

New Midterm Business Plan

【Revised for FY2022-FY2024】

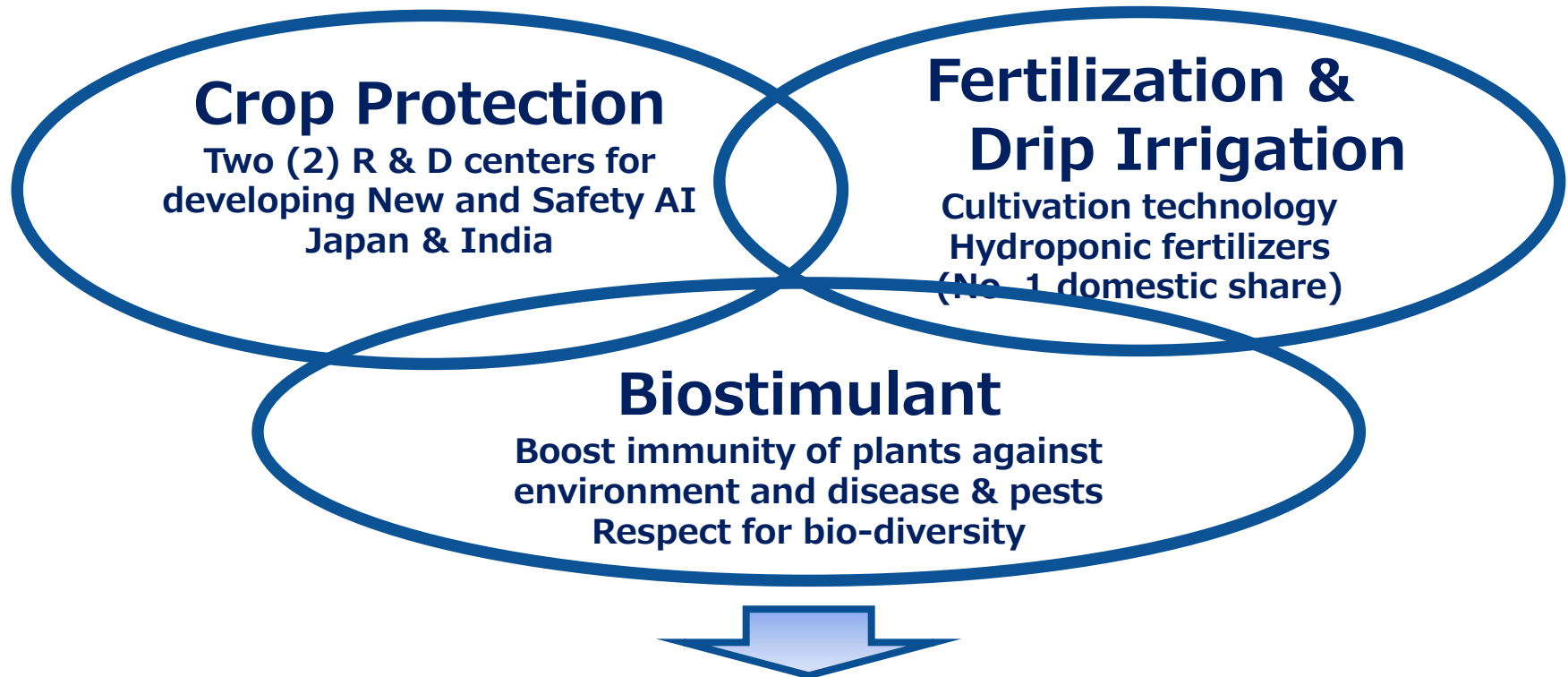
February 10th, 2022

The logo for OAT, featuring a stylized blue 'A' with a green swoosh, followed by the letters 'OAT' in blue and a green symbol. **OAT Agrio Co., Ltd.**

Corporate Philisophy

◆ Our philosophy and three (3) domains of agritechnologies

Pursuing ESG (Environment, Society, Governance) management and proactive involvement in SDGs (Sustainable Development Goals)



“Corporate Philosophy”
**We contribute to the people in the world
with our agritechnologies and sincerity.**

◆ Pursuing agritechnologies

Increasing of food supply is essential



Developing the resistance against pesticides due to repeated use



Out of roughly 1,000 agrochemical companies currently working on new development, just over 20 are in Japan, EU and US



New active ingredients development
Crop protection

Massive consumption of energy



Enhancing crop immunity
Biostimulants

Destruction of nature



Desertification
Salt damages
Water pollution
30% of the world's land are degraded



UN declared 2015 is the int'l Year of Soils



Minimum water and fertilizer supplies
Fertilization & Drip irrigation

New Midterm Business Plan 【2021】 Summary

※ New Midterm business Plan set on Feb 2021 【2021-2023】
Achieved the 2nd year target in a year ahead of schedule

Unit : M JPY

Item	Result FY2020	Plan FY2021 【1 st year】	Result FY2021	Plan FY2022 【2 nd year】	Plan 2023 【3 rd year】
Sales	20,288	21,288	22,657 <small>vs PY 111.7% vs BU 106.4%</small>	22,080	23,440
Operating Income	1,512	1,594	1,982 <small>vs PY 131.0% vs BU 124.3%</small>	1,990	2,450
Ordinary Income	1,346	1,419	1,969 <small>vs PY 146.3% vs BU 138.7%</small>	1,780	2,250
Net income attributable to owners of the parent company	837	908	1,443 <small>vs PY172.3% vs BU 158.9%</small>	1,030	1,410

New Midterm Business Plan 【Revised for 2022-2024】

< Further Challenges >

Negative (Risk) :

- ◆ COVID-19 (2020~2022)
- ◆ Decreasing population and cultivated area in Japan
- ◆ Cost of oil related materials increase
- ◆ Tightening supply raw materials for fertilizer from China
- ◆ Sea freight cost increase .etc



- Downtrend of domestic market
- Decreasing profit ratio
- Losing sales opportunity

Positive (Chance) :

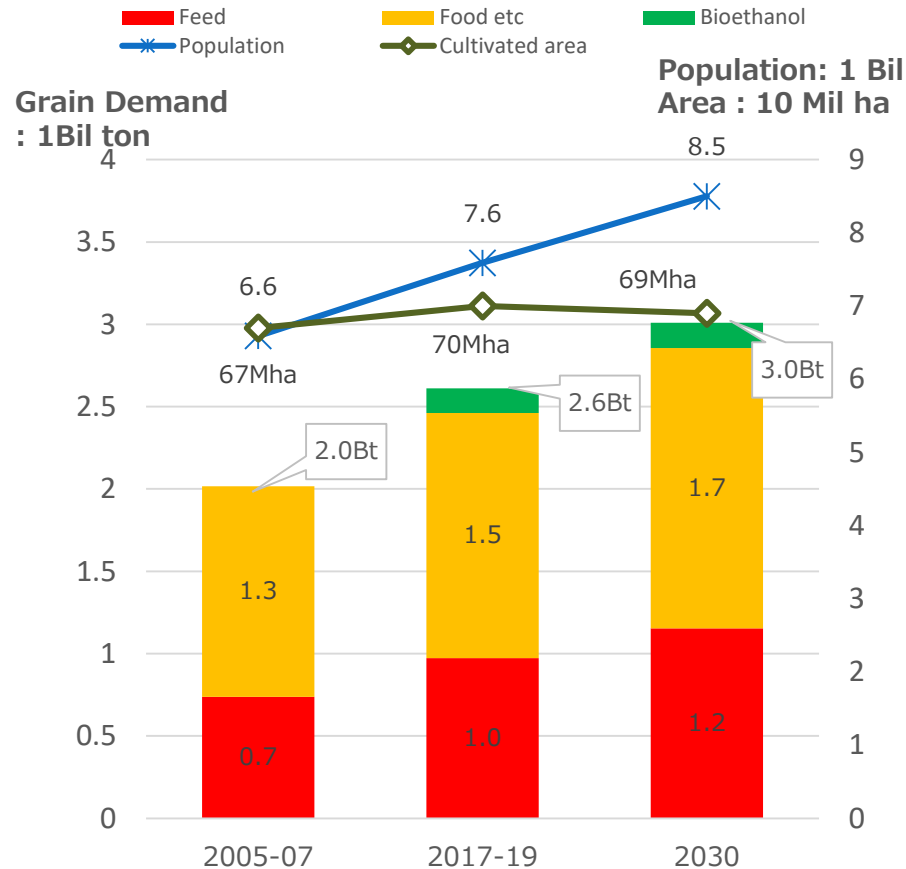
- ◆ World population forecast: 9 Bil. (FY2050 : FAO)
- ◆ Global pesticide market increase yr by yr
Predicted CAGR is 2.3% (2020-2025)
- ◆ Strategy for Sustainable Food Systems (MAFF, Japan)
~ For Carbon neutral 2050
 - Reducing 50% of chemical pesticide usage and 30% of inorganic fertilizer usage
 - Expanding the ratio of organic cultivated area to 25%(1mil ha)
- ◆ Restructuring at Tokyo Stock Exchange. Tightening criteria for Prime Market



OAT Agrio Group
make a chance
by utilizing &
mastering
“Agritechnology”.

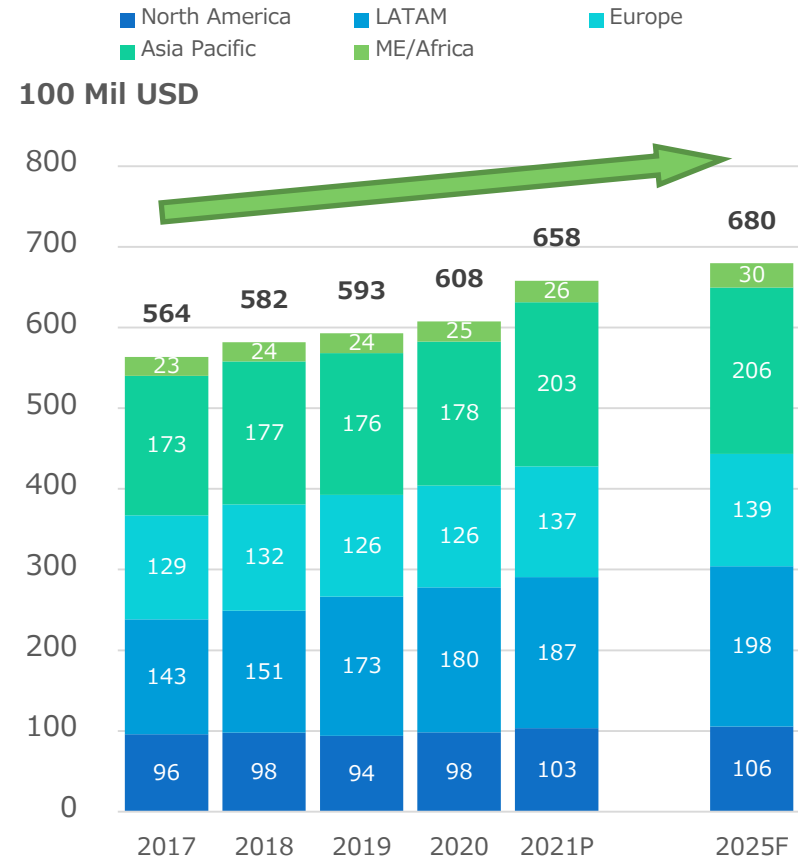
◆ World Population, Grain Demand, PPP Market

World Population and Grain Demand



Source: Trend forecasts of world food demand
(MAFF: Mar 2021)

World PPP Market



Source: AgbioInvestor

- ◆ Increasing Population & Grain Demand, but no expansion of Cultivated Area
⇒ Need to improve productivity/area
- ◆ Expanding PPP market ⇒ CAGR 2.3% between 2020 to 2025

◆ Utilizing & Mastering Agritechnology

◆ Outline of Strategy for Sustainable Food Systems (MAFF, Japan)

In order to establish a food sustainability, Measures for Achievement for De-carbonization and Resilience with Innovation was announced by MAFF. It is to promote innovations for supply chain in each process and for environmentally friendly attempts from the point of mid-long term.

◆ Vision in 2050

1. Zero emission of CO₂

- ◆ **Introduction of energy-saving greenhouse horticulture**

2. 50% reduction of chemical pesticide

- ◆ **Spreading integrated pest management**
- ◆ **Developing innovative technology for plant protection , utilizing biostimulants.**

3. 30% reduction of chemical fertilizer

- ◆ **Sophisticating effect-adjusted fertilizer that match the growth stage of crops.**

4. Expanding the ratio of organic cultivated area to 25%(1mil ha)

Company Philosophy “Utilizing & Mastering Agritechnology”

➡ Providing solutions for cultivation
Spreading Smart Agriculture

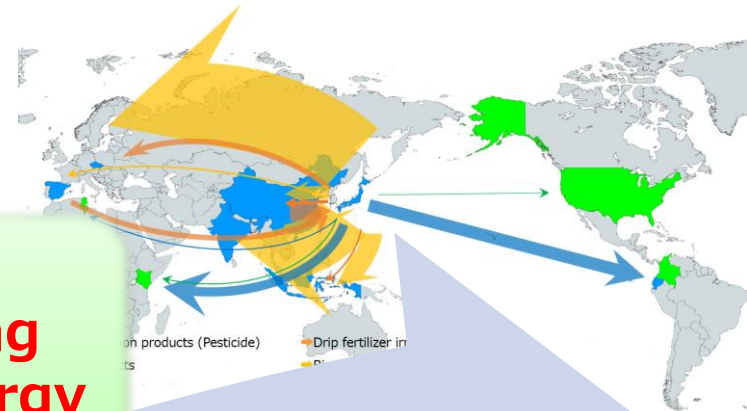
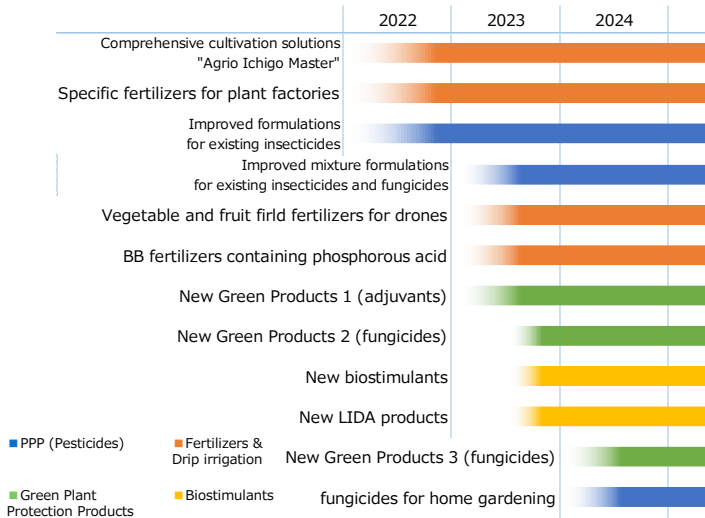
➡ Promoting environmentally friendly products
Promoting a business of biostimulants

➡ Promoting Fertilizers for greenhouse horticulture
Providing solutions for cultivation

➡ Hydroponics using organic fertilizers called “Probioponics”

※Applying for new JAS standard

◆ Activity Policy for New Midterm Business Plan 2022-2024



Maximizing global synergy

Launching New Products

~FY2022

~FY2023

~FY2024

Launching smart agriculture business [Agrio Ichigo Master]



- ◆ **Focusing on the growing-driver products, and enhancing the introduction of new products, entry into smart agriculture, and maximization of global synergies.**

Growing Drivers

- Green Products (GP)
- Biostimulants (BS)
- Spurring demands for horticulture
- Developing products globally

- Increasing sales by Launching new products
- Spreading GP/BS products
- **Entering into smart agriculture**
「Agrio Strawberry Master」
- Expanding the sales area
(More than 89 countries)

Maximizing global synergy

- Communications among OAT group
- Globalization of R&D

- Increasing sales in strong business area
- Improving an efficiency for R&D

◆ Aiming to improve a corporate value and to build a corporate culture and management that can contribute to sustainable agriculture for human and environmentally friendly.

Corporate Culture

- Taking action for 『Aglitechnology』
- Providing a “Fun” of cultivation

- To create OAT’s original manuals for cultivation (17 vegetables)
- Utilizing SNS
- Challenging D2C business

Human & environment-ally friendly

- Sustainability management

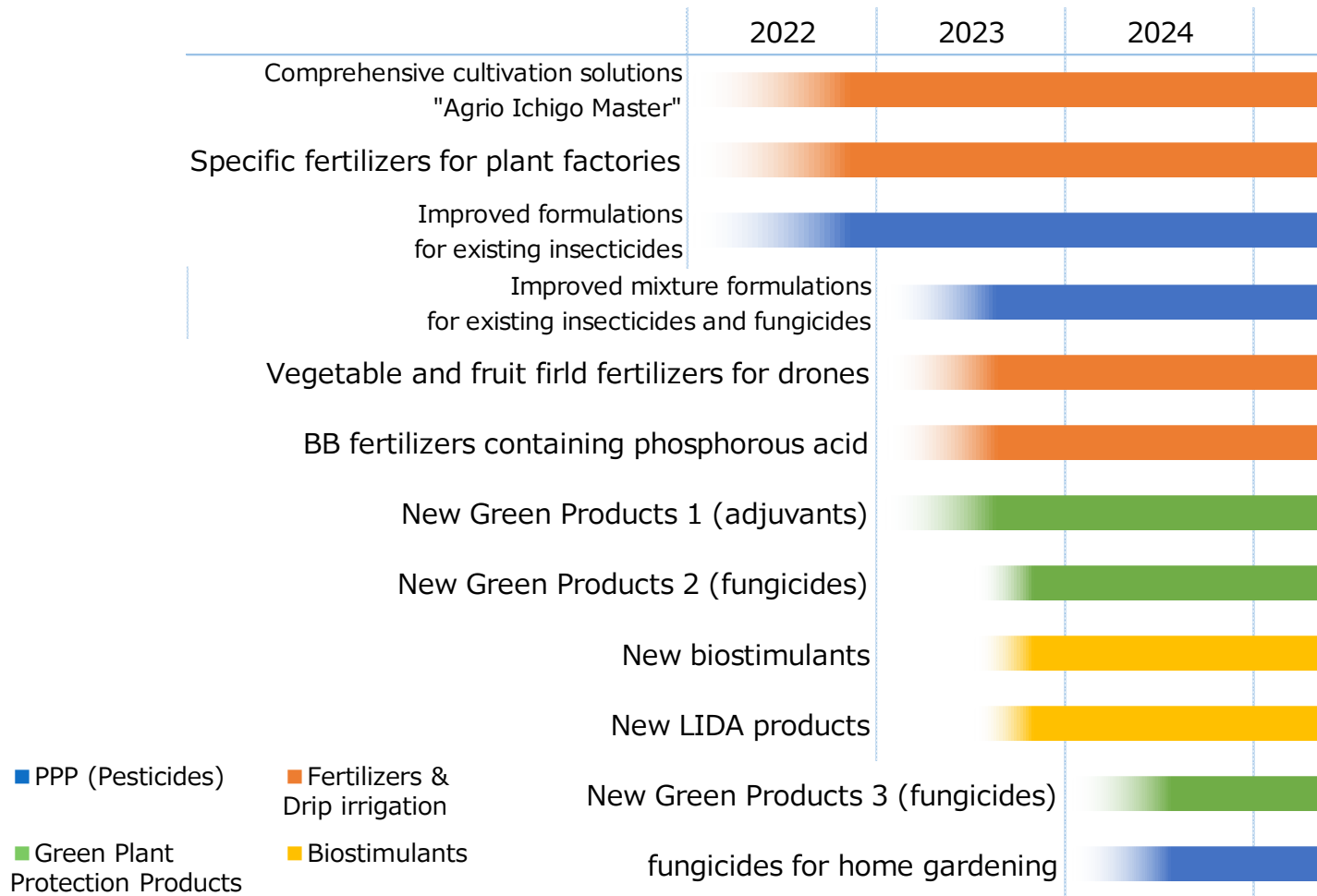
- Following TCFD’s recommendations.
- Action toward Carbon neutral
- Action toward Strategy for Sustainable Food Systems (MAFF)

Corporate Value

- Strengthening the management base

- To define the financial targets:
Ratio of net worth
Consolidated ROE
Net D/E Ratio

◆ Timeline of Launching New Products



New products will be introduced to new and focused market.

◆Renewal Midterm Plan < Further Challenge>

FY2020 vs 2024

Growth of net sales : 125.6%

Growth of operating income : 191.3%

Actual

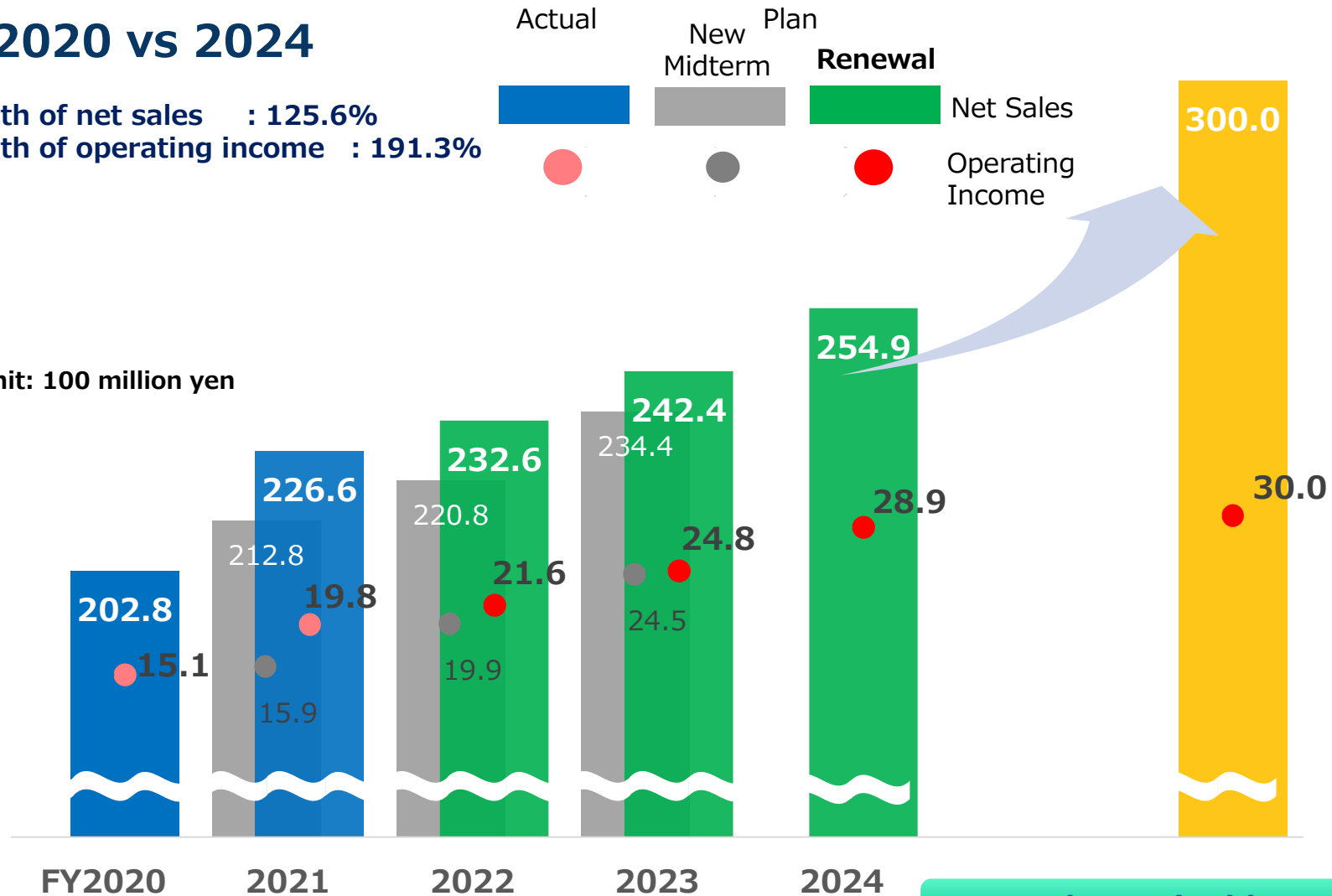
New Plan
Midterm

Renewal

Net Sales

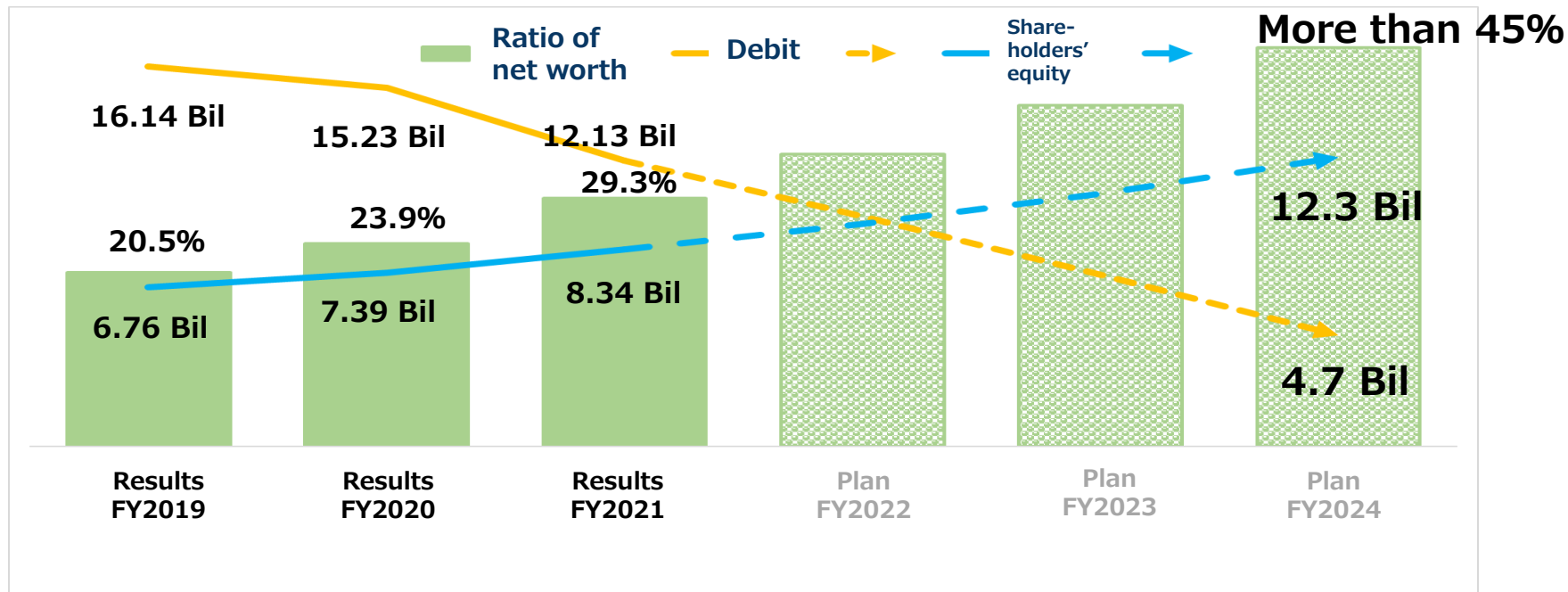
Operating
Income

Unit: 100 million yen



Toward sustainable growth

◆ Financial Targets



	Results FY2020	Plan FY2021	Results FY2021	Plan FY2022	Plan FY2023	Plan FY2024
Consolidated ROE	12.9%	13.8%	19.0%	15.0%	15.6%	16.6%

Targets in FY2024

- ◆ Ratio of net worth : More than 45%
- ◆ Consolidated ROE : More than 15%以上
- ◆ Net D/E Ratio : 0.1

◆ New Midterm Business Plan, consolidated

Unit: 100 Mil

	Results FY2020	Plan FY2021	Results FY2021	Plan FY2022	Plan FY2023	Plan FY2024
Net Sales	202.8	212.8	226.5	232.6	242.4	254.9
Operating Income	15.1	15.9	19.8	21.5	24.8	28.9
Ordinary Income	13.4	14.2	19.7	20.3	23.6	27.9
Net for the Period Attributed to Shareholders of the Parent	8.3	9	14.4	13.2	15.6	19
Operating Income Margin	7.5%	7.5%	8.7%	9.3%	10.2%	11.3%
Consolidated ROE	12.9%	13.8%	19.0%	15.0%	15.6%	16.6%

New Midterm Business Plan 【Revised for 2022-2024】

<Actions in detail>

- ◆ **Green Plant Protection Products**
for Human and Environmentally friendly
 - **Developing & launching new products**
- ◆ **Biostimulant business**
 - **Spreading target crops & sales area globally**
- ◆ **Development for the potentials in greenhouse horticulture field**
 - **Establishing new business models for proposing the packaged products**
- ◆ **The products deployment in global base**
 - **Spreading sales of existing PPP & Fertilizer products**

◆ Green Plant Protection Products (GPPP)

Our Definition of GPPP

Safe and environmentally friendly plant protection products with no restrictions on the number of times they can be used, such as natural / food additive-derived or organic JAS-compliant pesticides.

Why GPPP need?

Natural / food-derived

No limit to the number of times it can be used

Difficult for pests to acquire drug resistance

Friendly to natural enemies and fits IPM



◆GPPPs line-up

No.	Product name	Active substance	Organic JAS materials ¹ listed	Number of application
1	Kaligreen	Potassium bicarbonate	Yes	-
2	Tomonol	Agricultural machine oil (95%)	Yes	-
3	Tomonol S	Agricultural machine oil (97%)	Yes	-
4	Oleate	Sodium oleate	No	-
5	Acaritouch	Propyleneglycol fatty acid monoester	No	-
6	Suffoil	Edible blended oil	Yes	-
7	Sluggo ²	Iron phosphate (1%)	Yes	-
8	Sukuminbait ²	Iron phosphate (3%)	Yes	-
9	Toaro CT (WP)	Crystal proteins, having cytotoxic effects, produced by <i>Bacillus thuringiensis</i>	Yes	-
10	Toaro (SC)	Crystal proteins, having cytotoxic effects, produced by <i>Bacillus thuringiensis</i>	Yes	-
11	Iou (SC)	Sulphur	Yes	-
12	Poteguard	Basic sodium copper	No	-

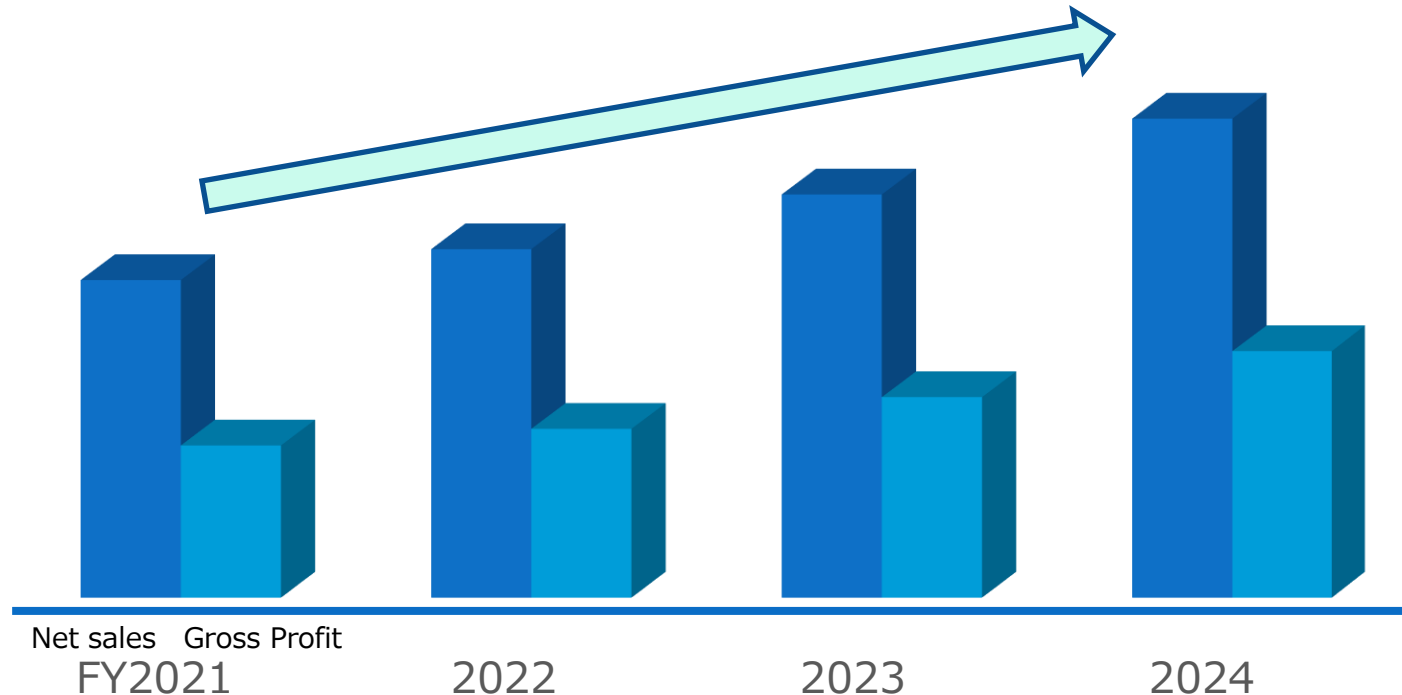
1. It is approved for use to produce organic foods certified as "Organic Japanese Agricultural Standards (JAS) "
2. It is a trademark of W. Neudorff.

◆ Estimated Growth of GPPPs

Human & Environmentally friendly agrochemicals



Results and Forecasts from FY2021 to 2024



Green PPP

**Growth Ratio : sales and gross profit
comparison : FY2021 vs. FY2024**

Sales 151% Gross Profit 162%

◆ Biostimulants Business

Our Definition of Biostimulants

Biostimulant is a substance and technology that enhances the natural immunity of plants and promotes resistances against cold, heat and diseases & pest, and also for the potential crop growth.

Why biostimulants are needed

Increasing the yield and improving the quality by enhanced immunity

Enhancing the plant resistance to stresses

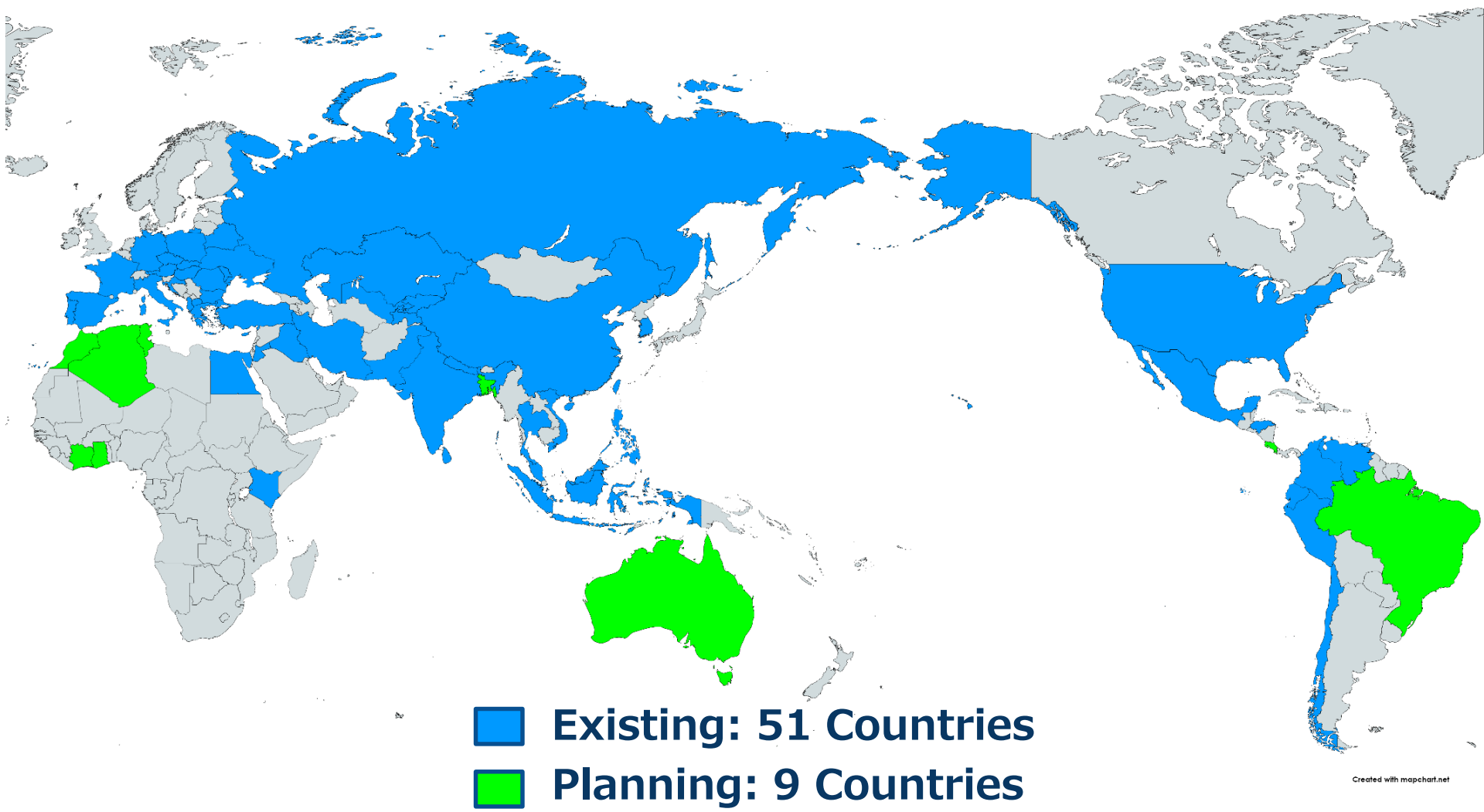
Improving the quality for the seed setting, sugar content and color of fruit

Adjusting and improving its water balance in plants

Improving the physical properties of farmed soil



◆ Business Area for Biostimulant Products



Created with mapchart.net

◆ Products in OAT that could contribute in greenhouse horticulture field

➤ Fertilizers for greenhouse horticulture

OKF series, fertilizers for drip irrigation, Tankmix* series

➤ Green plant protection products

Green pesticides such as suffoil and acaritouch

➤ Biostimulants

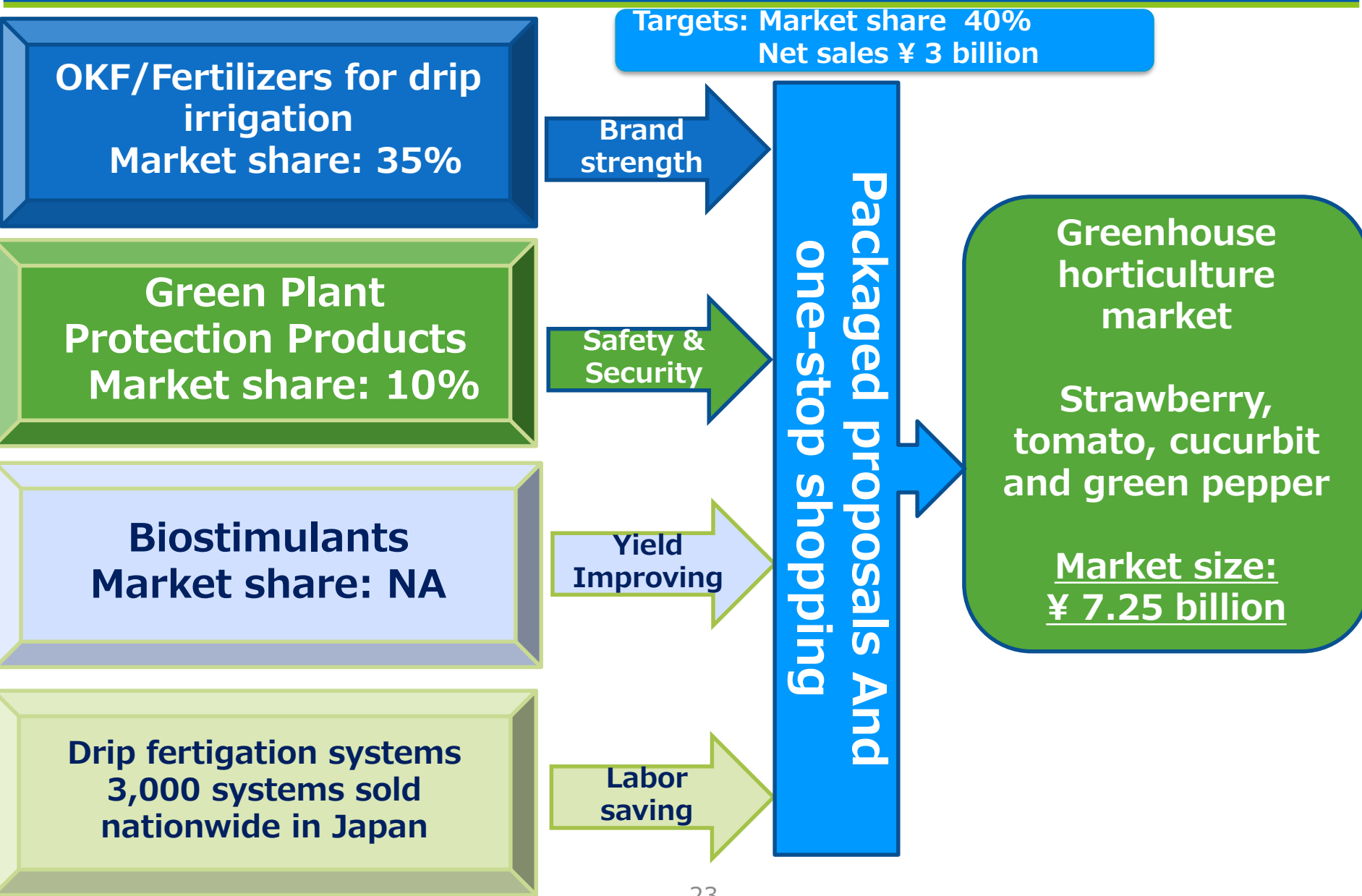
➤ Drip irrigation systems

Equipment and systems



* It is a Romanized Japanese of a product name.

◆ Sales strategy for the field of greenhouse horticulture (in Japanese market)



◆OAT Cultivation Support Manuals

OAT アグリオのトマト栽培応援マニュアル

※画面は作成途中のもの（部分）

サフオイル乳剤

殺虫・殺ダニ剤

【特長】安全な食用の植物油が主成分。物理的に作用する殺虫・殺ダニ剤で、ハダニ類とコナジラミ類の同時防除が可能。

- 対象害虫・対象病害・希釈倍数：ハダニ類（300～500倍）チャノコホコリダニ、トマトサビダニ、コナジラミ類、うどんこ病（300倍）
- 使用液量：100～500 ℓ/10a
- 使用時期：収穫前日まで
- 使用方法：散布



ショウチノスケフロアブル

殺菌剤

【特長】2成分の混合により、うどんこ病に対して高い効果を示す。残効性に優れ1シーズン中のうどんこ病防除回数の低減が期待できる。有用昆虫や天敵に対する影響が小さく、IPM体系に有用な資材として使用できる。

- 対象病害：うどんこ病・灰色かび病
- 希釈倍数：2000倍
- 使用液量：100～300 ℓ/10a
- 使用時期：収穫前日まで
- 使用回数：2回以内
- 使用方法：散布
- フルチアニルを含む農薬の総使用回数：2回以内
- メバニピリムを含む農薬の総使用回数：4回以内



カリグリーン

殺菌剤

【特長】安全な炭酸水素カリウムが主成分。うどんこ病に対して優れた治療効果を発揮。

- 対象病害：うどんこ病（800～1000倍）
- 使用液量：100～300 ℓ/10a
- 使用時期：収穫前日まで
- 使用方法：散布



トマト・ミニトマト 農薬防除事例

月		1月			2月			3月			4月			5月			6月			7月			8月			9月			10月			11月			12月		
時期		上	中	下	上	中	下	上	中	下	上	中	下	上	中	下	上	中	下	上	中	下	上	中	下	上	中	下	上	中	下	上	中	下	上	中	下
促成栽培	作物	A. トマト																																			
	1. サフオイル																																				
	2. ゴンヨール																																				
	3. オレート																																				
	4. トアロー水和剤																																				
	5. トアローフロアブル																																				
	6. カリグリーン																																				
抑制型	作物	A. トマト																																			
	1. サフオイル																																				

Proposing “Cultivation Support Manuals” for “pest control, fertilization, and quality improvement of 17 major crops, which are utilized the OAT advantage of 3 agritechologies”.

◆Solution Service for Cultivation

Launching Subscription Service

“Agrio Ichigo Master”

For farmers who starts farming, plans for greenhouse horticulture and improving the crop quality

土耕から高設栽培に変更をご検討の方
今よりも収量・品質を高めたい方



液肥投入機&付帯設備



液肥投入機の遠隔操作 & 環境モニタリングシステム



養液肥料
葉面散布
肥料
(タンクミックスF&B他社)

グリーン農薬
(サフオイル乳剤他社)

バイオスティ
ミュラント資材
(LIDA製品他社)

栽培・施肥
マニュアル

栽培相談
窓口

自動生育診断
システムの診断
アドバイス

機器
メンテナンス

環境
モニタリング
温度・湿度・CO2
葉面水分等、環境湿度

通信料・
サーバ利用料



定額料金に含まれるものおよびサービス

- ①養液土耕システム及び付帯設備の利用 (灌水装置、遠隔操作オプション、温度湿度センサー、土壌センサー)
- ②自動生育診断システムによる栽培アドバイス (毎朝メール配信)
- ③養液栽培用肥料、葉面散布肥料、バイオスティミュラント資材およびグリーン農薬を定期的に必要な量をお届け
- ④栽培マニュアル、栽培フォローの提供 (栽培に関する、なんでも相談できる窓口を利用できます)
- ⑤通信費・サーバ利用料
- ⑥機器メンテナンス費用

対応品種：さちのか (2023年より、紅ほっぺ、さがほのか、恋みのり、かおりの、かんなんひめを追加予定)

契約期間：3年契約～

契約内容：3年もしくは5年契約終了後に継続して利用延長も可能。契約終了時、システムについては買取も選択可 (契約面積に応じた調整価格にて)。システムのみ買取条件で途中解約可能。契約期間中の機器メンテナンス/修理は無償対応。栽培面積に応じた必要量の肥料・BS・農薬の提供、養液管理・栽培マニュアルの提供。通信費・サーバ利用料込み。液肥投入機及び付帯設備の設置・施工は契約者様にてお願いいたします (設置業者をご紹介いたします)。

当社栽培研究センターにおいていちご実証栽培を実施

当社の資材 (肥料、農薬およびBS) と栽培技術を用いて、徳島でいちごを栽培しています。生産物は「**ほほえみいちご®**」のブランドで販売しており、市場の評価も受けています。

また、この実証圃場は「**GLOBALG.A.P. (グローバルギャップ)**」の認証を取得しています。



安心安全・高収量の追求

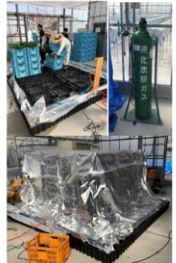
- 化学合成農薬を極力使用しない栽培を採用

2019-2020年の栽培で、化学合成農薬の使用回数を15回 (本圃5回、育苗10回) に抑えて栽培をすることができました。ちなみに徳島県の慣行の防除回数は54回と設定されています。この**減農薬栽培**を実現するために、**グリーン農薬の使用**、高濃度CO2処理後定植やUV-Bランプなどの最新栽培技術を導入しています。

また、収量は「**さちのか**」という品種で**6.1t/10a**を実現しました。



➤ 生育診断システム OAT栽培研究センター設置 モニタ機



◆ Partnership Agreement with Shintomi, Miyazaki Prefecture
for promoting & developing sustainable agriculture (Jan. 2022)



- Demonstrating “Agrio Ichigo (Strawberry) Master”
Highly automated hydroponic management by integrating remote control & monitoring and automatic diagnosis system

“Strategy for Sustainable Food Systems” by MAFF

- ① Reducing 50% of chemical PPP
- ② Hydroponic management by smart technology

- Demonstrating circular cultivation such as organic fertilizer-utilizing hydroponic cultivation (Probioponics)

“Strategy for Sustainable Food Systems” by MAFF

- ① Reducing 30% of inorganic fertilizer
- ② Establishing next-generation technology for organic cultivation

- Contributing to the promotion & development of local agriculture

実証実験用施設



新富町開発事業 構想イメージ図



◆ Global development

◆ Mitecide: Danisaraba



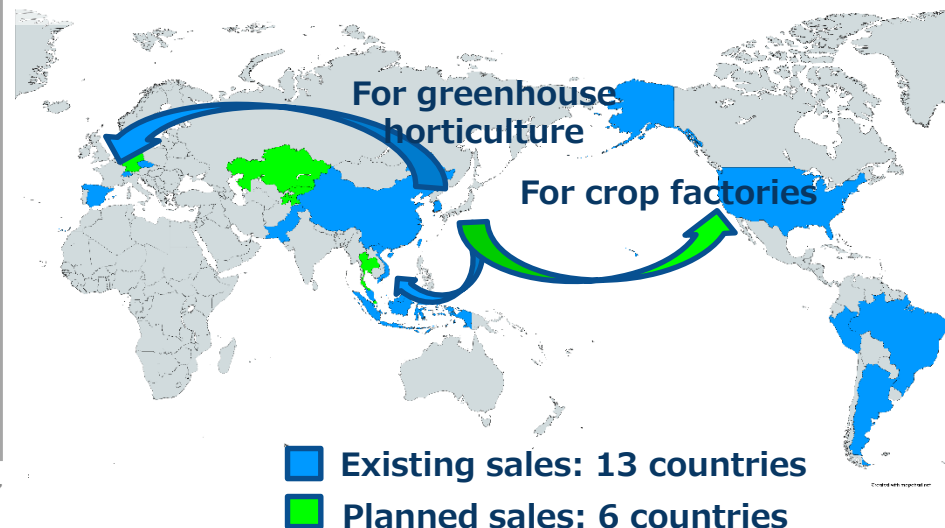
◆ Fungicide: Gatten



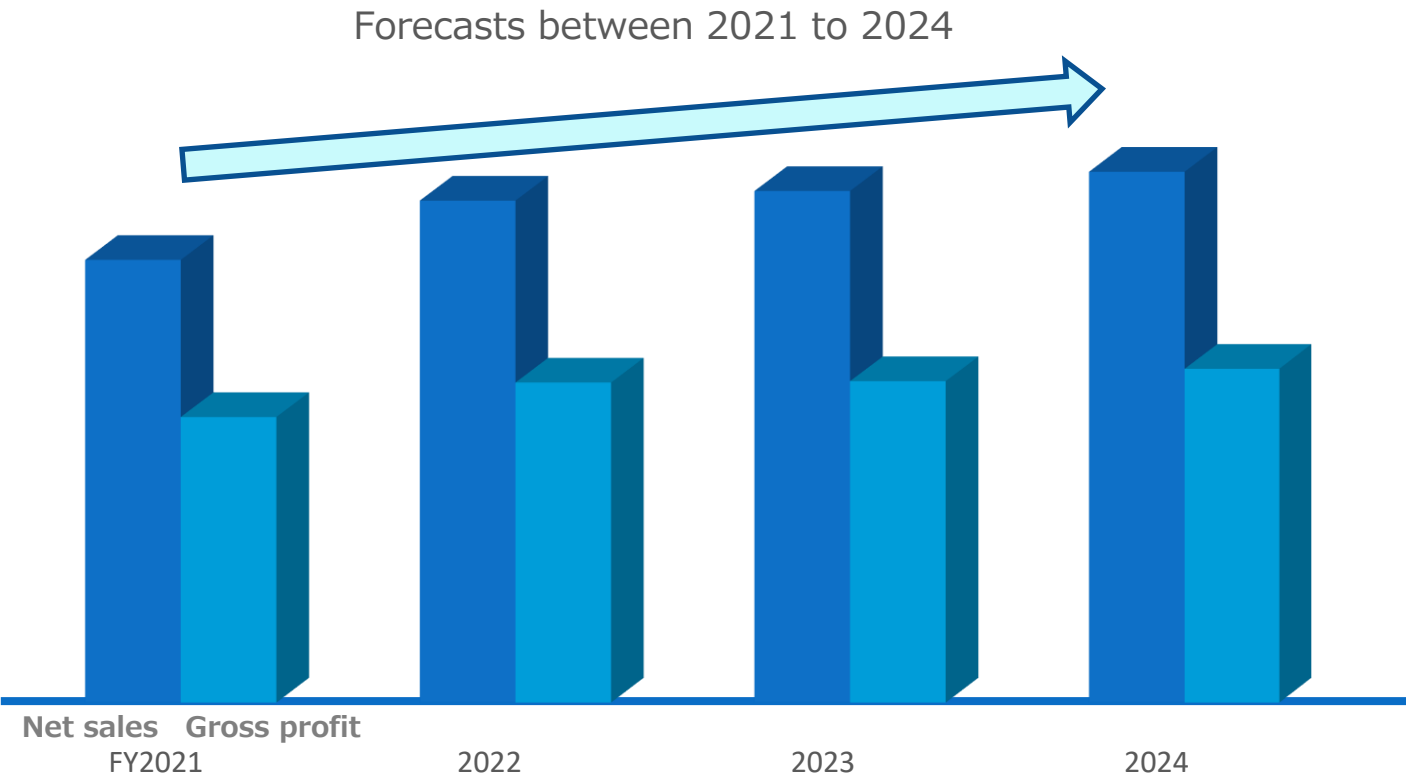
◆ Fungicide: Kaligreen (Green Product)



◆ Fertilizers



◆ **Estimated growth of Overseas business
in Midterm Business Plan (non-consolidated)**

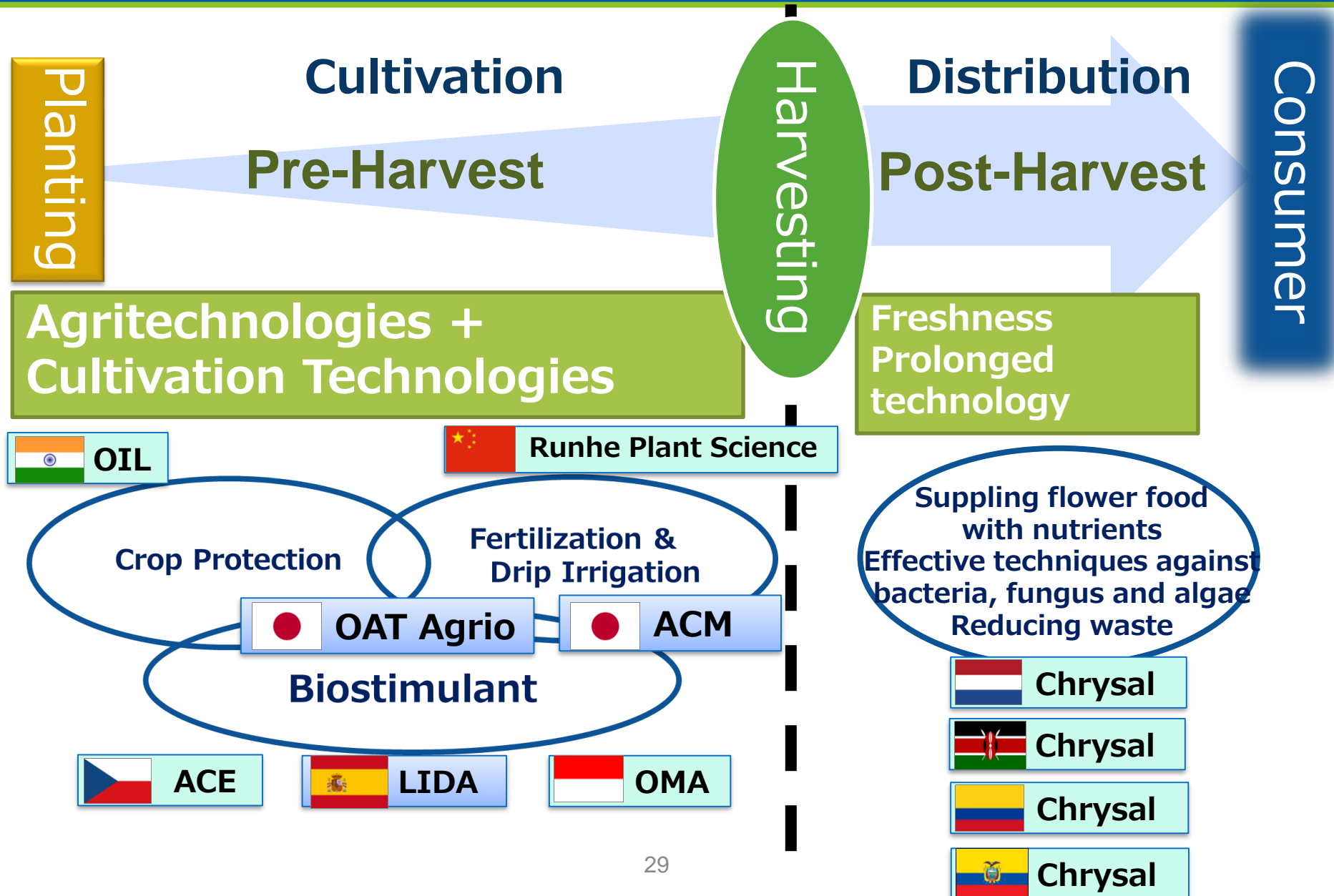


Results in 2021 vs. Plan in 2024
Sales 120% Gross Profit 117%

5. Pursuit the possible synergy in global base



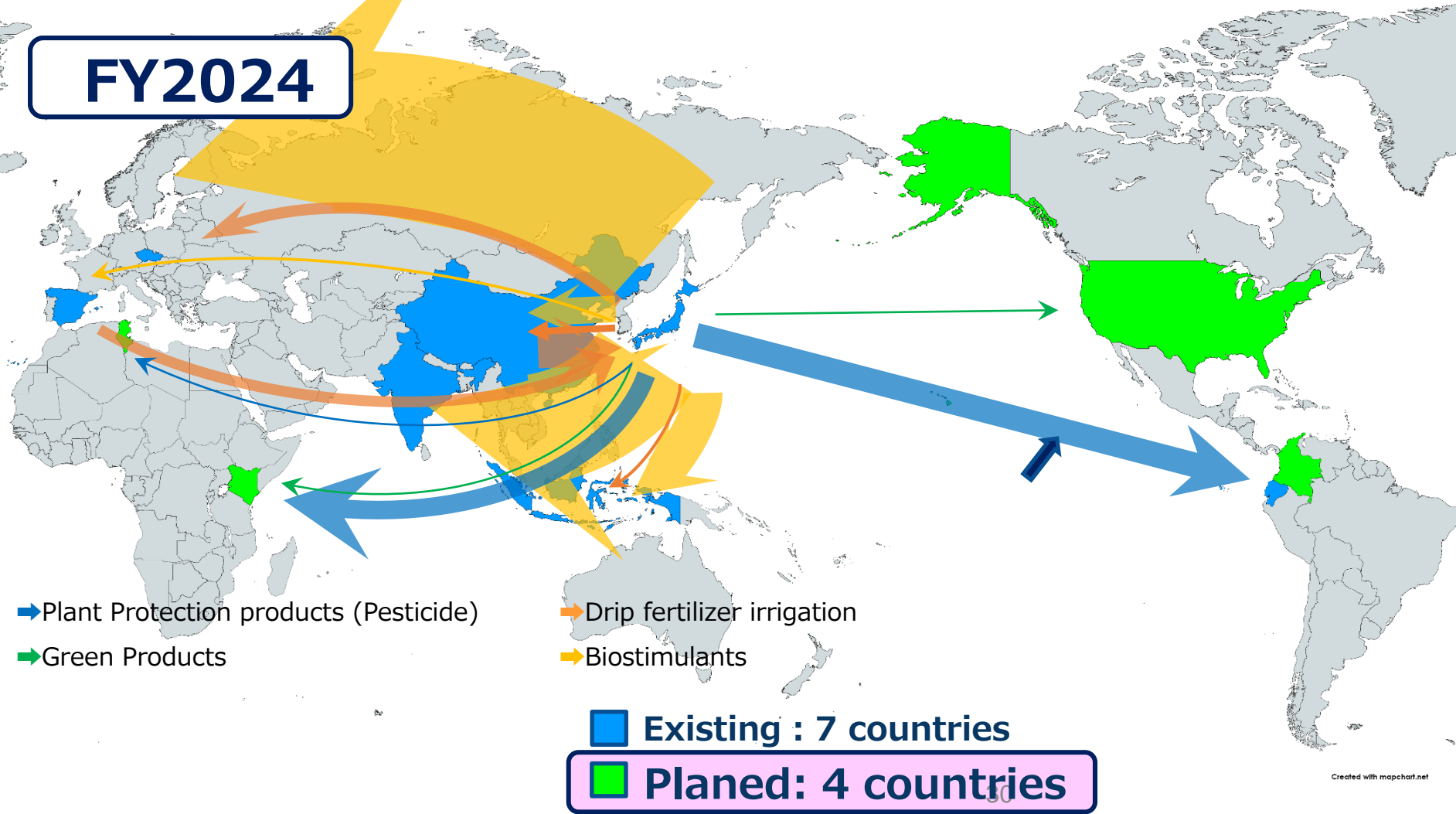
◆ OAT group involvement in agricultural value chain



◆ Synergy between OAT Group [FY2020 vs FY2024]

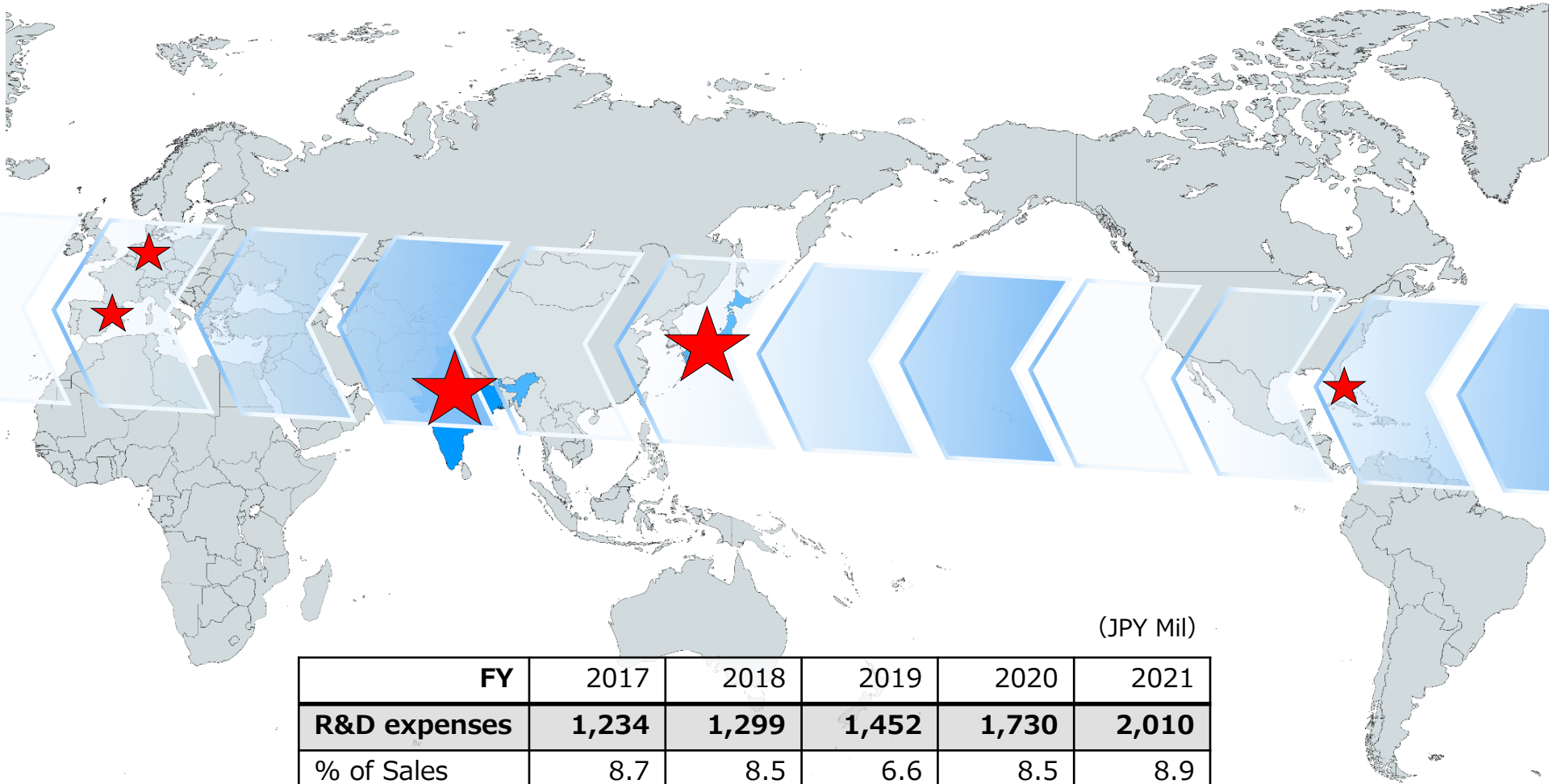


FY2024



Sales expansion Globally to 191% by leveraging the strengths of each group company's products and sales bases Sales

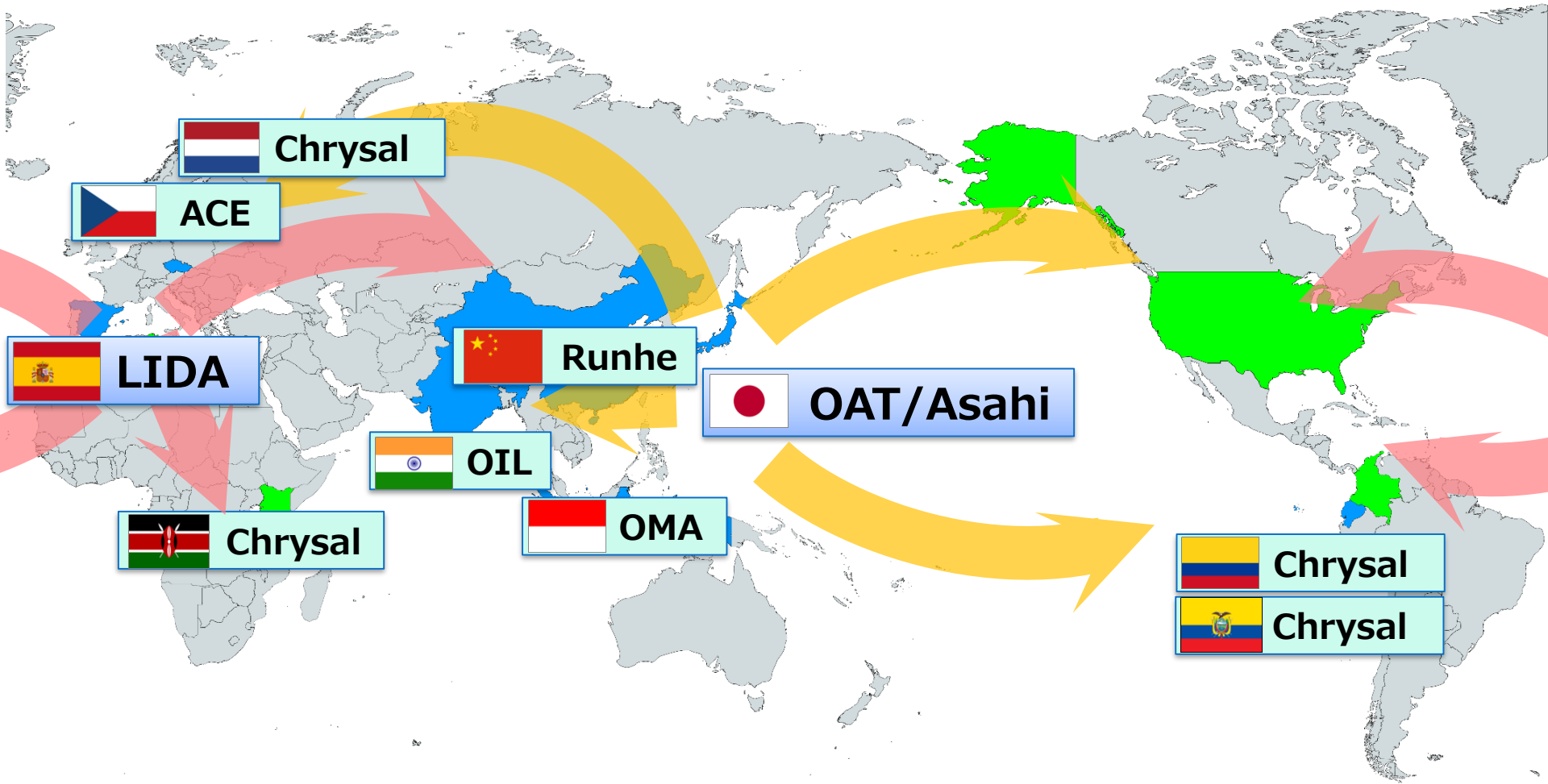
◆ R&D Network



Created with mapchart.net

Accelerating R&D activities in 5 different regions globally, by investing about 10% of sales for R&D.

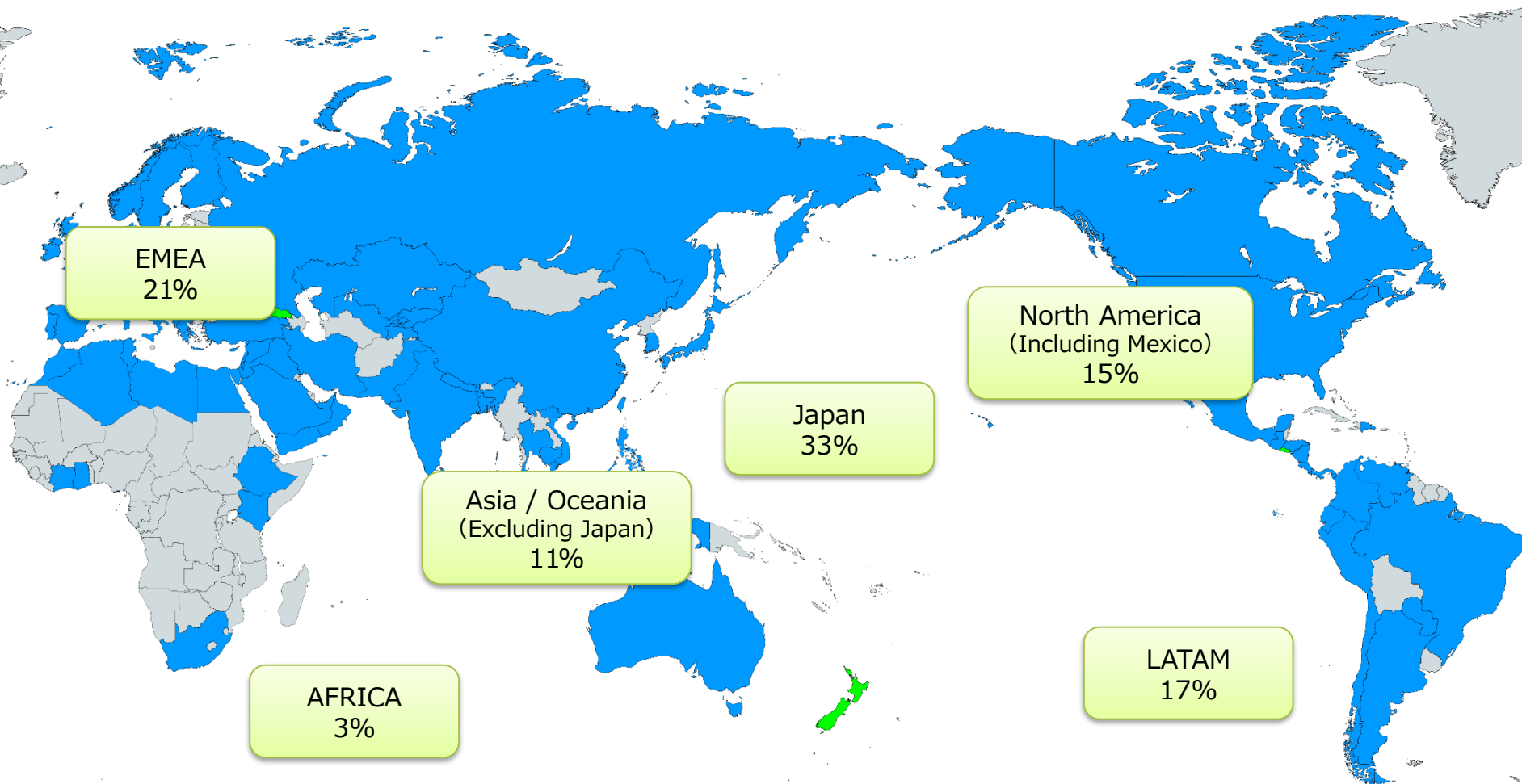
◆ Developing Biostimulant business Globally



Created with mapchart.net

Expanding the sales globally supplied from Spain and Japan

◆ Percentage of Sales by Region



Created with mapchart.net

Sales in 5 Continents, 89 Countries

6. Building the corporate culture and challenge for the new business

➤ The need & value of Corporate Culture under COVID-19

In order to dispel anxiety over the uncertainty of the future under COVID-19, OAT Agrio will focus on “Cultivation”, which OAT Agrio has engaged and accumulated ample of know-how & experiences. And we decide “To deliver and encourage the people in a world about the fun and the challenge of Cultivation, by experiencing it at first hand” as OAT’s Corporate Culture.

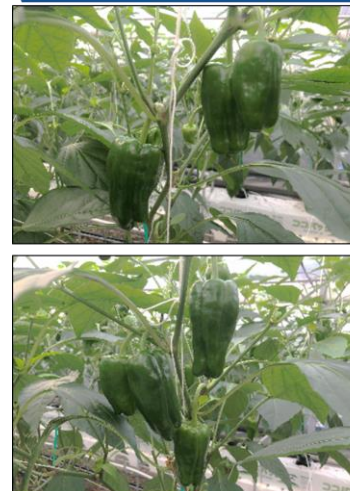
“Cultivation” is OAT Agrio’s area of excellence, a competitive advantage in the market, and a strength that cannot be matched by our competitors.

This Corporate Culture, focusing on our strengths, is a concept of value shared with all employees, and the code of conduct.

【Growing strawberries】



【Growing green peppers】



【Growing peas】



◆ Changing market environment

- OAT challenges to develop new D2C business
- Changing lifestyles under the COVID-19
- Increase the demand for stay-at-home consumption

Due to longer periods of time spent at home because of COVID-19, home gardening and home vegetable gardens are attracted attention, and more and more people have begun to grow vegetables, fruit and flowers in their gardens and balconies. In Japan, DIY stores and online horticultural shops are reporting increase of sales, and a survey has shown that sales were 160% compared to the previous year.

【Growing cherry tomatoes】



【Growing pak choi】



- ◆ Building the corporate culture and challenge for the new business

➤ Developing the stay-at-home market under the COVID-19

"Corporate Philosophy"
Agritechnologies and sincerity

"Corporate Philosophy"
+
"Corporate Culture"
Agritechnologies and sincerity
Spreading the joy of cultivation

Existing business

Increasing yield
Stable of cultivation
Quality improvement



Professional farmer

Number of people engaged in
agricultural : 1.68 mill. people
Average age: 67 years

New D2C business

The joy of
cultivation &
harvest



The joy of
delicious tastes &
beautiful form

Non-farmer

Number of people using farm
or allotments: 3.6 mill. people

◆ ESG Management














Through ESG management, our group will promote business activities that could contribute to building a sustainable society.

The corporate activities of our group are itself an initiative toward the SDGs. In order to further improve the sustainability of our business, we will launch the following initiatives.

◆ To Do in the Future

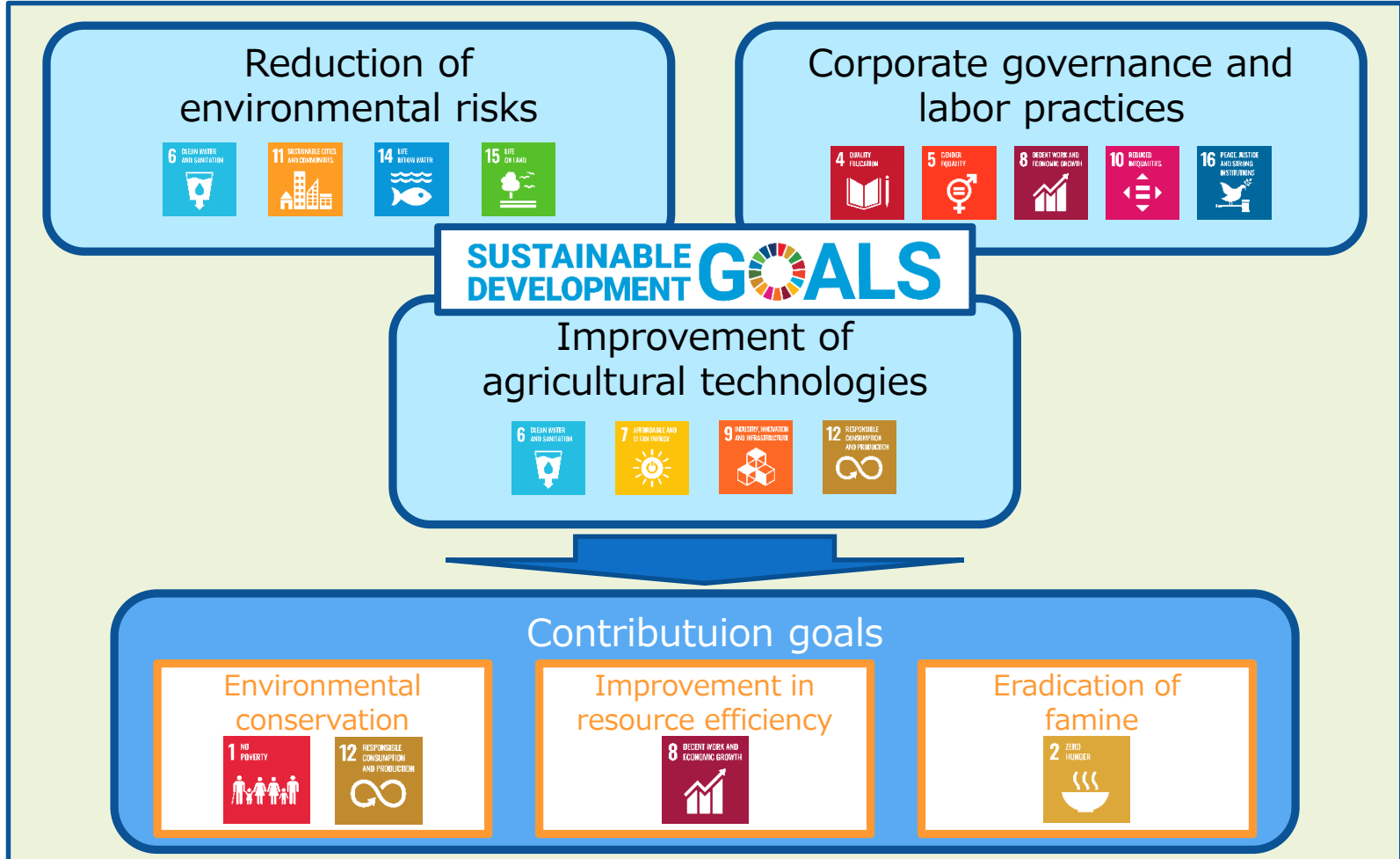
- TCFD (Task Force on Climate-related Financial Disclosures) (March 2022)
 - Evaluate the financial impact of climate-related risks and opportunities
 - Reflect the results in the Corporate Governance Code
- Carbon Neutrality
 - Calculate GHG (greenhouse gas) emissions and set reduction targets
- Prepare OAT Agrio Group "Sustainability Report" (March 2022)

◆ ESG Management, CSR and SDGs

ESG	Materiality	KPI	SDGs
E En- viron- ment	Reduction and recycling of waste	Reduction of plastic waste and production loss Practical application of recycling of industrial raw materials	     6.3、6.4、7.2、11.6、12.5、14.1、14.3
	Use of renewable energy and reduction of greenhouse gases	Promotion of use of renewable energy	
	Exhaust and effluence management	Management of factory water consumption and effluence	
S Socie-ty	Working environment	Safe and accident-free workplaces	     4.4、5.5、8.5、8.8、10.2、10.3、12.2
	Product quality	Enhancement of quality assurance system	
	Personnel	Establish new ways of working and assessment system Compliance with and promotion of Act on Promotion of Women's Participation and Advancement in the Workplace	
	Personnel training Human capital development	Support for acquisition of qualifications Theme based study programs	
	Supply chain Management	Develop distribution system Responsible procurement of raw materials	
G Gover- nance	Corporate Governance	Enhancement of governance and internal control Business transparency through information disclosure Promotion of stakeholder engagement	   17.17
	Risk Management	IT control	
	Compliance	Promotion and renewal of ISO9001 quality management	

We are actively engaged in ESG management, including environmental protection and diversity promotion.

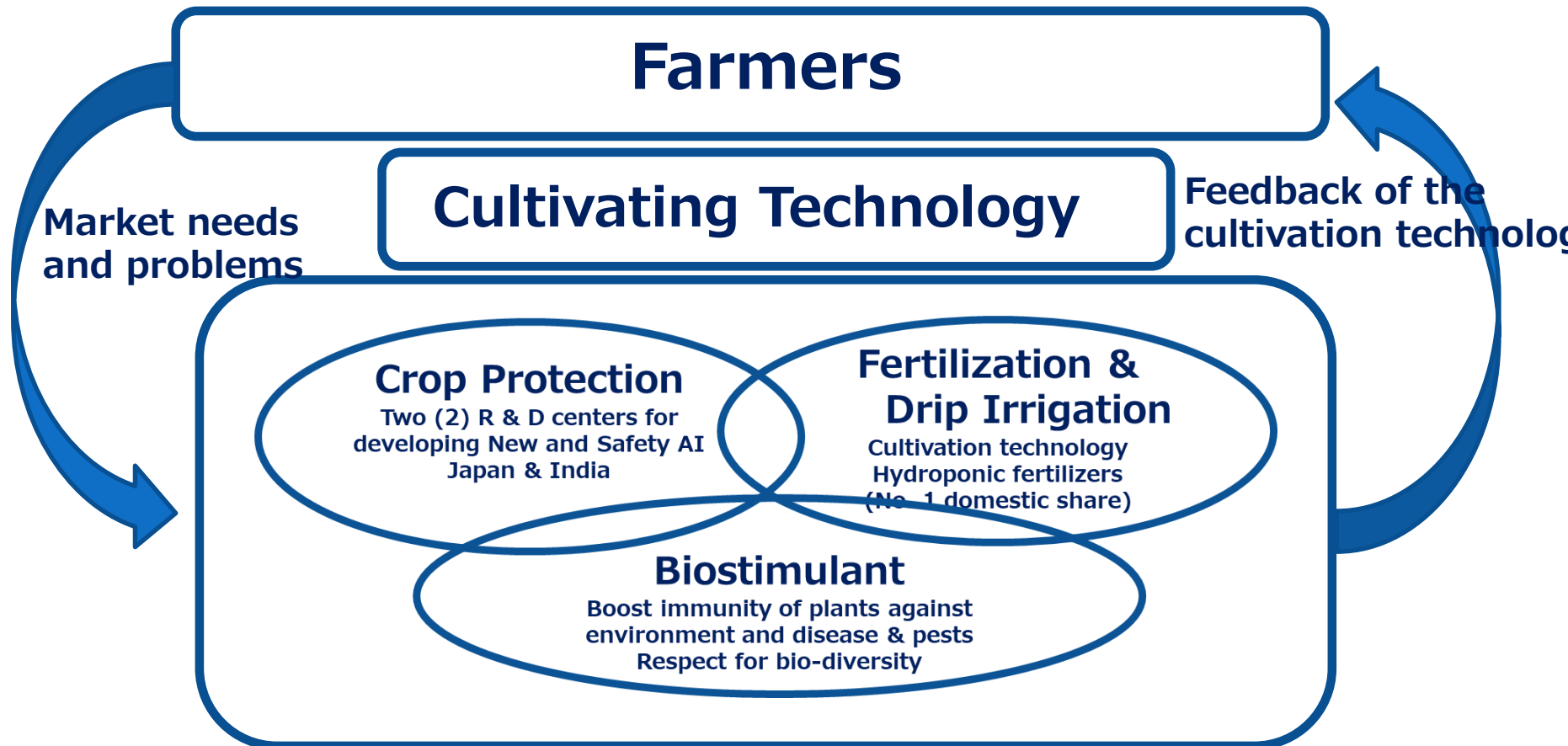
◆SDGs Activities



The corporate activities are itself an initiative toward the SDGs. The spread of "agri-technology" will lead to "environmental protection," "improvement of resource efficiency," and "eradication of hunger."

◆ The Role of OAT Agrio group

OAT Agrio group aims to spread the agritechnology in a world to achieve the corporate philosophy.



◆ Our Vision



**A company that challenges cultivation
by employees themselves in order to
spread Agritechnology to the world**



“Corporate Philosophy”

We contribute to the people in the world with our agritechnologies and sincerity.

“Realization of Corporate Philosophy”

We aim to become a company that spreads “agritechnologies” widely throughout the world through “cultivation”.

“Corporate Culture”

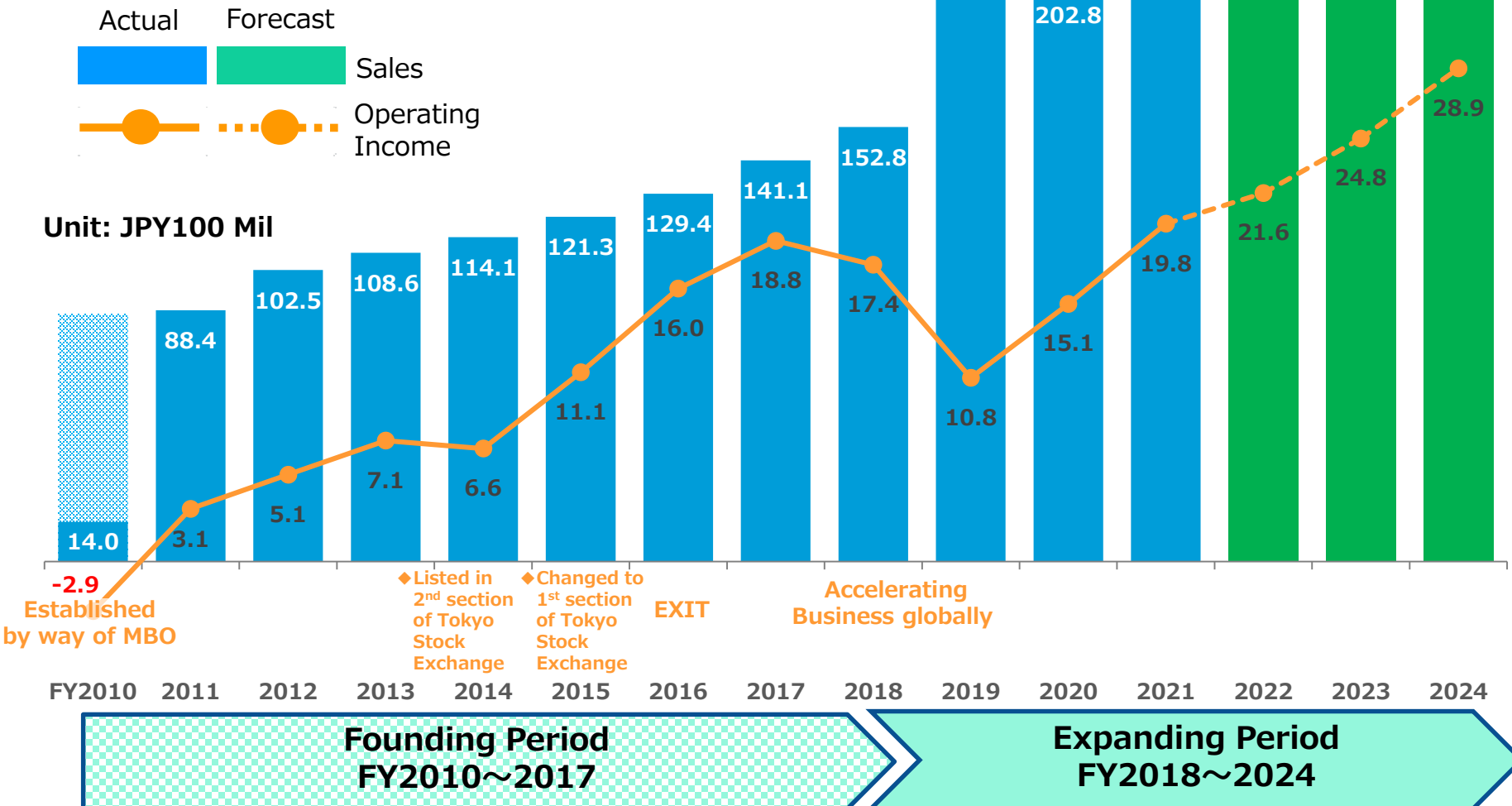
We share the fun & the challenge of cultivation from our experiences with the world.

◆ Net Sales and Operating Income from 2010 to 2024

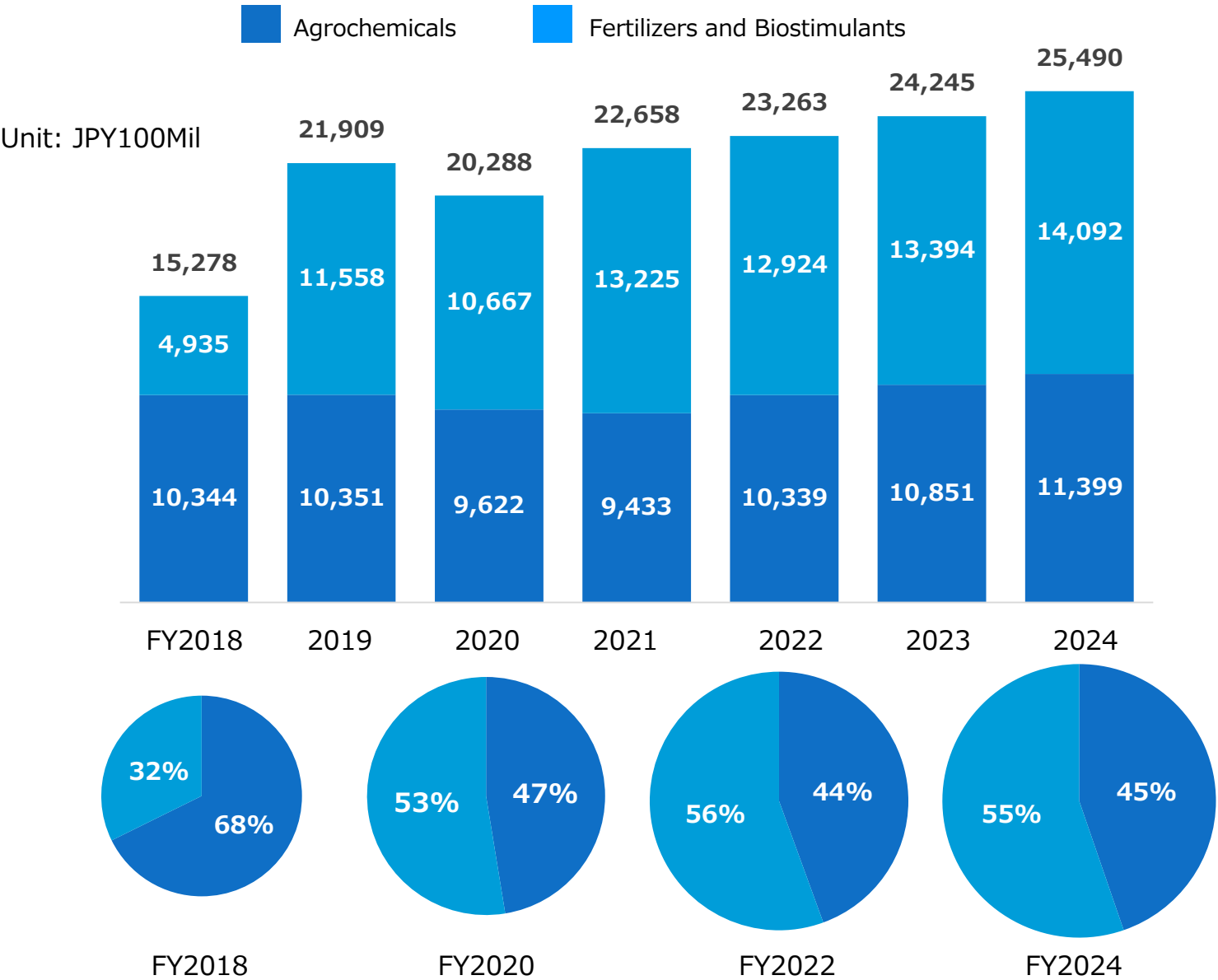
CAGR (Forecast) between FY2011-2024

Sales: 8.5%

Operating income: 18.7%



◆ Plant Protection Products, Fertilizers & Biostimulants



- This document describes the outlook for the Company and the Group, plans for the future, etc. These forward-looking statements are based on current assumptions about future events and trends, and there is no guarantee that these assumptions are accurate. Due to various factors, actual results may differ materially from those described in this document.
- Information about companies other than our company relies on publicly known information.
- This document does not constitute a solicitation for an application for acquisition of any securities, an application for sale or a solicitation for an application for purchase (hereinafter referred to as "solicitation act"), nor is it intended for solicitation, and any contract, Nor can it be the basis for an obligation.