units Grievance channel 	<ul style="list-style-type: none"> Impacts of business operation on societies, communities, and the environment Social projects Complete, transparent, and efficient performance disclosures to the public 	<ul style="list-style-type: none"> Human rights & labor practices Social impact Ecosystem & biodiversity protection 	<ul style="list-style-type: none"> Coordinate work locally to jointly address problems Listen to recommendations to inform determination of operational approach Communicate and disclose performance in a complete, transparent, and efficient manner, and receive recommendations for improving operational plans 	<ul style="list-style-type: none"> Operations that uphold human rights and labor practices Value-added initiatives for societies Ecosystem and biodiversity protection
STAKEHOLDER GROUP: Creditors and banks				
<ul style="list-style-type: none"> Letters to creditors E-mail and Social Media Grievance channel 	<ul style="list-style-type: none"> Pay in full and on time Complete, transparent, and efficient performance disclosures 	<ul style="list-style-type: none"> Corporate governance 	<ul style="list-style-type: none"> Provide accurate and complete financial information Comply with contract terms Strictly follow the conditions Pay off debts on time 	<ul style="list-style-type: none"> Good corporate governance Anti-corruption



CASE STUDY

VOLUNTEER PROJECT
Royal Volunteer Training

Crop Integration, Rice, Transport and Service Business committed to continuing the royal intention to benefit society and the sufficiency economy concept by applying it to daily life. Executives and volunteer employees joined in learning and training in the sufficiency economy, new theory agriculture, and a learning base for solving problems according to the social geography and self-reliance, and doing public service without expecting anything in return, following the royal volunteer concept “We do good deeds with our hearts” for 2 classes, with 180 volunteer participants at the Volunteer School Training Center 904 (Bang Khen).

Volunteers who participated in the training received hats and scarves, along with volunteer ID cards, to join the CP Volunteer Force, do good deeds, benefit society, and strive to live and do business according to the 3 Benefits of Charoen Pokphand Group to create benefits for society.



CASE STUDY

ROYAL VOLUNTEER 904

Join forces of volunteers to join
“We do good deeds with our hearts”



Crop Integration Business unites Volunteers to Do Good for Society under the Project “We Do Good with Our Hearts” Unites executives and employees, along with government agencies and volunteer citizens, to volunteer in the areas surrounding the business premises and sales areas, in 2 locations:

Public service at Bangpoo
Army Nature Study Center

Charoen Pokphand Group joins forces with executives and employees of the group and external agencies, led by Chairman Dhanin Chearavanont, to plant mangrove trees in the forest, creating a mangrove forest, increasing the abundance of the ecosystem, and creating a complete food source for various species of birds.

Public service at Prasat Nakhon Luang, Nakhon
Luang District, Phra Nakhon Si Ayutthaya Province

Executives and employees, volunteers, together with local administrative organizations and local government agencies, business networks, join in weaving good deeds in the volunteer project “We Do Good with Our Hearts” Year 6, performing public services, trimming trees, cleaning up, and adjusting the landscape around Prasat Nakhon Luang, Phra Nakhon Si Ayutthaya Province, to develop the local area and important tourist areas





CASE STUDY

CP PROJECT

Do GOOD FOR CHILDREN.

Trok Chan Office, a fully integrated plant business, jointly established the Safety School Club with the aim of promoting learning and reducing losses within schools, as well as jointly creating a culture and awareness of safety for students, school personnel, and company personnel.

December 15, 2023

50 executives and volunteer staff from the Safety School Club delivered 4 bathrooms, a mushroom farm, a petanque field, as well as vegetable seeds from Chia Tai and Chat rice to Nong I Lo School, Pak Chong District, Nakhon Ratchasima Province, to provide students with hygienic bathrooms and to promote exercise and a hygienic lunch.



They also helped prepare lunch for the students and organized activities to provide knowledge on safety, occupational health, and waste separation for the students through learning bases and recreational activities to enhance their skills and have fun.

In addition to sharing opportunities and promoting good hygiene for schools in the company's workplace area, these activities also help create good relationships between executives and employees.



CASE STUDY

REFORESTATION TO RESTORE

WATERSHED FORESTS "CELEBRATION OF HER MAJESTY QUEEN SIRIKIT"

On the occasion of Her Majesty Queen Sirikit the Queen Mother's birthday on 12 August 2023, the Safe Nature Project, in collaboration with Sri Lanna National Park and network partners in Phrao District, Chiang Mai Province, organized the "Reforestation Project to Restore Headwater Forests in Honor of Her Majesty Queen Sirikit the Queen Mother on the Auspicious Occasion of Her Majesty's 91st Birthday Anniversary on 12 August 2023" to jointly plant trees on an area of 20 rai at the Samli Forest Plantation, Village No. 11, Mae Wan Subdistrict, Phrao District, Chiang Mai Province.

The Sri Lanna National Park requested the land back from the villagers after jointly surveying land ownership in accordance with the guidelines for resolving land issues in conservation forest areas under Section 64 and made a joint management agreement to allow people to live sustainably with the forest. The seedlings used for planting focused on economic trees and local woods according to the needs of the community, such as the Tiger Lily, Ko Duey, Ko Pan, Sam Bai Pine and Makham Pom, etc.





CASE STUDY

CP PROJECT
RUN FOR
CHILDREN.

On December 16, 2023,

The Stronger Group organized the “CP Run for Kids” activity at the Soil and Water Conservation Research Center, Pak Chong District, Nakhon Ratchasima Province, to encourage employees to exercise and take care of their health. Part of the proceeds from the activity will be donated to develop and share opportunities with students at Nong I Lo School, Pak Chong District, Nakhon Ratchasima Province.

This running activity is part of the volunteer activities by the “Stronger” group of employees to campaign and encourage fellow employees to exercise for health, and to share opportunities and create happiness for children and youth, in line with the Charoen Pokphand Group’s business operations, which emphasize participation in caring for society and supporting access to education for children and youth.



Crop Integration Business established the Stronger Club with the aim of being a part in raising awareness of exercise and health care to create good health and well-being for employees. Therefore, activities to encourage employees to exercise continuously were organized by campaigning and providing knowledge about exercise and health care in the project “CP Run for Kids Stronger Outing Trip No. 5”.

The event was held on December 16, 2024 at the Pak Chong Soil and Water Conservation Research Center to allow employees and their families to enhance their health and build good relationships. Income after deducting expenses was donated to the Safety School Club to build a bathroom for students at Nong I Lo School, Nakhon Ratchasima Province. This time, 118 employees applied to join the event.





CASE STUDY JOIN IN PLANTING ECONOMIC TREES IN THE FOREST CONNECTION PROJECT.

On August 17, 2023,

Executives and volunteer employees of Crop Integration Business, along with a volunteer team from the Nakhon Luang Learning Center, together with the Seub Nakhasathien Foundation and community networks in the Ban Rai Phichit area, Kosamphi Nakhon District, Kamphaeng Phet Province, planted trees in the “[Ecosystem Restoration Project with Economic Forestry Process for Forest Connectivity](#)” to strengthen the ecosystem between Khao Sanam Phiang Wildlife Sanctuary and Khlong Wang Chao National Park.



This activity promotes 4 communities, namely Ban Rai Phichit, Ban Nong Bua Samakkhi, Ban Nong Daen, and Ban Pang Khanun, to change from monoculture to economic tree planting and mixed farming to connect the original conservation forest area that was separated by agricultural areas and Rural Highway No. 1116 in the form of creating a distribution of forest patches (Stepping Stone), which the community can use and earn sustainable income. At the same time, it may lead to the connection of wildlife “route” and the exchange of genes of various plant species between the two conservation forests.

The project’s goal is to create a distribution of the ecosystem in the form of a stepping stone forest that is connected to create opportunities for wildlife distribution and restore biodiversity, creating a sustainable balance of the ecosystem. It was found that there are 5 potential areas for operation, covering an area of 6,000 rai. Currently, they have planted trees in Zones 3 and 4, totaling 16,000 trees, or 14% of the project’s target area.





CASE STUDY

GREEN HOME : THAILAND

Executives and staff of Saeng Phan Research Station, Saeng Phan-Kham Phran Farm, planted trees in the tree planting activity in the home forest planting project at the Saeng Phan Research Station’s forest planting plot, which is part of the drive to become a carbon neutral organization by 2030 in accordance with the policy of Charoen Pokphand Group.

Crop Integration Business has started tree planting activities in the home forest planting project since 2020 in the company’s areas, such as the Saeng Phan Research Station in Saraburi Province, the Sawankhalok Research Station in Sukhothai Province, with a total of more than 3,600 newly planted trees planted and more than 20,000 original forest trees surveyed and counted.

The trees planted include 500 bamboo trees of 12 species, such as Sang Mun bamboo, Fangyan bamboo, Lai Liang bamboo, Angel bamboo, etc., because bamboo is a fast-growing plant, drought-resistant, suitable for the local environment, and can store carbon well, as well as being useful.



Area	Original wood (tree)	2020 (tree)	2021 (tree)	2022 (tree)	2023 (tree)	Total (tree)
CPP	50,000	2,208	2,567	2,067	1,508	58,350
CPA & CPS	83,353	260	280	381	1,000	86,545
Transportation and services	224	-	-	-	300	524



CASE STUDY

GREEN HOME OVERSEAS

After receiving the sustainability policy and perennial tree seedlings from the Green Home Reforestation Project in 2020, CPP Myat Min Agro Co., Ltd., C.P.Seeds Vietnam Co., Ltd. and C.P.Seeds (India) Pvt., Ltd. have planned to drive the home reforestation project by planting perennial trees in the factory area and various farms, and have announced their intention to become a Carbon Neutral organization by 2030.

Green Home : CPP India



Executives and volunteer staff of CP Seeds (India) Pvt. Ltd. planted 100 mango trees in the “Green Home : CPP INDIA” at the Vijayawada Seed Conditioning Plant as part of the drive towards becoming a carbon neutral organization by 2030 in line with the sustainability policy of Charoen Pokphand Group.

CP Seeds (India) Pvt. Ltd. has been prioritizing and participating in tree planting activities in the Home Forestry Project to increase green spaces in the area around the organization since 2020. Currently, a total of 1,759 new trees have been planted.

GREEN HOME : CPP Myanmar



Executives and volunteer staff of CPP Myat Min Agro Co., Ltd. planted 2,200 Acacia trees in the “Green Home : CPP MYANMAR” next to the water reservoir at Bawni Farm as part of the drive towards becoming a carbon neutral organization by 2030, in line with the sustainability policy of Charoen Pokphand Group.

CPP Myat Min Agro Co., Ltd. has been driving tree planting activities in the In-Home Forestry Project to increase green spaces in the area around the organization since 2020. Currently, a total of 6,620 new trees have been planted.



GREEN HOME : CPP Vietnam

Executives and volunteer staff from the Vietnam Plant Breeding Factory, together with the Chia Lai Provincial Agricultural Office, planted 1,000 trees as part of the “CPP Vietnam Green Homes Protecting Green Life” project in a nature reserve in Chia Lai Province, Vietnam, to help restore the environment, increase green space, and reduce greenhouse gas emissions in the area.

The project is part of the environmental and nature conservation project that CP Seeds Vietnam Co., Ltd. has been working with local government agencies to continuously restore natural resources, in line with the policy of becoming a carbon-free organization by 2030 and the Charoen Pokphand Group’s biodiversity target, building good relationships between the company and local government agencies and communities, and raising awareness of being an organization that cares for and looks after the environment.

GREEN HOME (OVERSEAS)

Area	Goal (tree)	Original wood (tree)	2020 (tree)	2021 (tree)	2022 (tree)	2023 (tree)	Total (tree)
India	2,500	429	23	346	360	1,030	2,188
Myanmar	-	513	1,108	1,870	929	2,200	6,620
Vietnam	5,655	-	1,700	1,000	1,000	1,000	4,700

HOME

Crop Integration Business realize the importance of environmental sustainability. The business is operated under the concept of using natural resources for the benefit of the value. Along with taking care of natural resources and the environment through various activities under the Safe Thai Nature Project, Charoen Pokphand Group” with the following objectives:

1. To educate and instill consciousness in the youth and the community to live happily in harmony with nature.
2. To protect, suppress and proactively campaign for areas that are still intact. both at the area level and the overall picture of the country
3. To rehabilitate, reforest and preserve watersheds in damaged areas. by planting forests to suit that area, such as planting softwood trees Original solid wood flooring precious wood, rare wood wood to hold soil, absorb water and wood for animal feed
4. To encourage people to use the forest area as an area to make a living. Have a career path and have a good quality of life



The Strategy and action plan are implemented through supporting activities in various forms, namely educating and cultivating awareness of the people and the environment. Enhancing efficiency, suppressing the authorities, restoring reforestation, preserving watersheds in damaged areas, and promoting people who use forested areas as planting land to have a better career and quality of life. To achieve the vision of being an organization that creates a positive contribution to the agricultural society through product and management innovations that improve the progress and security of food crops and energy crops to a global society on the basis of sustainable environment conservation under the framework of vision, mission and safety policy. Occupational Health, Environment, Energy and Efficiency, the following environmental sustainability goals consisting of



Greenhouse
Gas Emissions



Circular economy
system



Maintenance of
water resources



Protection of
ecosystems
and biodiversity



Responsible Supply
Chain Management



CLIMATE RESILIENCE

GRI 103-1, 103-2, 103-3, 302-1, 302-3, 305-1, 305-2,
305-4, 306-2, 307-1

OPPORTUNITIES AND CHALLENGES

Crop Integration Business committed to reducing greenhouse gas emissions and continuous monitoring measures by managing climate change and participating in reducing environmental impacts on a wide scale, adhering to relevant international principles and integrating them into business operations principles that emphasize the impacts of climate change.

Net Zero

Goal 2030

Reduce GHG emissions per revenues unit by **25%** compared to the base year 2020.

SUPPORTING THE SDGS



SDG 7

Affordable and Clean Energy

7.2

Increase substantially the supply of renewable energy in the global energy mix

7.3

Double the global rate of improvement in energy efficiency



SDG 11

Sustainable Cities and Communities

11.6

Reduce the adverse per capita environmental impact of cities



SDG 12

Responsible Consumption and Production

12.2

Achieve the sustainable management and efficient use of natural resources

12.3

Halve per capita global food waste

12.5

Substantially reduce waste generation



SDG 13

Climate Action

13.3

Improve education, awareness-raising and human and institutional capacity on climate change

KEY OPERATING RESULTS IN 2023



Reduce Greenhouse gas emissions per revenue compared to the base year 2020

89.18%



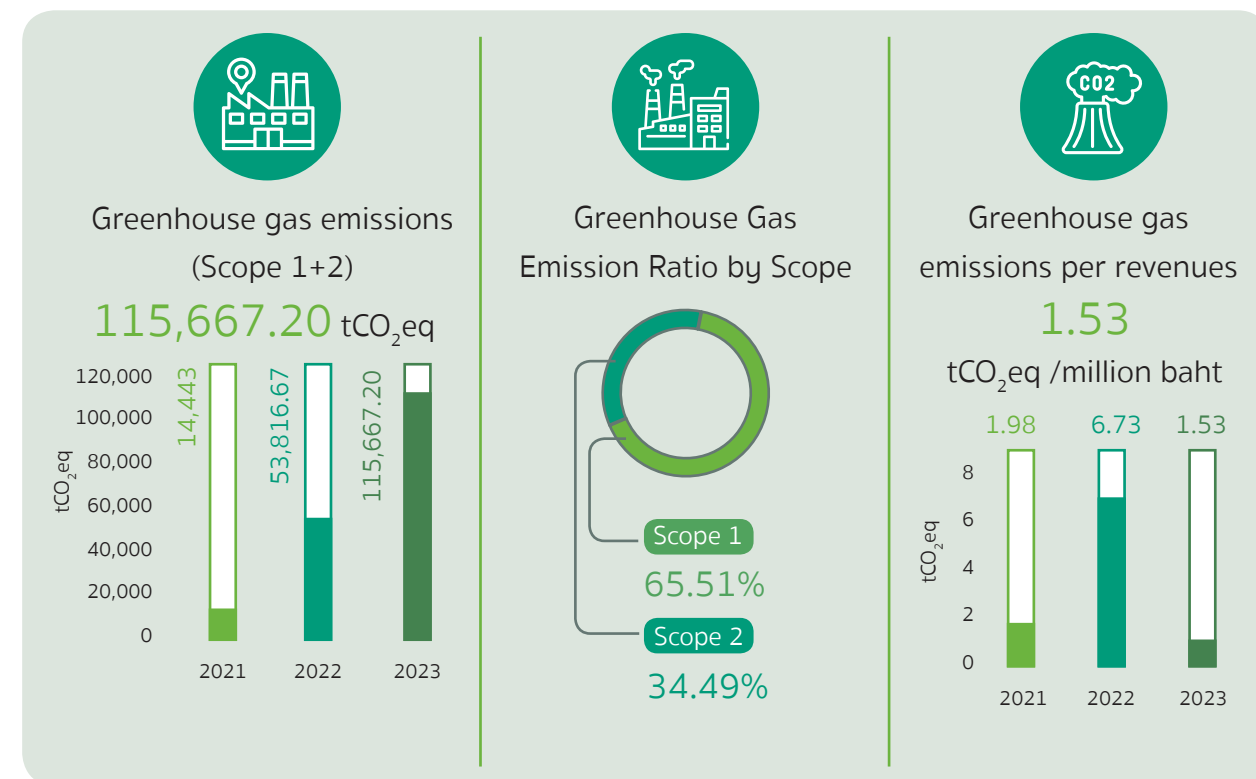
Greenhouse gas emissions
455,128.17 tCO₂eq



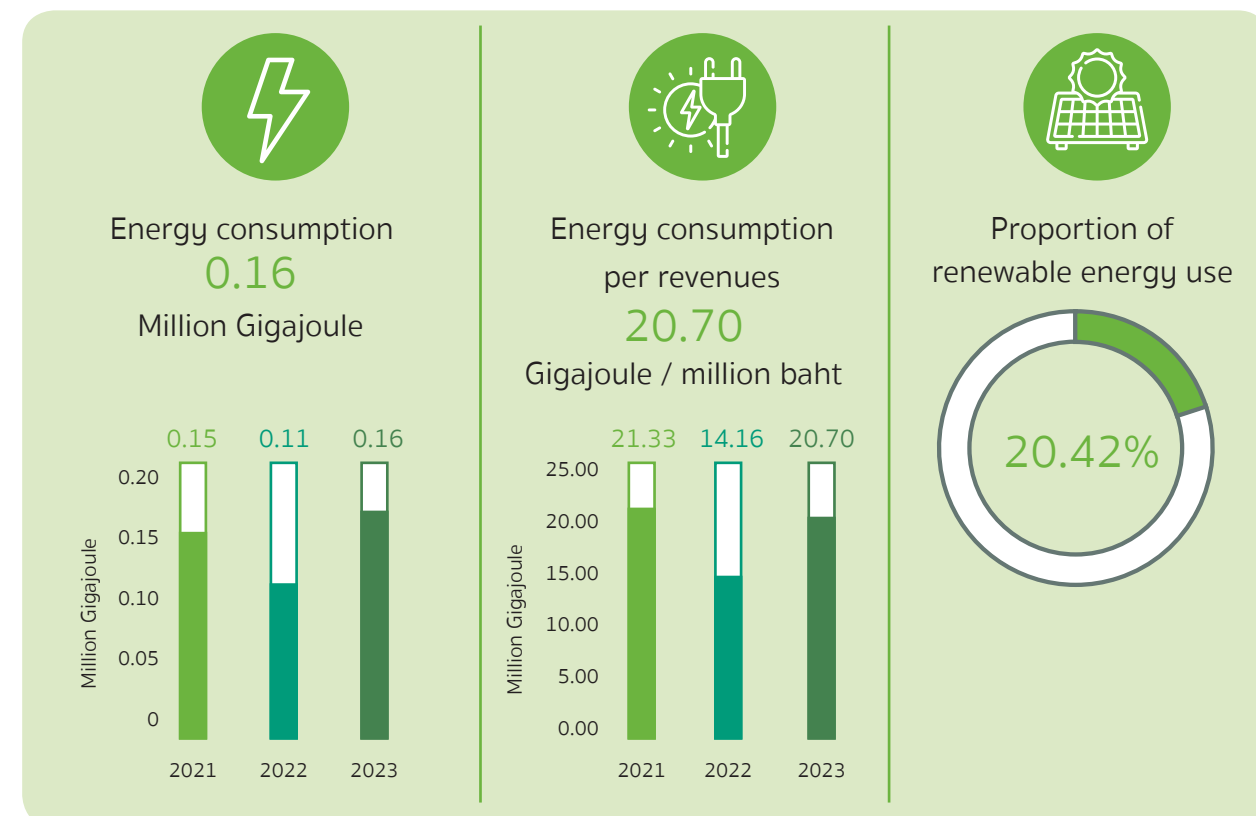
Proportion of renewable energy
20.42%

GREENHOUSE GAS EMISSION

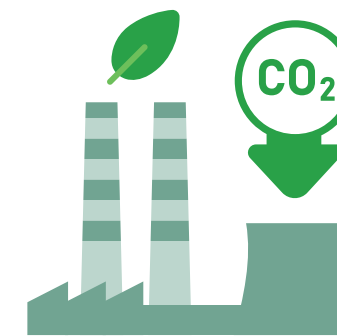
2023 PERFORMANCE



ENERGY MANAGEMENT INFORMATION

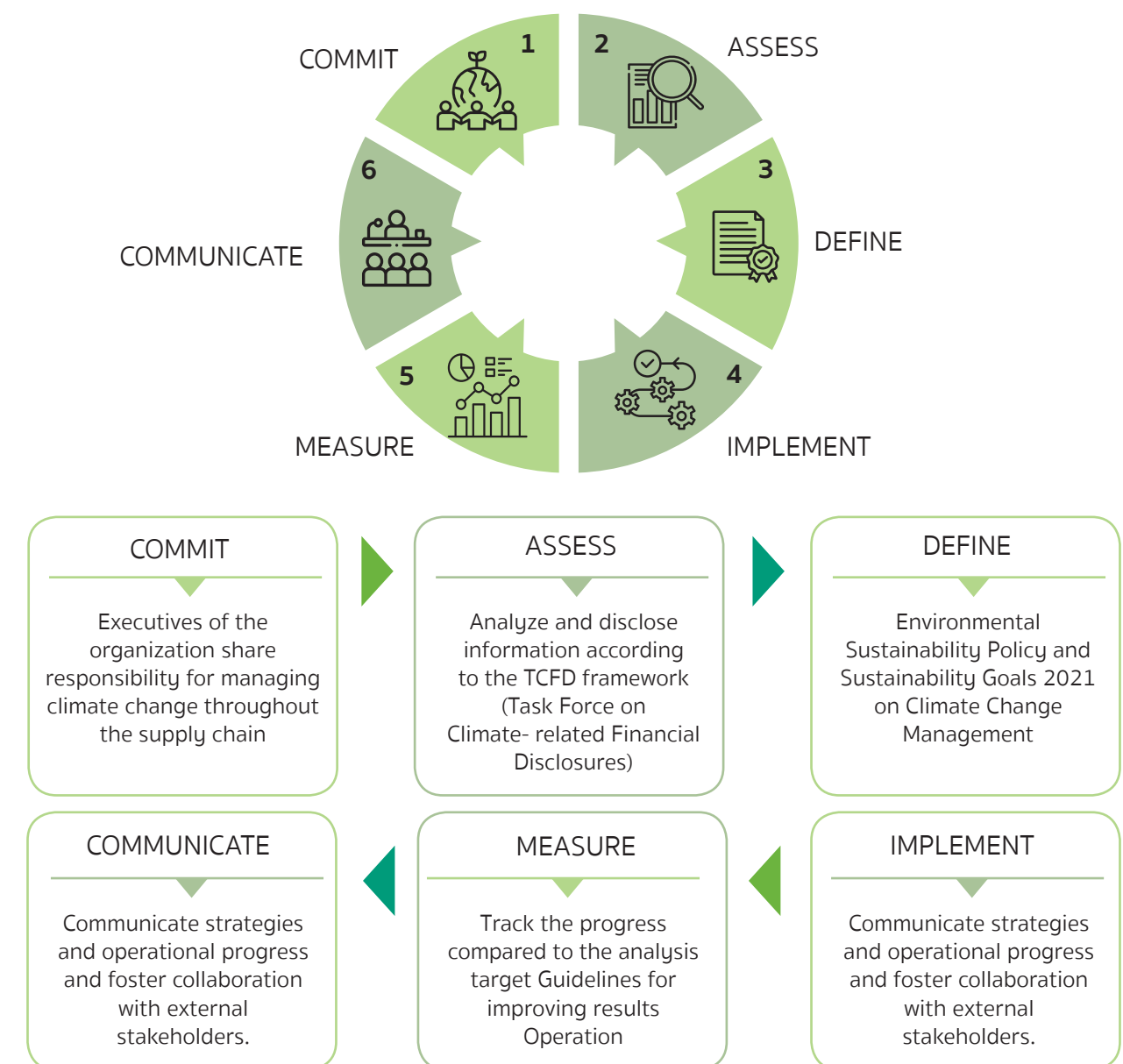


ASSESSMENT OF CLIMATE RISKS AND OPPORTUNITIES BASED ON THE TCFD FRAMEWORK



Crop Integration Business sets goals for climate change management throughout the supply chain, covering energy efficiency, renewable energy use, waste management, reduction of plastic packaging use. It assesses climate risks and opportunities and in the future will conduct a Scenario Analysis based on the guidelines of the Task Force on Climate-Related Financial Disclosure (TCFD), organizing work that covers all aspects such as physical, technological, marketing, policy and regulatory risks, and corporate reputation.

CLIMATE CHANGE MANAGEMENT OPERATIONS.



GHG REDUCTION TARGETS

Business	Emission volume (equivalent to tons of carbon dioxide)	Emission volume (5% increase every year)	Emission volume (Kg.CO ² equivalent) (Captured at 25% of total discharge volume)	Tree planting goals (trees) (Self Assessment) (1 tree can store 9.5 kg of carbon)	Tree planting goals (trees) (LESS/T-VER) (1 tree can store 100 kg of carbon)
CPP (Thailand)	4,069.81	6,313.60	1,578,403	166,147 (150,000)	15,784
Seed Fertilizer Promotion	2,586.70	4,012.80	1,003,205	105,600 (100,000)	10,032
CPP (Vietnam)	235.38	555.10	138,753	14,606 (20,000)	1,387
CPP (Myanmar)	235.38	555.1	138,753	138,753	1,387
CPP (India)	3,465.61	5,376.20	1,344,075	141,481 (150,000)	13,440
CPP (Total)	10,357.50	16,067.80	4,016,970	422,839 (420,000)	40,169
CPA / CPS	7,659.05	11,881.71	2,970,427	312,677 (310,000)	29,704



CASE STUDY TRAINING WORKSHOP ON CARBON CREDIT PROJECT DEVELOPMENT (T-VER)

Sustainability Management, Governance and Compliance Office and the Faculty of Forestry, Kasetsart University organized a training workshop on the development of carbon credit projects (T-VER) in the forestry sector for executives and employees from various agencies from the integrated plant business at the Farm Saeng Phan meeting room, Wang Muang Subdistrict, Saraburi Province.

In this training, trainees will learn both theory and practice by going to the field to practice, such as setting up sample plots, studying tree species, measuring trees, and recording data, including analyzing and processing data from the field, summarizing results, and writing projects to present to the Greenhouse Gas Management Organization or TGO.

After the training, the Faculty of Forestry, Kasetsart University, presented certificates of honor to the trainees to apply their knowledge in their areas of responsibility and drive the goals of Crop Integration, Rice, Transportation and Services Business in accordance with the policy of Charoen Pokphand Group, which aims to become a carbon neutral organization by 2030 and the Net Zero greenhouse gas emission policy by 2050.



CASE STUDY MYANMAR BUSINESS AIMS TO CARBON NEUTRAL ORGANIZATION UNDER THE CONCEPT OF “ZERO BURN ZERO WASTE”



Executives, staff, and member farmers, together with local leaders and representatives of the Department of Agriculture, totaling 300 people, held an event at FarmPro, Myawaddy branch, and broadcasted live to the Taunggyi and Mandalay branches to jointly declare their intention to become a Carbon Neutral Organization under the concept of zero burn zero waste in the year 2030 to reduce the impact of natural disasters and create a sustainable agricultural society in accordance with the policy of the Charoen Pokphand Group.



Crop Integration, Rice, Transportation and Service Business, Charoen Pokphand Group operates its business based on the principle of sustainable development to improve the quality of life and well-being of its farmer members, while also emphasizing the importance of caring for the environment in every country in which it operates.

The Myanmar business has operated the FarmPro business, which provides integrated agricultural services to its farmer members, to improve their careers and improve their well-being. We intend for our employees and farmer members to have a common goal in conducting business together and taking care of the environment, because everyone is an important part of creating benefits together with preserving the environment for the world. Therefore, we would like to announce our goal of becoming carbon neutral and releasing zero waste by 2030.

CIRCULAR ECONOMY

GRI 103-1, 103-2, 103-3, 306-1, 306-2,
306-3, 306-4, 306-5

OPPORTUNITIES AND CHALLENGES

Crop Integration Business committed to managing resources carefully so that nothing is discarded. Products and materials are kept for reuse, remanufactured and recycled to maximize resource usage and create added value for waste. Waste is not managed by landfill and new sustainable product design approaches are developed, which is a goal for all companies in the business group to pursue.

1. Reduce the amount of food waste to zero. (Zero Food Waste)
2. No general waste disposal by landfill. (Zero Waste to Landfill)
3. All used plastic packaging can be recycled, reusable, reusable or biodegradable.



Goal 2030

Zero food waste and waste going to landfill. All plastic packaging used can be recycled, reused or biodegradable

SUPPORTING THE SDGs



SDG 11

Sustainable Cities and Communities.

11.6

Reduce the adverse per capita environmental impact of cities.



SDG 12

Responsible Consumption and Production.

12.2

Achieve the sustainable management and efficient use of natural Resources.

12.3

Halve per capita global food waste.

12.5

Substantially reduce waste generation.

KEY PERFORMANCE IN 2023



Announcement of the circular economy policy food waste reduction policy and food waste sustainable packaging policy and waste management policy.



Modify waste data reporting according to GRI 306: WASTE (2020).

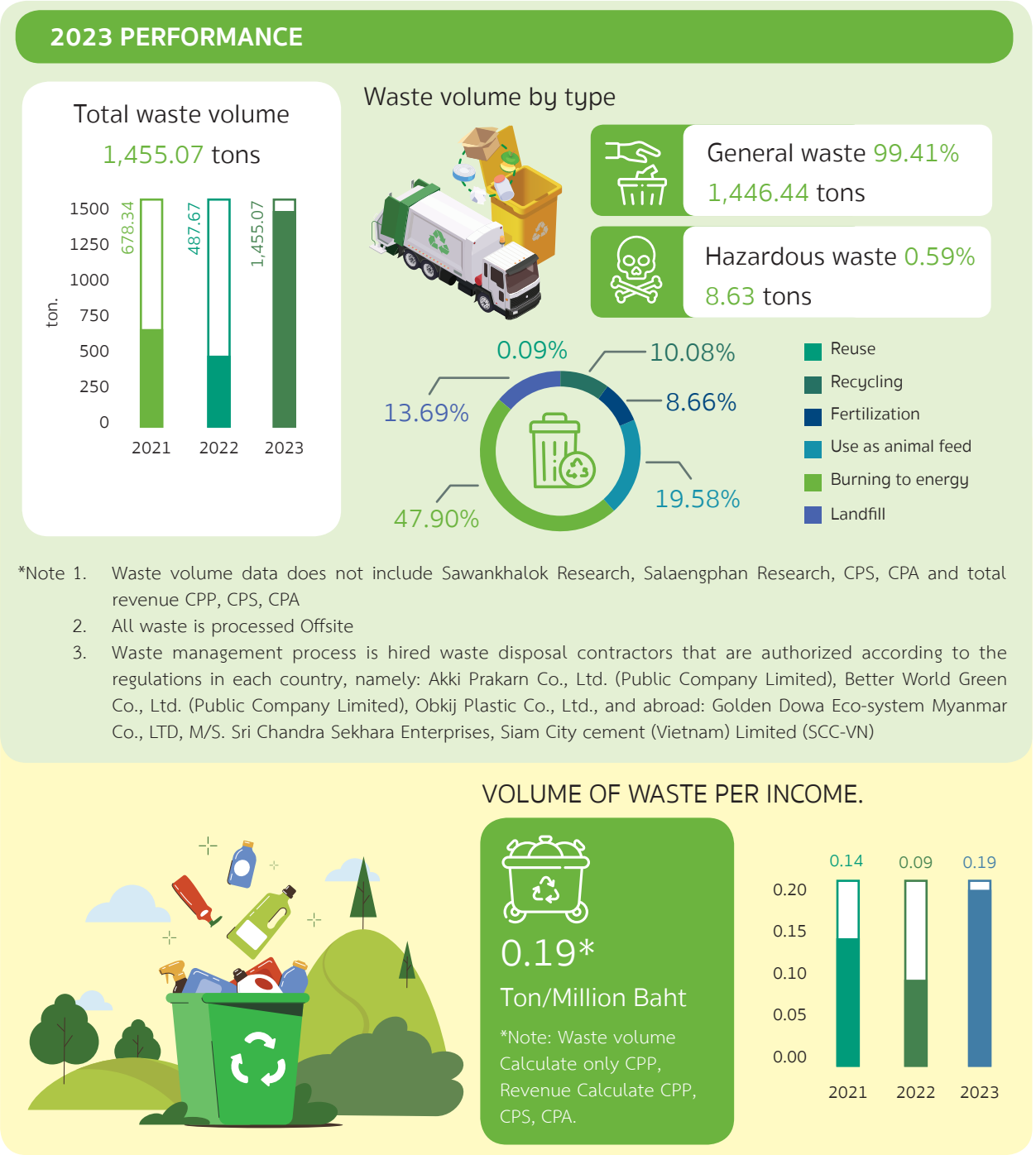


Create a baseline on the loss in the production supply chain. (Food Loss)

WASTE MANAGEMENT


MANAGEMENT APPROACH

Crop Integration Business committed to managing industrial waste and waste within the factory by using the international standard system ISO 14001:2015 to manage waste within the organization systematically and correctly according to the requirements and laws. It also operates according to the electronic authorization system (management of unused materials) consisting of SK.1, SK.2 and SK.3 continuously, resulting in the organization having no environmental complaints from surrounding communities.



CASE STUDY

WASTE MANAGEMENT IN FACTORIES (CPP)



Charoen Pokphand Produce Co., Ltd. set a policy for waste management throughout the system based on the principles of the circular economy by reducing the amount of waste from the production process and reusing it as much as possible. It also supports the creation of projects and activities to provide knowledge on waste management processes, such as waste separation, reuse, and processing of agricultural raw materials to make employees aware of the value and maximum use of resources.

Projects and activities	Seed Processing Plant Soi 19, 12	Chemical Fertilizer Packing and Mixing Plant	Organic Fertilizer Plant
Project to promote farmers to produce cow feed from stubble (256 tons)	●		
Corn cob fuel production project (1,061 tons)	●		
Car wash water reuse project.		●	
Zero waste project training activities.			●
Campaign for waste separation.			●



Project to promote farmers to produce cattle feed from stubble

CASE STUDY

WASTE MANAGEMENT IN FACTORIES (CPA)



Charoen Pokphand Agriculture Co., Ltd. set a policy for waste management throughout the system based on the principles of the circular economy by reducing the amount of waste from the production process and reusing it as much as possible. It also supports the creation of projects and activities to provide knowledge on waste management processes, such as waste separation, reuse, and processing of agricultural raw materials to make employees aware of the value and maximum use of resources.



BIO Filter system



Organize separate bins



Change the old calendar
It's a Braille book.



PROJECTS AND ACTIVITIES TO PROVIDE KNOWLEDGE ABOUT WASTE MANAGEMENT.

Projects and activities	Rubber factory, Loei	Rice mill, Chainat	Trok Chan Office	Fruit juice steaming plant
BIO Filter System.	●			
Wastewater treatment system.	●			
Organize separate bins.	●	●	●	●
“Change waste into usefulness” project.			●	
Old calendar replacement project It is a Braille book.			●	
Project to deliver hard plastic cups to the disabled.			●	
Project to turn leftovers into lunch money for children			●	



Wastewater treatment
system: Activated Sludge

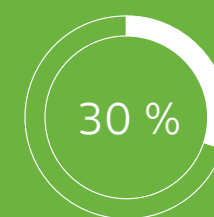


WATER STEWARDSHIP

| GRI 103-1, 103-2, 103-3, 303-1, 303-3

OPPORTUNITIES AND CHALLENGES

Half of the world's people will suffer from water scarcity if the use of water continues to flow. Moreover, the World Economic Council argues that water is one of the most important environmental issues in the 2017. Maintaining the stability of natural resources, especially clean water, is a major concern for the private sector. Crop Integration Business Group give importance to and pay attention to water resource management as a fundamental factor for doing business, as well as supporting the Sustainable Development Goals 6



Goal 2030

Reduce the amount of water used per unit of income by 30% compared to base year 2020

SUPPORTING THE SDGS



SDG 6

Clean Water and Sanitation

- 6.3 Improved water quality through safe treatment and rec
- 6.4 Increased water use efficiency and ensure sustainable supply
- 6.5 Implement integrated water resources management
- 6.B Support the participation of local community in improving water and sanitation management



SDG 12

Responsible Consumption and Production

- 12.2 Achieve the sustainable management and efficient use of natural resources



SDG 14

Life Below Water

- 14.1 Reduced marine pollution

KEY OPERATING RESULTS IN 2023



Reduction of water per revenues of the amount of water used per revenue of the base year 2020
98.25 %



Proportion of water being used
0.002%



Amount of water used per Revenue
255.87 M³ / M baht



Water consumption
1.93 M M³

WATER CONSERVATION

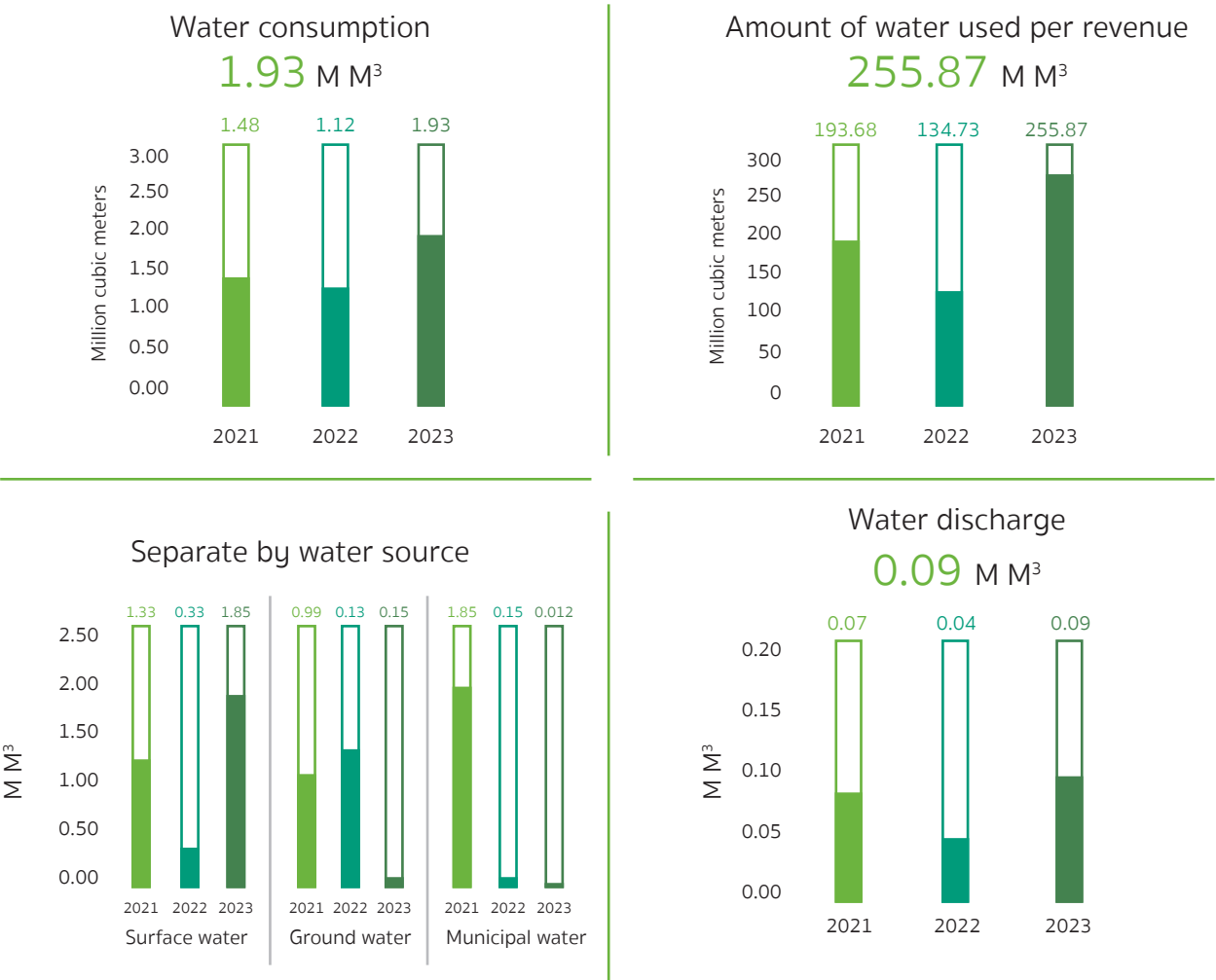


MANAGEMENT APPROACH

Crop Integration Business operates on water stewardship under the UN Global Compact and Water Stewardship policy, and the Water Stewardship Framework. These serve as guidelines, facilitating the business to achieve its strategic goal to assess water scarcity risk.

WATER STEWARDSHIP MANAGEMENT FRAMEWORK

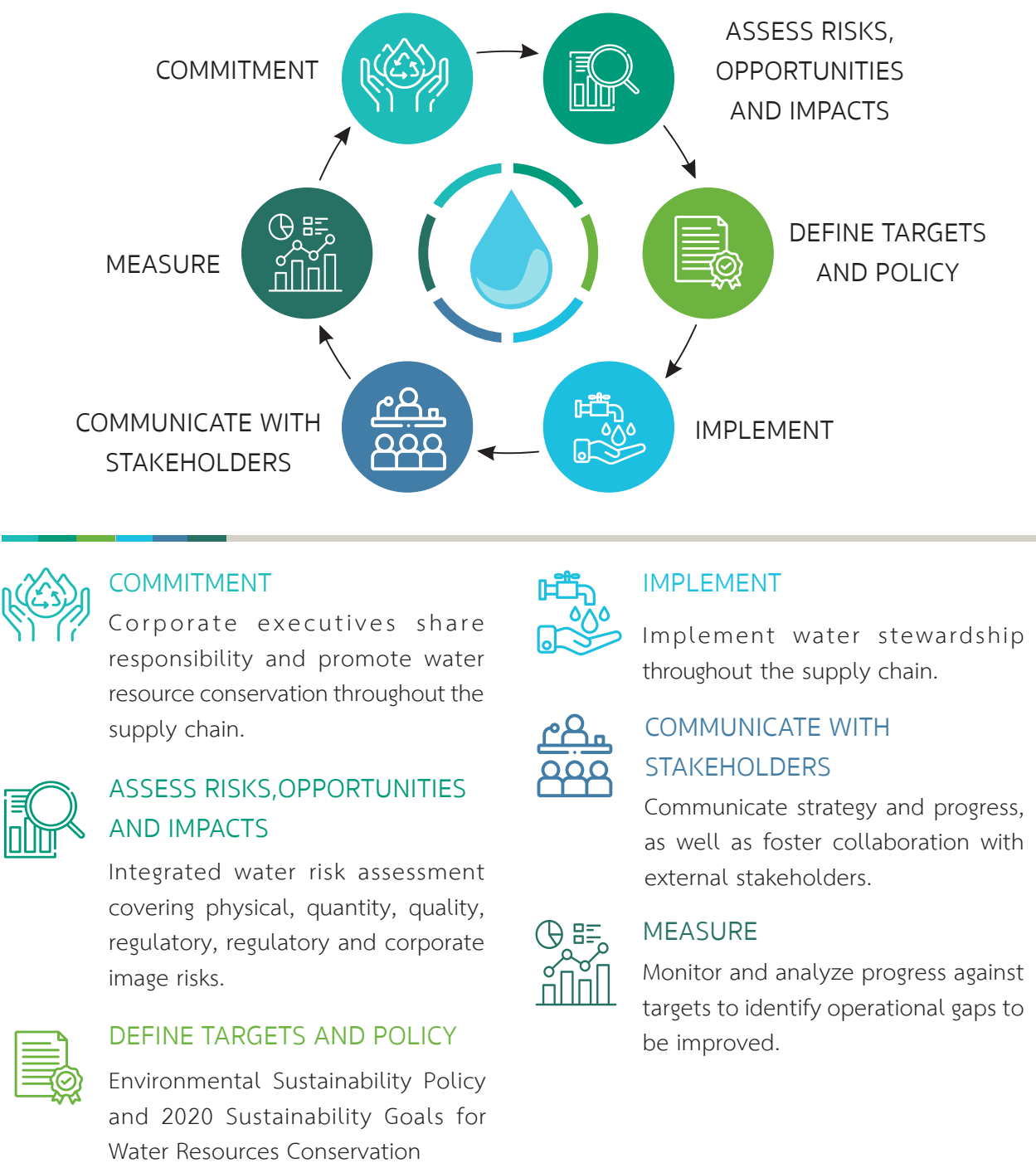
2023 PERFORMANCE



MANAGEMENT APPROACH

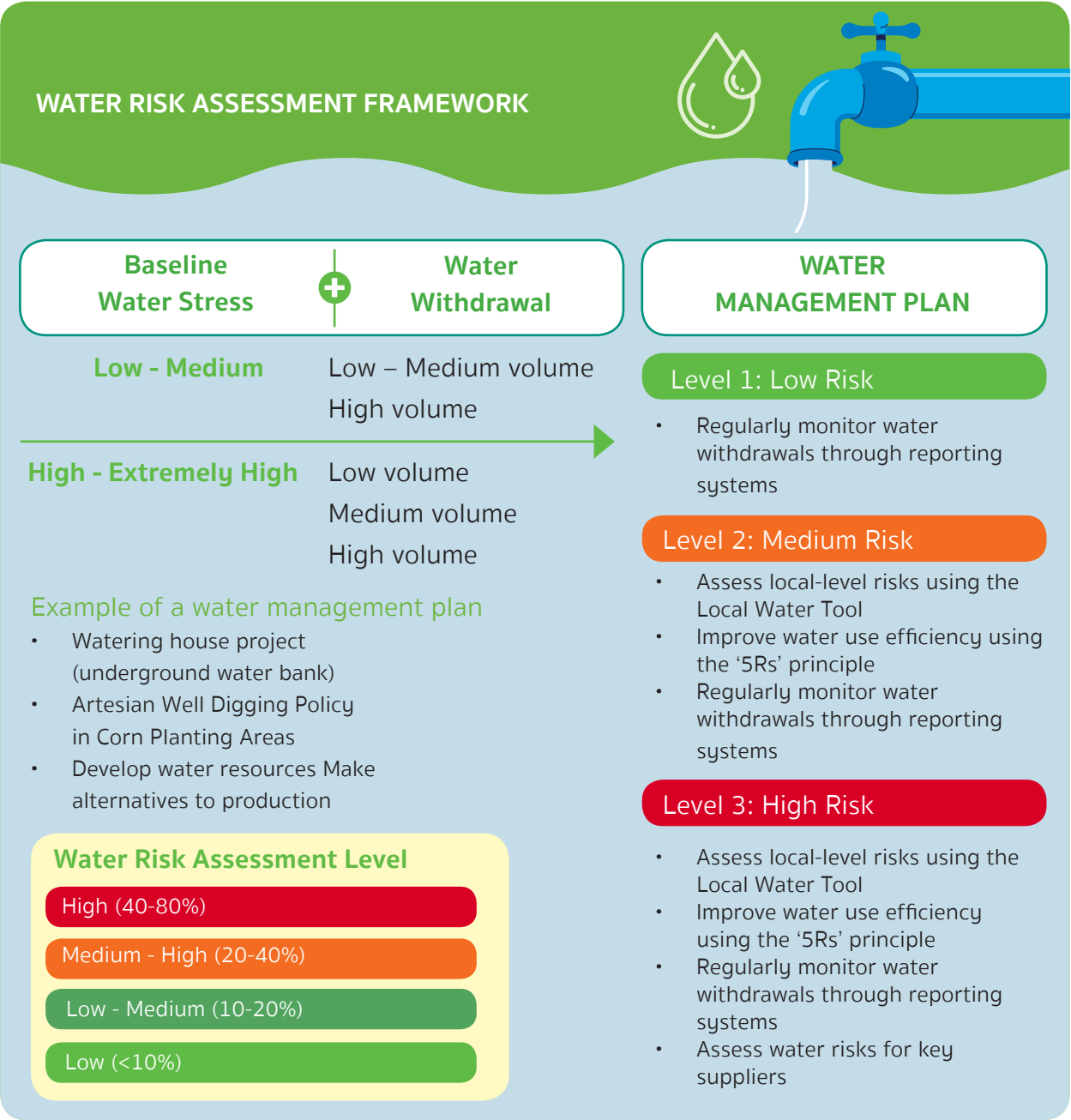
Water is a natural resource that is essential for all life and is also important for business operations. Currently, water scarcity has become an increasingly serious issue around the world. Charoen Pokphand Group is aware of this problem and risk, so it has established guidelines to ensure that business operations can maintain a balance between water usage and the water needs of communities and nature as follows:

WATER STEWARDSHIP MANAGEMENT FRAMEWORK



ENABLING A GOOD WATER MANAGEMENT PLAN THROUGHOUT THE SUPPLY CHAIN.

Crop Integration Business has developed a water resources risk assessment framework that is applied across all of its units and Business Groups. The assessment evaluates risk factors in various dimensions, including the volume of water withdrawal by organization, and baseline water stress levels. Our business has adopted the internationally-recognized Aqueduct Water Risk Atlas tool of the World Resources Institute (WRI) for use as our preferred assessment tool. The results of the assessment are ranked according to three levels of water risk and are then used to develop appropriate management plans.



CASE STUDY

DELIVERING A MOUNTAIN POND-A WATER SOURCE FOR AGRICULTURE IN HIGH AREAS.



Safe Thai Nature Project, in collaboration with Maejo University, has supported the development of water sources and water pipe systems for the Ban Mae Pan-San Kiang community since 2012 to solve the community’s problem of lacking water sources. Previously, they were able to cultivate only once a year, changing to a variety of farming activities, including wood groups, egg-laying chicken groups, pig groups, and a community product processing plant, creating a stable income for the community.

Support the establishment of the “Mae Pan-Sankiang Safe Natural Agriculture Community Enterprise Group” to expand the business. Currently, there are 164 households in total. In 2023, there was a net profit of 19.4 million baht.

In April 2023, a new cold water well was delivered to the community to develop into an eco-tourism destination and jointly develop the Phuang San Khao pond and the water pipe system according to the plan. Currently, there are a total of 52 Phuang ponds, covering an agricultural water use area of 1,450 rai.

CASE STUDY

WATER RESOURCE DEVELOPMENT IN MYANMAR

Myanmar business started the groundwater drilling business in 2019, focusing on agricultural areas of farmer members in Naypyitaw and Mandalay to create underground water sources for farming outside the rainy season and as a reserve water source to solve the problem of intermittent rain during the rainy season, helping to support production factors and purchasing markets, allowing farmers to continue farming throughout the year.

In 2023, a total of 210 groundwater wells were drilled. From 2019-2023, a total of 589 groundwater wells were drilled, covering an agricultural area of 2,945 acres (approximately 7,448 rai).



ECOSYSTEM & BIODIVERSITY PROTECTION

| GRI 102-9, 103-1, 103-2, 103-3, 304-2

OPPORTUNITIES AND CHALLENGES

Crop Integration Business aware of the problems that arise and committed to taking part in reducing impacts and protecting the integrity of biodiversity and ecosystems through the involvement of businesses and industry in Take care and minimize these effects. Our organization continues to assess the risks of global biodiversity by striving to conserve and utilize marine resources responsibly, protect, restore and support the use of terrestrial ecosystems, forests and natural diversity.



Goal 2023
The number of areas that have been undertaken to protect and restore terrestrial ecosystems.

SUPPORTING THE SDGS

- 

SDG 6
Clean Water and Sanitation

6.6 Protect and restore water-related ecosystems
- 

SDG 14
Life Below Water

14.2 Reduced marine pollution

14.4 Sustainable fishing

14.5 Conserve coastal and marine area
- 

SDG 15
Life on Land

15.1 Ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services

15.2 Halt deforestation, restore degraded forests

15.4 Ensure the conservation of mountain ecosystem

15.5 Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity

KEY OPERATING RESULTS IN 2023



Number of ecosystem and biodiversity protection projects
1 Project
(Safe Thai Nature Project)



Environmental investment Through the Safe Nature Project
6 Million baht

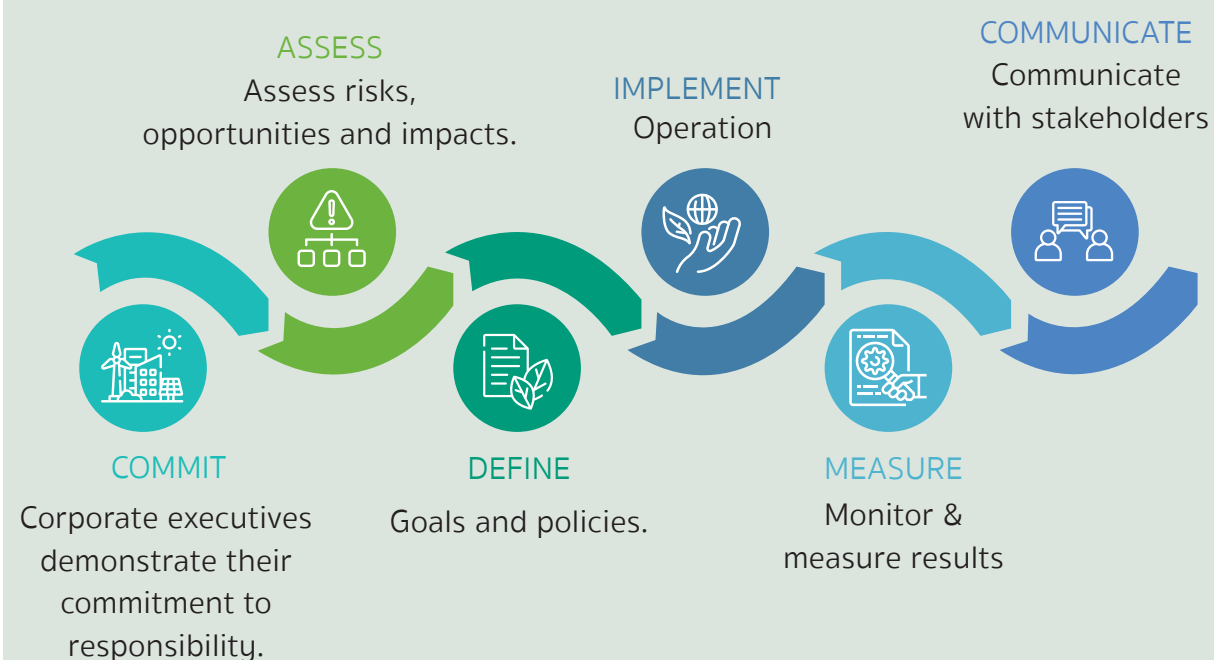
MANAGEMENT APPROACH

Crop Integration Business believes that protection of ecosystems and biodiversity based on the equitable use of resources is the responsibility of all sectors of society, therefore, guidelines in line with the Rio Declaration on Environment and Development and the Convention on Biological Diversity are therefore formulated :

1. Participate responsibly to protect ecosystems and biodiversity in compliance with laws, regulations and international standards and set long-term goals to guide business operations as well as to cooperate with organizations working in conservation.
2. Reduce impacts on ecosystems and biodiversity along the supply chain by developing supply chain management practices. Responsible for preventing deforestation and ensuring guidelines are implemented effectively.
3. Ecosystem and biodiversity risk assessments are carried out to inform decision-making and effective risk management.
4. To promote awareness and understanding of ecosystem protection and biodiversity to employees, partners and key stakeholders by organizing training knowledge sharing or organizing campaign activities.
5. Disseminate information and performance on the protection of ecosystems and biodiversity through Sustainability Reports. Charoen Pokphand Group to report the progress status of current operations against the targets identified to stakeholders.
6. Develop cooperation with government agencies, non-profit organizations (NGOs), educational institutions, community and other agencies to jointly solve ecosystem and biodiversity



ECOSYSTEM AND BIODIVERSITY PROTECTION FRAMEWORK



CASE STUDY SUPPORT CAREER CHANGE

By giving 7 tons of CP Mor Din organic fertilizer and knowledge on the use of organic fertilizer to farmers in 3 villages: Ban Khao Khieo, Ban Phai Ngam and Ban Huai Ruam, who live on the edge of Huai Kha Khaeng forest, to use to improve the soil in herbal plantation plots and mixed farming plots.



Safe Thai Nature Project, in collaboration with the Seub Nakhasathien Foundation, supports communities affected by wildlife leaving the Huai Kha Khaeng Forest Conservation Area by changing to growing non-animal feed crops so that the community can still have an income even if the wildlife leaves, and helps reduce the risk and conflict of the community with wildlife. The project began in 2021 and currently has 38 farmers interested in and participating in the project, covering an area of 74 plots.

CASE STUDY

PROVIDING FOOD SUPPLIES TO SUPPORT FOREST FIRE SUPPRESSION MISSIONS



Safe Thai Nature Project collaboration with CP Retailink Co., Ltd., provided food supplies to Sri Lanna National Park, Chiang Mai in its mission to solve forest fire problems, and provided morale to officers from 10 ranger units, the central patrol unit, and the Phrao District Headman and Village Headman Club.



Supporting the mission to monitor and solve the forest fire haze problem in Phrao District, which is an integrated spatial operation between Sri Lanna National Park and Phrao District Network, starting from going to the area to understand the community, practicing and planning to extinguish forest fires, and cooperation in monitoring and following the situation continuously.



CASE STUDY

RAK PA SAK RIVER BASIN FOR 3rd YEAR

Crop Integration, Rice, Transportation and Service Business collaboration with government agencies, local leaders and local communities, has implemented the “**Rak the Pa Sak River Basin**” project for the 3rd year, releasing local fish species into the Pa Sak River, creating community participation, and developing the water ecosystem for the Pa Sak River at Wat Sammakam, Mae La Subdistrict, Nakhon Luang District, Phra Nakhon Si Ayutthaya Province.

Executives and volunteer employees from various units of the business group, which operates along the Pa Sak River, jointly released 60,000 carp and tilapia, and set up a booth serving omelet rice to over 150 attendees.



CASE STUDY

SUPPORT PATROLLING MISSION-PROTECT FORESTS.



Safe Nature Project and CP Retailink Co., Ltd. provided food supplies to Huai Kha Khaeng Wildlife Sanctuary in Uthai Thani Province to support the patrol mission, monitor threats and protect the Huai Kha Khaeng Forest, an important large forest of the country.



In addition, they have supported the improvement of food and water sources in the Huai Kha Khaeng Forest since 2021. Currently, 10 artificial salt licks, 20 rai of grassland and 400 water sources have been improved. It is expected that this will help reduce the number of wild animals that come out to find food outside the conservation area.



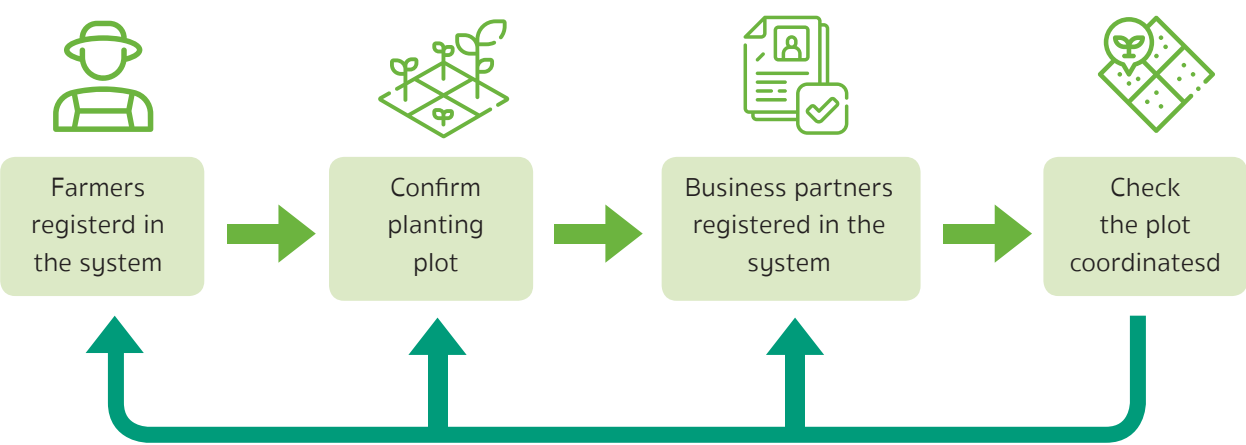
CASE STUDY
TRACEABILITY IN MYANMAR.



CPP Myanmar has established a traceability system in its Myanmar business to assure its trading partners and consumers that the company can monitor every step of the way, from pre-planting, during planting, and post-planting, all the way to the final consumer.

In 2023, we started collecting agricultural plot coordinates in the Southern Shan region. Our local partners collected GPS coordinates of the farmland and then checked them against forest area data to confirm that they were the correct agricultural areas and compared them with daily hotspot data from satellites. If hotspots are detected in agricultural areas, the company will take measures to meet farmers to provide knowledge and promote the cessation of burning to reduce the problem of fine dust (PM 2.5) and carbon emissions from agricultural areas.

Importantly, the products from the area can be confirmed to be environmentally friendly, so these products are introduced into the production process in various industries, creating confidence among consumers in the company’s products.



CASE STUDY
CPP MYANMAR committed to sustainable agricultural business in Myanmar.



CPP Myanmar is committed to sustainable agricultural business in Myanmar by promoting environmentally friendly agriculture, providing appropriate economic and social returns, to improve the livelihood and quality of life of farmers who are members of the FarmPro integrated agricultural business (B2C).

Farmers in the project will receive support in improving their production processes according to the Farm Sustainability Assessment (FSA) standards, an international standard from the SAI platform that promotes resource-efficient agriculture using environmentally friendly technologies, which is considered a long-term sustainable management and development of upstream production throughout the supply chain.

The company plans to expand its operations to members in various areas of Myanmar to enhance environmentally friendly production standards, reduce greenhouse gas emissions, and reduce agricultural waste to reduce the direct and indirect impacts of agricultural processes, as a foundation for driving towards a carbon neutral organization by 2030.



RESPONSIBLE SUPPLY CHAIN MANAGEMENT

| GRI 102-9, 103-1, 103-2, 103-3, 308-1, 308-2, 414-1, 414-2

OPPORTUNITIES AND CHALLENGES

Crop Integration Business realizes that the strength of the supply chain depends on the least strong link. The company is therefore a part in strengthening business partners throughout the supply chain to achieve excellent practices in all dimensions, including the economy, society, and the environment. This is considered a challenge to drive positive change and is committed to developing the potential of partners, thinking together, and creating together to move towards sustainability. In addition, the company also aims to develop sustainably in every country in which it operates or invests, in accordance with the CP Group's 3-Benefit Philosophy.



Goal 2030

Business groups with high-risk raw material traceability processes Including sustainability audits with high-risk trading partners.

KEY OPERATING RESULTS IN 2023



Determine Tier 1 are audited for sustainability.
73.91%

SUPPORTING THE SDGS



SDG 4

Quality Education

4.4

Increase the number of youth and adults who have relevant skills, and promote Entrepreneurship



SDG 8

Decent Work and Economic Growth

8.3

Promote development-oriented policies that support decent job creation, entrepreneurship



SDG 9

Industry, Innovation, and Infrastructure

9.4

Upgrade infrastructure to make them sustainable, with increased resource-use efficiency and greater adoption of technologies

RESPONSIBLE SUPPLY CHAIN MANAGEMENT

MANAGEMENT APPROACH

Crop Integration Business focuses on managing supply chain by defining management procedures as a guideline for all companies in the business group to provide supply chain management go in the same direction in supply chain management, the business group starts from communicating manuals. Code of Conduct for Partners to all business partners for business partners to be aware of the policies and Expectations of the business group and can work together continuously.



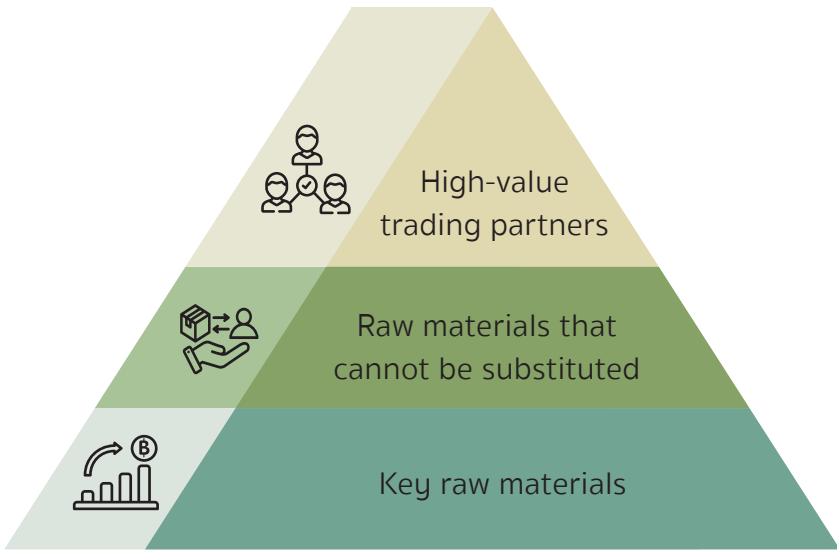
RAISING AWARENESS AND RISKS

Crop Integration Business has received a policy from the Charoen Pokphand Group and is committed to raising awareness of responsible supply chain management. With major business partners first (Critical Suppliers). The principles used to classify the main trading partners are as follows:

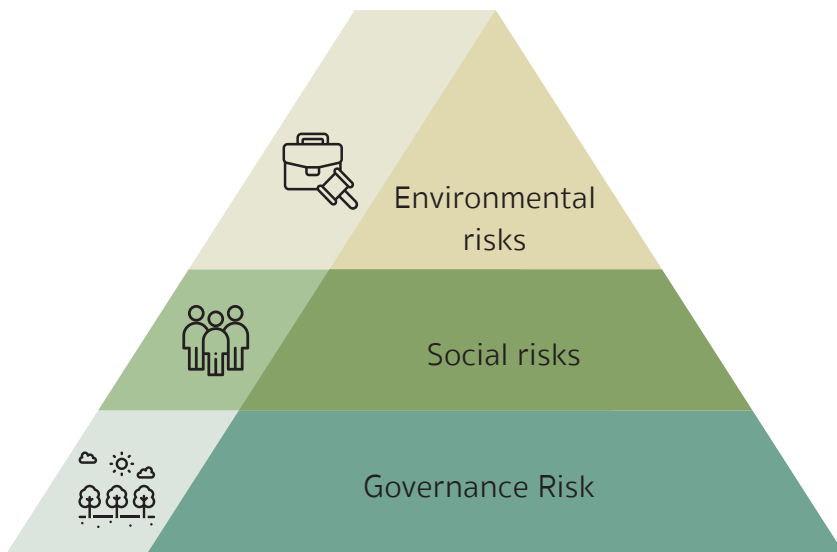


In addition, it was identified to find business partners who are at risk by assessing sustainability risks throughout the supply chain through two-dimensional assessment criteria, namely the severity of the impact. and the likelihood of risk, which the risk issue used in the assessment is taken from the channel.They are as follows: 1.News 2.Past Performance 3.Industry-related risk factors and 4.Trends and potential risks in the future.

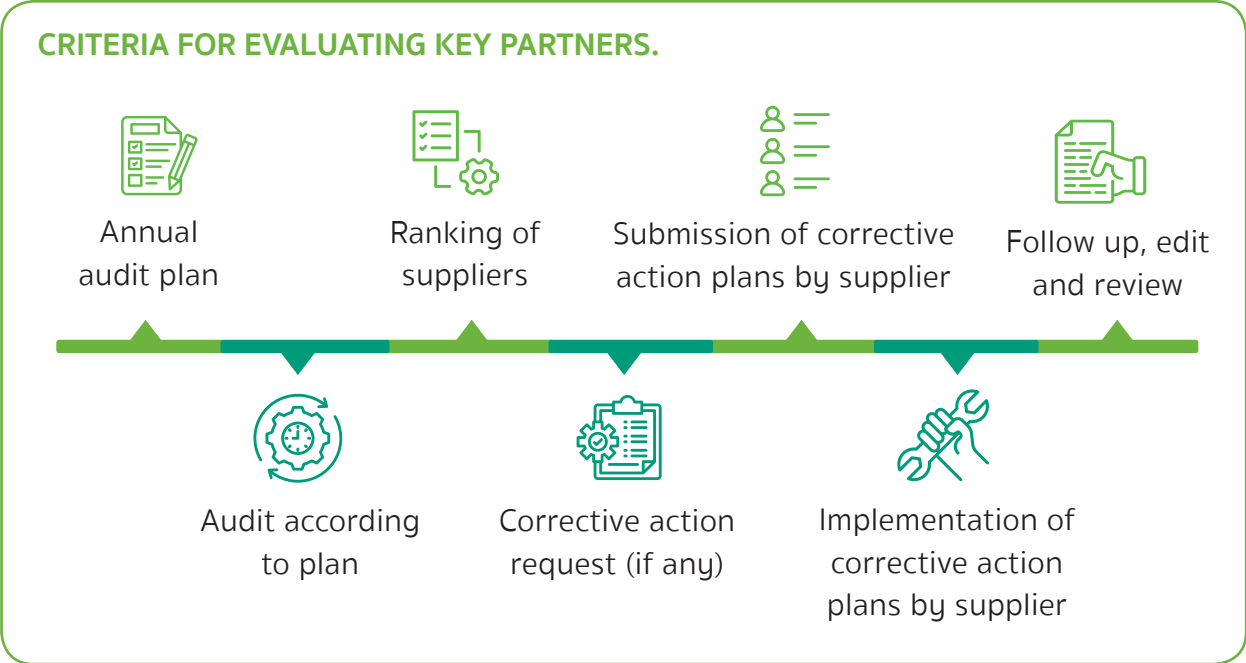
DETERMINE MAIN TRADING PARTNERS.



IDENTIFICATION OF RISK TRADING PARTNERS.



CRETERIA FOR EVALUATING IMPORTANT SUPPLIERS.



CASE STUDY

KEY SUPPLIER

ASSESSMENT PERFORMANCE

Crop Integration Business set up a compliance audit committee to show commitment to conducting business as standards and operational guidelines. Ready to create a register of main business partners (Critical 1Tier Supplier) as well as set criteria for evaluating business partners and operating standards.

After grading assessment scores Both the preparation of a self-assessment (Self assessment) and the assessment of the auditors in order to follow and supervise in accordance with the established rules.



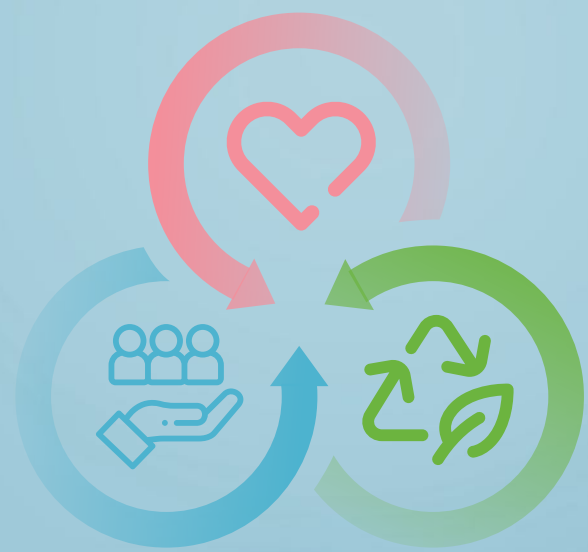
Critical Supplier 1 audit 2023 (case)

AUDIT PLAN	AUDIT ACTUAL	KPI > 80 %	Online
20	13	65	100%
			(1 Aug – 15 Dec 2023)

Ethical assessment for business partners at the business premises by the assessment team.



APPENDIX



COMPANIES WITHIN THE SUSTAINABILITY REPORTING SCOPE

4 COUNTRIES

THAILAND

MYANMAR

VIETNAM

INDIA



Thailand

Charoen Pokphand Produce Co., Ltd.
Charoen Pokphand Seed Co., Ltd.
Charoen Pokphand Agriculture Co., Ltd.

INDIA



Overseas Business

MYANMAR



CPP Fertilizer Co.,Ltd
CPP Myat Min Agro Co.,Ltd

VIETNAM



C.P.Seeds Vietnam Co.,Ltd.
C.P.Seeds (India) Pvt.,Ltd

8
Research and Development Stations.

12
Laboratories.

8

Seed Processing Plants.

5

Fertilizer Plants.

1

Rubber Plant.

12

Farms and orchards.



SUSTAINABILITY PERFORMANCE 2021-2023

Charoen Pokphand Produce Co.,Ltd. and companies in Crop Integration Business

GRI	Performance	Unit	2021		2022		2023	
ECONOMIC PERFORMANCE								
G4-EC1	Revenues	Million Baht	7,290.70		7,290.70		7,540.74	
	Employee Benefits	Million Baht	166.84		166.84		26.51	
	Employee Benefits	Million Baht	175.40		175.40		109.86	
	Investing in research and development	Million Baht	72.10		72.10		176.94	
	Community and Social Contrubution	Million Baht	1.51		1.51		2.47	
SOCIAL PERFORMANCE								
Employees								
102-8	Total Employees	persons	4,892		2,183		2,283	
		Male / Female	3,668	1,224	1,499	684	1,575	708
102-8	Separate by contract type	persons						
	Employees		3,858		2,183		2,198	
		Male / Female	2,784	1,074	1,499	684	1,508	690
	Worker / Contractors		1,034		50		232	
		Male / Female	884	150	39	11	215	17
405-1	Separate by gender	%						
	Male		72.16 %		68.67%		70.91%	
	Female		27.84 %		31.33%		29.09%	
401-1	New Hires							
	Number of new hires	persons	563		353		462	
		Male /Female	-	-	244	109	216	246
	Ratio of new hires	%	11.51%		16.17 %		20.23%	
		Male / Female	-	-	16.28%	15.94%	9.46%	10.77%

GRI	Performance	Unit	2021		2022		2023	
401-1	Turn Over							
	Number of turn over	persons	345		317		481	
		Male / Female	83	191	126	257	278	203
	Ratio of Turn Over	%	7.05 %		14.52 %		21.06 %	
		Male / Female	7.14%	6.78%	12.74%	18.42%	12.17%	8.89%
404-1	Average of training hours for all employees	Hours per	5.24		18.50		19.15	
404-1	Number of Employees completed sustainability Training	persons	4,892		2,183		2,283	
OCCUPATIONAL HEALTH AND SAFETY								
DJSI 3.7.2	Injury Rate (IR)							
	Employees	Persons per 1,000,000 working hours	2.17		1.47		2.34	
		Male / Female	1.90	2.54	1.08	2.04	2.96	1.27
DJSI 3.7.3	Worker / Contractors	Persons per 1,000,000 working hours	1.44		6.49		1.73	
		Male / Female	2.06	0.00	5.03	9.15	2.52	0.00
	Lost-Time Injury Frequency Rate (LTIFR)							
	Employees	persons	4		7		5	
		Male / Female	2	2	3	4	4	1
	Worker / Contractors	persons	1		8		1	
		Male / Female	1	0	4	4	1	0
	403-9(a)	Occupational Fatality Rate						
Employees		Persons per 1,000,000 working hours	0.00		0.00		0.00	
		Male / Female	0.00	0.00	0.00	0.00	0.00	0.00



GRI	Performance	Unit	2021		2022		2023	
403-9(b)	Worker / Contractors	Persons per 1,000,000 working hours	0.00		0.00		0.00	
		Male / Female	0.00	0.00	0.00	0.00	0.00	0.00
403-9(a)	Number of facilities as a work-related injury							
	Employees	persons	0		0		0	
		Male / Female	0	0	0	0	0	0
403-9(b)	Worker / Contractors	persons	0		0		0	
		Male / Female	0	0	0	0	0	0
403-9(a)	Number of High-consequence work-related injury (excluding facilities)							
	Employees	Persons per 1,000,000 working hours	0.00		0.00		0.00	
		Male / Female	0.00	0.00	0.00	0.00	0.00	0.00
403-9(b)	Worker / Contractors	Persons per 1,000,000 working hours	0.00		0.00		0.00	
		Male / Female	0.00	0.00	0.00	0.00	0.00	0.00
403-9(a)	Rate of High-consequence work-related injury (excluding facilities)							
	Employees	persons	0		0		0	
		Male / Female	0	0	0	0	0	0
403-9(b)	Worker / Contractors	persons	0		0		0	
		Male / Female	0	0	0	0	0	0
403-9(a)	Number of Recordable work-related injury							
	Employees	Persons per 1,000,000 working hours	2.71		2.11		3.75	
		Male / Female	2.84	2.54	2.15	2.04	5.19	1.27
403-9(b)	Worker / Contractors	Persons per 1,000,000 working hours	5.78		7.30		1.73	
		Male / Female	6.18	4.82	6.29	9.15	2.52	0.00
403-9(a)	Number of Recordable work-related injury							
	Employees	persons	0		10		8	
		Male / Female	3	2	6	4	7	1

GRI	Performance	Unit	2021		2022		2023	
403-9(b)	Worker / Contractors	persons	4		9		1	
		Male / Female	3	1	5	4	1	0
403-9(a)	Number of Recordable work-related injury							
	Employees	persons	0		0		0	
		Male / Female	0	0	0	0	0	0
403-9(b)	Worker / Contractors	persons	0		0		0	
		Male / Female	0	0	0	0	0	0
403-9(a)	Number of Fatalities as a result of Work-related ill health							
	Employees	persons	0		0		0	
		Male / Female	0	0	0	0	0	0
403-9(b)	Worker / Contractors	persons	0		0		0	
		Male / Female	0	0	0	0	0	0

Note :

- *The data was collected from 4 countries as follows: Thailand, Vietnam, India and Myanmar
- The severity level of an injury is calculated from the number of absent work days. Injury Rate (IR) = [Total number of injuries at all levels (during the reporting period) X 1,000,000 hours worked] / Total number of hours worked (during the reporting period).
- Lost Time Injury Rate (LTIR) = [Total number of lost time injuries (during the reporting period) X 1,000,000 hours worked] / Total number of hours worked (during the reporting period).
- Lost Day Rate (LDR) = [Total number of lost days (during the reporting period) X 1,000,000 hours worked] / Total number of hours worked (during the reporting period)



SUSTAINABILITY PERFORMANCE 2021-2023

Charoen Pokphand Produce Co.,Ltd. and companies in Crop Integration Business.

GRI	Performance	Unit	2021	2022	2023
ENVIRONMENT PERFORMANCE					
ENERGY					
302-1(e)	Total Energy Consumption	Gigajoules	155,519.25	113,263.91	156,057.60
302-1(a)	Fuel Consumption	Gigajoules	65,937.09	13,320.53	65,853.51
302-1(b)	Renewable energy	Gigajoules	42,901.23	78,316.34	31,865.97
302-1(c)	Electricity Consumption	Gigajoules	46,680.92	21,627.05	58,338.12
302-3(a)	Energy intensity value per unit of income	Gigajoules / Million baht	21.33	-	20.70
GREEN HOUSE GAS (GHG) EMISSION					
305-2(a)	Total Green House gas (GHG) emission	tCO ₂ eq	14,443.21	53,816.67	455,128.17
305-1(a)	Green House gas (GHG) emission (Scope 1)	tCO ₂ eq	5,794.46	35,253.34	4,468.91
305-2(a)	Green House gas (GHG) emission (Scope 2)	tCO ₂ eq	8,648.75	18,563.32	7,097.80
302-4	Green House gas (GHG) emission (Scope 3)	tCO ₂ eq			443,561.45
305-4(a)	Greenhouse gas cost per income	tCO ₂ eq / M baht	1.98		1.53
WATER					
303-5	Water consumption	Million m ³	1.41	1.08	1.93
303-3(a)	Total volume of water withdrawn	Million m ³	1.48	1.12	2.02
303-3(c)	Freshwater (≤1,000 mg/L Total Dissolved Solids)	Million m ³	1.48	1.12	2.02
	Surface water	Million m ³	1.33	0.99	1.85
	Ground water	Million m ³	0.13	0.13	0.15

GRI	Performance	Unit	2021	2022	2023
	Municipal water supplies	Million m ³	0.02	0.003	0.012
	Other water (>1,000 mg/L Total Dissolved Solids);	Million m ³	0.0012	-	-
	Surface water	Million m ³	-	-	-
	Ground water	Million m ³	-	-	-
	Municipal water supplies	Million m ³	0.0012	-	-
303-4 (b)	Total of water being used	Million m ³	0.02	-	0.002
303-4 (a)	Total of water discharge	Million m ³	0.07	0.04	0.09
	GHG emissions intensity ratio	Million m ³	193.68	-	255.87
WASTE					
306-3 (a)	Total weight of waste generated	Ton	678.34	487.67	1,455.07
	Total weight of hazardous waste generated	Ton	3.15	6.40	8.63
	Total weight of non-hazardous waste generated	Ton	678.34	481.28	1,446.44
306-4 (a)	Total weight of waste diverted from disposal	Ton	572.94	438.95	558.81
306-4 (b)	Total weight of hazardous waste diverted from disposal	Ton	0.01	0.37	1.30
	Preparation for reuse	Ton	0.01	-	1.30
	Recycling	Ton	-	0.37	
306-4 (c)	Total weight of non-hazardous waste diverted from disposal	Ton	572.93	438.57	557.51
	Preparation for reuse	Ton	9.91	0.34	-
	Recycling	Ton	189.58	25.17	146.69
	Composting; (Not Included food waste)	Ton	171.95	180.70	125.94
	Feed Material	Ton	201.48	232.35	284.88
	Constuction Material	Ton	-	-	-



GRI	Performance	Unit	2021	2022	2023
306-5 (a)	Total weight of waste directed to disposal	Ton	105.4	48.73	896.26
306-5 (b)	Total weight of hazardous waste directed to disposal	Ton	3.14	6.02	7.33
	Incineration (with energy recovery).	Ton	-	5.33	3.30
	Incineration (without energy recovery).	Ton	2.35	-	3.28
	Landfl ling.	Ton	0.67	0.70	0.74
	Other disposal operations	Ton	0.12	-	-
306-5 (c)	Total weight of non-hazardous waste directed to disposal	Ton	102.25	42.71	888.93
	Incineration (with energy recovery).	Ton	-	0.04	-
	Incineration (without energy recovery).	Ton	0.10	-	690.41
	Landfl ling.	Ton	102.16	42.67	198.52
	Other disposal operations.	Ton	-	-	-
	Waste generated intensity ratio	Ton/ Million baht	0.09	-	0.19
PLASTIC PACKAGING					
	All plastic packaging	Ton	-	-	-
	Biodegradable plastic packaging	Ton	-	-	-
	Recyclable plastic packaging	Ton	-	-	-
	*Category Mono Layer				

Note

- *Calculations are based on GRI G4 (EN3) Sustainability Reporting.
- Amount of fuel energy used = sum of each type of fuel used X calorific value of each type of fuel (measurement unit: gigajoules per month)
- CONVERSION FACTOR based on Thailand's annual energy report Department of Alternative Energy Development and Efficiency
- Electric power consumption = Sum of the amount of electrical energy used. (kWh) X 3.6 (measurement unit: gigajoules per month)
- Total amount of energy used = exhausted energy + renewable energy + electrical energy consumption (measurement unit: gigajoules per month)
- Energy intensity per income covers non-consumed energy such as diesel fuel, renewable energy such as rice husks and internal electricity only.

- Emission calculations GHG emissions Scope 2 (Scope 2) have been recalculated using the emission factor using the following reference values:
 - Thailand according to the Energy Policy and Planning Office ministry of energy (<http://www.eppo.go.th/index.php/en/en-energystatistics/co2-statistic>)
 - Myanmar, referenced from <https://united4efficiency.org/country-assessments/myanmar>
 - Vietnam, referenced from https://www.iges.or.jp/en/publication_documents/pub/data/en/1215/IGES_GRID_EF_v10.10_20210223.xlsx
 - India, referenced from https://www.iges.or.jp/en/publication_documents/pub/data/en/1215/IGES_GRID_EF_v10.10_20210223.xlsx
- *Greenhouse gas emissions reporting covers CO₂, CH₄ and N₂O, calculated and displayed in terms of the Global Warming Potential (GWP) set by the Intergovernmental Panel on Climate Change 2006 (IPCC) while the coefficient Greenhouse gas emissions (Emission Factor) based on data from IPCC and Thailand Greenhouse Gas Management Organization. (Public Organization) (GRI G4-EN 15, EN 16)
- The value of greenhouse gas concentration per income covers the volume. GHG emissions Scope 1 (Scope 1) and Scope 2 (Scope 2) (GRI G4-EN 18)
- Total water consumption collected from meter/billing receipt/groundwater usage report.
- The amount of general waste and the amount of hazardous waste stored within the company are the total amount of waste for the past year (G4-EN23).
- Total amount of waste generated Including only the amount of general waste and hazardous waste generated each year by the amount of waste stored within the company each year Calculated from accumulated waste in the current year – accumulated waste in the past year (G4-EN23)
- Information on waste disposal methods is obtained from the disposal method confirmation from the waste disposal operator or from the waste disposal invoice (G4-EN23).

GRI (GRI CONTENT INDEX) :

GRI 102: GENERAL DISCLOSURES 2016

DISCLOSURES		CHARTER	OMISSION/ NOTE	EXTERNAL ASSURANCE
Organizational Profile				
102-1	Name of the organization	Our Business		
		About this Report		
102-2	Activities, brands, products, and services	Our Business		
102-3	Location of headquarters	Business Overview		
102-4	Location of operations	BusinessOverview		
		Our Business		
102-5	Ownership and legal form	Our Business		
102-6	Markets served	Business Overview		
		Our Business		
102-7	Scale of the organization	2021 Highlights		
		Business Overview		
102-8	Information on employees and other workers	Appendix		
102-9	Supply chain	Responsible Supply Chain Management		
102-10	Significant changes to the organization and its supply chain	About this Report		
102-11	Precautionary Principle or approach	Climate Change Management		
		Water Stewardship		
102-12	External initiatives	Stakeholder Engagement		
102-13	Membership of associations	Stakeholder Engagement		
Strategy				
102-14	Statement from senior decision-maker	Message from the President		
		Message from the CEO		

DISCLOSURES		CHARTER	OMISSION/ NOTE	EXTERNAL ASSURANCE
102-15	Key impacts, risks, and opportunities	Message from the President		
		Message from the CEO		
		Our Business		
		Climate Change Management		
		Water Stewardship		
Ethics and Integrity				
102-16	Values, principles, standards, and norms of behavior	Six Core Values		
		C.P. Excellence		
102-17	Mechanisms for advice and concerns about ethics	Corporate Governance		
Governance				
102-18	Governance structure	Sustainability Governance		
		Corporate Governance		
102-20	Executive-level responsibility for economic, environmental, and social topics	Sustainability Governance		
Stakeholder Engagement				
102-40	List of stakeholder groups	Stakeholder Engagement		
102-41	Collective bargaining agreements	Human Rights and Labor Practices		
102-42	Identifying and selecting stakeholders	Stakeholder Engagement		
102-43	Approach to stakeholder engagement	Stakeholder Engagement		
102-44	Key topics and concerns raised	Stakeholder Engagement		



DISCLOSURES	CHARTER	OMISSION/ NOTE	EXTERNAL ASSURANCE
Reporting Practice			
102-45	Entities included in the consolidated financial statements	Our Business 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 2022, we discontinued reporting GRI 308-2 and GRI 414-2 as our supplier audit program is set to be completed by 2022. 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	Appendix	

SPECIFIC STANDARD DISCLOSURES

GRI	DISCLOSURES	CHARTER	OMISSION/ NOTE	EXTERNAL ASSURANCE
Economic Performance				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Sustainability Milestone		
	103-2 The management approach and its components	Sustainability Milestone		
	103-3 Evaluation of the management approach	Sustainability Milestone		
GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	2022 Highlights		
Indirect Economic Impacts				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Social Impact Education Innovation		
	103-2 The management approach and its components	Social Impact Education Innovation		
	103-3 Evaluation of the management approach	Social Impact Education Innovation		
GRI 203: Indirect Economic Impacts 2016	203-1 Infrastructure investments and services supported	Social Impact Education		
	203-2 Significant indirect economic impacts	Social Impact Education Innovation		
Anti-corruption				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Corporate Governance		
	103-2 The management approach and its components	Corporate Governance		



GRI	DISCLOSURES	CHARTER	OMISSION/ NOTE	EXTERNAL ASSURANCE
	103-3 Evaluation of the management approach	Corporate Governance		
GRI 205: Anti-Corruption 2016	205-2 Communication and training about anti-corruption policies and procedures	Corporate Governance		
Energy				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Climate Change Management		
	103-2 The management approach and its components	Climate Change Management		
	103-3 Evaluation of the management approach	Climate Change Management		
GRI 302: Energy 2016	302-1 Energy consumption within the organization	Climate Change Management		/
		Appendix		
	302-3 Energy intensity	Climate Change Management		
		Appendix		
	302-4 Reduction of energy consumption	Climate Change Management		
		Appendix		
Water				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Water Stewardship		
	103-2 The management approach and its components	Water Stewardship		
	103-3 Evaluation of the management approach	Water Stewardship		

GRI	DISCLOSURES	CHARTER	OMISSION/ NOTE	EXTERNAL ASSURANCE
GRI 303: Water and Effluents 2018	303-1 Interactions with water as a shared resource	Water Stewardship		
	303-2 Management of water discharge-related impacts	Water Stewardship		
	303-3 Water withdrawal	Water Stewardship		/
		Appendix		
	303-4 Water discharge	Water Stewardship		/
		Appendix		
	303-5 Water consumption	Water Stewardship		/
		Appendix		
Biodiversity				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Ecosystem & Biodiversity Protection		
	103-2 The management approach and its components	Ecosystem & Biodiversity Protection		
	103-3 Evaluation of the management approach	Ecosystem & Biodiversity Protection		
GRI 304: Biodiversity 2016	304-3 Habitats protected or restored	Ecosystem & Biodiversity Protection		



GRI	DISCLOSURES	CHARTER	OMISSION/ NOTE	EXTERNAL ASSURANCE
Emissions				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Climate Change Management		
	103-2 The management approach and its components	Climate Change Management		
	103-3 Evaluation of the management approach	Climate Change Management		
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	Climate Change Management Appendix		/
	305-2 Energy indirect (Scope 2) GHG emissions	Climate Change Management Appendix		/
	305-4 GHG emissions intensity	Climate Change Management Appendix		
Wastes				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Circular Economy		
	103-2 The management approach and its components	Circular Economy		
	103-3 Evaluation of the management approach	Circular Economy		
GRI 306: Waste 2020	GRI 306-3: Waste generated	Circular Economy Appendix		/
	GRI 306-4: Waste diverted from disposal	Circular Economy Appendix		/
	GRI 306-5: Waste directed to disposal	Circular Economy Appendix		/

GRI	DISCLOSURES	CHARTER	OMISSION/ NOTE	EXTERNAL ASSURANCE
Supplier Environmental Assessment				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	responsible supply chain management		
	103-2 The management approach and its components	responsible supply chain management		
	103-3 Evaluation of the management approach	responsible supply chain management		
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	responsible supply chain management		
Employment				
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		
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	Appendix		
Occupational Health and Safety				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Occupational health and safety		
	103-2 The management approach and its components	Occupational health and safety		
	103-3 Evaluation of the management approach	Occupational health and safety		
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	Occupational health and safety		
	403-2 Hazard identification, risk assessment, and incident investigation	Occupational health and safety		



GRI	DISCLOSURES	CHARTER	OMISSION/ NOTE	EXTERNAL ASSURANCE
	403-3 Occupational health services	Occupational health and safety		
	403-4 Worker participation, consultation, and communication on occupational health and safety	Occupational health and safety		
	403-5 Worker training on occupational health and safety	Occupational health and safety		
	403-6 Promotion of worker health	Occupational health and safety		
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Occupational health and safety		
	403-6 Promotion of worker health	Occupational health and safety		
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Occupational health and safety		
	403-9 Work-related injuries	Human Rights and Labor Practices Occupational Health and Safety Appendix		/
	403-10 Work-related ill health	Human Rights and Labor Practices Occupational Health and Safety Appendix		/

GRI	DISCLOSURES	CHARTER	OMISSION/ NOTE	EXTERNAL ASSURANCE
Training and Education				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Leadership and Human Capital Development		
	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 Rights Assessment				
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		
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 Communities				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Social Impact		
		Health and Well-being		
		Education		
		Water Stewardship		
		Ecosystem & Biodiversity Protection		
		Responsible Supply Chain Management		



GRI	DISCLOSURES	CHARTER	OMISSION/ NOTE	EXTERNAL ASSURANCE
	103-2 The management approach and its components	Social Impact		
		Health and Well-being		
		Education		
		Water Stewardship		
		Ecosystem & Biodiversity Protection		
		Responsible Supply Chain Management		
	103-3 Evaluation of the management approach	Social Impact		
		Health and Well-being		
		Education		
		Water Stewardship		
		Ecosystem & Biodiversity Protection		
		Responsible Supply Chain Management		
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	Health and Well-being		
		Education		
		Water Stewardship		
		Ecosystem & Biodiversity Protection		
		Responsible Supply Chain Management		
Supplier Social Assessment				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Ecosystem & Biodiversity Protection		
	103-2 The management approach and its components	Ecosystem & Biodiversity Protection		
	103-3 Evaluation of the management approach	Ecosystem & Biodiversity Protection		

GRI	DISCLOSURES	CHARTER	OMISSION/ NOTE	EXTERNAL ASSURANCE
GRI 414 Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	Ecosystem & Biodiversity Protection		
Product and Service Labelling				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Health and Well-being		
	103-2 The management approach and its components	Health and Well-being		
	103-3 Evaluation of the management approach	Health and Well-being		
GRI 417: Marketing and Labeling 2016	417-1 Requirements for product and service information and labeling	Health and Well-being		
Healthy and Affordable Food				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Health and Well-being Innovation		
	103-2 The management approach and its components	Health and Well-being Innovation		
	103-3 Evaluation of the management approach	Health and Well-being Innovation		



SUBSIDIARIES INCLUDED IN SUSTAINABILITY REPORT 2023

The Company produces this Sustainability Report. According to Global Reporting Initiatives (GRI) standards, disclosures follow the Core Option criteria.

GRI Standard	Scope of reporting	year	Company in Crop Integration Business Group															Data coverage for 2023
			Charoen Pokphand Produce Co., Ltd.												CPS		CPA	
			Seed Processing Plant Soi 12	Seed Processing Plant Soi 19	Chemical Fertilizer Plant	Organic Fertilizer Plant	Foundation Seed Production : Salangpan-Kampran Farm	Commercial Seed Production , Maesot Center	Commercial Seed Production , Phobpra Center	Commercial Seed Production , Phrae Center	Sawankalok Research Station	Salangpan Research Station	Charoen Pokphand Seeds (Vietnam) Co., Ltd.	Charoen Pokphand Seeds (India) Co., Ltd.	CPP Fertilizer Co.,Ltd (Myanmar)	Charoen Pokphand Seed Co., Ltd.	Charoen Pokphand Agriculture Co., Ltd.	
Environmental																		
302-1	Total Energy Consumption	2023	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	65.00
		2022	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	65.00
		2021	/	/	/	/	/	/	/	/	/	/	/	/	/			65.00
305-1	Green House gas (GHG) emission (Scope 1)	2023	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	65.00
		2022	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	65.00
		2021	/	/	/	/	/	/	/	/	/	/	/	/	/			65.00
305-2	Green House gas (GHG) emission (Scope 2)	2023	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	65.00
		2022	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	65.00
		2021	/	/	/	/	/	/	/	/	/	/	/	/	/			65.00
303-3 (2018)	Total volume of water withdrawn	2023	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	65.00
		2022	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	65.00
		2021	/	/	/	/	/	/	/	/	/	/	/	/	/			65.00
303-4 (2018)	Total of water discharge	2023																
		2022	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	65.00
		2021	/	/	/	/	/	/	/	/	/	/	/	/	/			65.00
303-5 (2018)	Water consumption	2023	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	65.00
		2022	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	65.00
		2021	/	/	/	/	/	/	/	/	/	/	/	/	/			65.00
306-3 (2018)	Total weight of waste generated	2023	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	65.00
		2022	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	55.00
		2021	/	/	/	/	/	/	/	/			/	/	/			55.00

GRI Standard	Scope of reporting		year	Company in Crop Integration Business Group															Data coverage for 2023
				Charoen Pokphand Produce Co., Ltd.												CPS	CPA		
				Seed Processing Plant Soi 12	Seed Processing Plant Soi 19	Chemical Fertilizer Plant	Organic Fertilizer Plant	Foundation Seed Production : Salangpan-Kampran Farm	Commercial Seed Porduction , Maesot Center	Commercial Seed Porduction , Phobpra Center	Commercial Seed Porduction , Phrae Center	Sawankalok Research Station	Salangpan Research Station	Charoen Pokphand Seeds (Vietnam) Co., Ltd.	Charoen Pokphand Seeds (India) Co., Ltd.	CPP Fertilizer Co.,Ltd (Myanmar)	Charoen Pokphand Seed Co., Ltd.	Charoen Pokphand Agriculture Co., Ltd.	
Social																			
Occupational Health and Safety																			
403-2	Injury Rate (IR)	Employees	2023	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
			2022	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
			2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00	
		Worker / Contractors	2023	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
			2022	/	/	/	/	/	/	/	/	/	/	/	/	/	/		
			2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00	
		Lost-Time Injury Frequency Rate (LTR)	Employees	2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00
				2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00
				2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00
	Worker / Contractors		2023	/	-	/	/	/	/	-	-	-	-	-	/	/	/		
			2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00
	Occupational Disease Rate (ODR)	Employees	2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00
		Worker / Contractors	2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00

GRI Standard	Scope of reporting		year	Company in Crop Integration Business Group															Data coverage for 2023
				Charoen Pokphand Produce Co., Ltd.												CPS	CPA		
				Seed Processing Plant Soi 12	Seed Processing Plant Soi 19	Chemical Fertilizer Plant	Organic Fertilizer Plant	Foundation Seed Production : Salangpan-Kampran Farm	Commercial Seed Production , Maesot Center	Commercial Seed Production , Phobpra Center	Commercial Seed Production , Phrae Center	Sawankalok Research Station	Salangpan Research Station	Charoen Pokphand Seeds (Vietnam) Co., Ltd.	Charoen Pokphand Seeds (India) Co., Ltd.	CPP Fertilizer Co.,Ltd (Myanmar)	Charoen Pokphand Seed Co., Ltd.	Charoen Pokphand Agriculture Co., Ltd.	
403-9	Rate of Recordable work-related injury	Employees	2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			2021	/	/	/	/	/	/	/	/	/	/	/	/			65.00	
		Worker / Contractors	2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			2021	/	/	/	/	/	/	/	/	/	/	/	/			65.00	
	Rate of High-consequence work-related injury (excluding facilities)	Employees	2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			2021	/	/	/	/	/	/	/	/	/	/	/	/			65.00	
		Worker / Contractors	2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			2021	/	/	/	/	/	/	/	/	/	/	/	/			65.00	
	Rate of facilities as a work-related injury	Employees	2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			2021	/	/	/	/	/	/	/	/	/	/	/	/			65.00	
		Worker / Contractors	2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			2021	/	/	/	/	/	/	/	/	/	/	/	/			65.00	



LRQA Independent Assurance Statement

Relating to CHAROEN POKPHAND PRODUCE CO., LTD. AND CHAROEN POKPHAND AGRICULTURE CO.,LTD. AND SUBSIDIARIES IN THE CROP INTEGRATION BUSINESS Sustainability Report for the calendar year 2023

This Assurance Statement has been prepared for CHAROEN POKPHAND PRODUCE CO., LTD. AND CHAROEN POKPHAND AGRICULTURE CO., LTD. AND SUBSIDIARIES IN THE CROP INTEGRATION BUSINESS. in accordance with our contract but is intended for the readers of this Report.

Terms of engagement

LRQA (Thailand) Ltd. was commissioned by CHAROEN POKPHAND PRODUCE CO., LTD. AND CHAROEN POKPHAND AGRICULTURE CO., LTD. AND SUBSIDIARIES IN THE CROP INTEGRATION BUSINESS (CP CROP) to provide independent assurance on its Sustainability Report 2023 “the report” against the assurance criteria below to a moderate level of assurance and at the materiality of the professional judgement of the verifier, using AccountAbility’s AA1000AS v3¹, where the scope was a Type 2 engagement.

Our assurance engagement covered CHAROEN POKPHAND PRODUCES CO.LTD AND CHAROEN POKPHAND AGRICULTURE CO., LTD.’s subsidiaries in Thailand only includes the integration crop business and specifically the following requirements:

- Evaluating CP CROP’s adherence to AA1000 AccountAbility Principles (2018) of Inclusivity, Materiality, Responsiveness, and Impact.
- Confirming that the report is in accordance with:
 - GRI Standards (2021)
- Evaluating the reliability of data and information for only the selected indicators listed below: ¹ - *Environmental*:
GRI 302-1 Energy consumption within the organization, GRI 303-3 Water withdrawal, GRI 303-4 Water discharge, GRI 303-5 Water consumption, GRI 305-1 Direct (scope 1) GHG emissions, GRI 305-2 Energy indirect (scope 2) GHG emissions, GRI 306-3 Waste generated, GRI 306-4 Waste diverted from disposal and GRI 306-5 Waste directed to disposal.
 - Social*:
GRI 403-9 to 10 Work-related injuries and ill health.

Our assurance engagement excluded the data and information of CP CROP’s subsidiaries within Thailand where it has no operational control, all operations, and activities outside of Thailand and suppliers and any third-parties mentioned in the report.

LRQA’s responsibility is only to CP CROP. LRQA disclaims any liability or responsibility to others as explained in the end footnote. CP CROP’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 CP CROP.

LRQA’s Opinion

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

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

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

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

¹ GHG quantification is subject to inherent uncertainty.



LRQA’s approach

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

- Assessing CP CROP’s approach to stakeholder engagement to confirm that issues raised by stakeholders were captured correctly. We did this by interviewing CP CROP’s management who engage directly with stakeholder groups as well as reviewing documents and associated records.
- Reviewing CP CROP’s process for identifying and determining material issues to confirm that the right issues were included in their report. We did this by benchmarking reports written by CP CROP and its peers to ensure that sector specific issues were included for comparability. We also tested the filters used in determining material issues to evaluate whether CP CROP makes informed business decisions that may create opportunities which contribute towards sustainable development.
- Auditing CP CROP’s data management systems to confirm that there were no significant errors, omissions or misstatements in the report. We did this by reviewing the effectiveness of data handling process, and systems, including those for internal verification. We also spoke with key people in various departments responsible for compiling the data and drafting the report.
- Visited CP CROP’s operations as business representative (Vapor Hear Treatment & Packing facilities in Chonburi) to sample performance data and information for the selected specific standard disclosures to confirm its reliability.

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 CP CROP’s stakeholder engagement process. CP CROP has addressed the key stakeholder group’s opinion regarding their impacts.
- Materiality: We are not aware of any material issues concerning CP CROP’s sustainability performance that have been excluded from the report. CP CROP has processes for identifying and determining material issues based on a set of unbiased criteria and qualitative impact valuation.
- Responsiveness: CP CROP has addressed the concerns of stakeholders in relation to transition plan for climate change. However, we believe that future reports should disclose safety practices and improvement progress in all CP CROP operations.
- Reliability: Data management systems are well defined, but the implementation of these systems varies across CP CROP’s operational facilities.
- Impact: CP CROP has addressed impacts valuation of an agriculture products, food loss and climate change related.

LRQA’s standards, competence and independence

LRQA ensures the selection of appropriately qualified individuals based on their qualifications, training and experience. The outcome of all verification and certification assessments is then internally reviewed by senior management to ensure that the approach applied is rigorous and transparent.

This verification is the only works undertaken by LRQA for CP CROP and as such does not compromise our independence or impartiality.



Opart Charuratana
Lead Verifier
On behalf of LRQA (Thailand) Ltd.

Dated: 15 September 2024

LRQA reference: BGK00001060/B

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SUSTAINABILITY REPORT 2023

Charoen Pokphand Produces Co., Ltd.
Charoen Pokphand Agriculture Co.,Ltd.
and companies in Crop Integration Business.
Charoen Pokphand Group.

1 Fortune Town (CP Tower 2), 23th Floor
Ratchadapisek Road, Din Daeng, Bangkok 10400

