



Domestic Processed Food Business

We will increase the volume of vegetables we supply and contribute the longer, healthier lives of Japanese people by offering various food and beverage products.

Masanori Miyachi
Executive Officer
Marketing Division Director

Performance trends (FY2019)

*After elimination and adjustment of inter-segment transactions

Revenue **132.5 billion yen**
Down **0.3%** year on year

Core operating income **112 billion yen**
Up **0.3%** year on year

Recognition of general business conditions

As Japan faces advanced population aging, how society extends healthy life expectancy has become a critical issue. The Domestic Processed Food Business will contribute to longer, healthier lives by providing various food and beverage products for a diverse range of consumers, from children to the elderly, to promote increased vegetable consumption and resolve the issue of a lack of vegetable consumption by Japanese people.

Results and Issues to be addressed

FY2019 resulted in decreased revenue but increased profits. Revenue was down 0.3% year on year to 132.5 billion yen while core operating income was up 0.3% year on year to 11.2 billion yen.

Although the vegetable beverages market scope declined compared to the previous year due to a temporary drop in demand attributable to poor weather, tomato juice sales continued to grow. In the Food - Other category, we held

Strength

- Kagome's brand power cultivated over our 120-year history
- Ability in product development that doesn't rely on additives.
- Ability in ingredient procurement to incorporate nature's blessings into our products
- Ability in sales to approach various markets, from dry and chilled products to fresh produce, prepared dishes, and gifts

Opportunity

- Diversification of health awareness
- Need for simple meal preparation for seniors and families with both parents working
- Increased dining out and consumption of prepared foods driven by growing preferences for alternatives to at-home meals

Weakness

- Product development restrictions related to reliance on natural produce for raw materials
- Dispersal of marketing investments due to diverse business structure
- Decline in relative value of Kagome products due to the emergence of high-quality private brands

Threat

- Intensifying competition on health beverage market
- Skyrocketing raw materials prices due to global climate instability
- Accelerating decline in food expenditures due to population decline and population aging



Matters requiring focus in the mid- to long-term

the food tasting event Rice Omelet Stadium 2019, which featured delicious rice omelets from around Japan, as part of efforts to increase demand for tomato ketchup. We also launched sales of a vegetable stock seasoning for professional-use to support vegetarian and vegan menu options. Our Vegetable Stock Seasoning has been highly praised by customers. With online sales, we expanded sales of Tsubuyori Yasai Vegetable Juice and supplements registered as Foods with Function Claims.

In FY2020, we will maximize sales for all businesses in Japan through our Let's Eat Vegetables Campaign. For beverages, we will launch and grow sales of Yasai Seikatsu SOY+, which combines vegetable and fruit juice with soy milk. We will continue to launch to market beverages that respond to generation-specific health needs as we strive to develop customers in new age groups. For food, we will strengthen promotions for vegetable consumption across all segments: consumer use, food service use, and fresh produce. We also will enhance vegetable and vegetable stock-based menu proposals for the home meal replacement and food service industry. For the home cooking market, we will strengthen marketing promoting western cuisine and proposing menus linked to fresh tomatoes to target the increased opportunities for home cooking driven by trends towards cost consciousness.

Looking at our Second Mid-Term Management Plan, progress for beverages and direct marketing sales is largely on par with plans but the food segment seems to be struggling overall. Kagome will strive for growth by and become a true vegetable company by succeeding in our Let's Eat Vegetable Campaign. Through various strategies, we will generate demand for vegetables and maximize sales for all Japanese businesses.

Vegetable beverages have highs and lows in demand. If consumer consciousness related to consuming vegetables wanes, demand for vegetable beverages declines. We must solidify our demand foundation and widely engage in like-minded parties as we work united as a company towards this initiative. In 2018, vegetable consumption in Japan was approximately 290g per day and total consumption was 13.97 million tons. Of this total amount, Kagome supplied 620,000 tons (4.4%). This ratio equated to 145.3 billion yen in sales from business in Japan. If vegetable consumption increases to 350g per day, total consumption would increase to 16.86 million tons, resulting in increased sales of approximately 30.0 billion yen assuming our current provision rate of 4.4%. We will address Japan's vegetable consumption deficiency with strong determination and commitment to achieving corporate growth by resolving society's problems.

✓ Specific measures to address weaknesses and threats

- Create database using past product development failures and important data as knowhow
- Prioritize marketing investments based on clarification of priority domains and direction
- Use natural raw materials and additive-free technology to distinguish ourselves from competitor private brands and health beverages
- Disperse procurement, adopt efficient lines, and engage in cost reduction activities to prepare for risks associated with climate change and price fluctuations
- Amid declining food expenditures in Japan, secure loyal customers through online and mail-order sales

✓ Impact of COVID-19 pandemic

As people are still being asked to stay at home to prevent the spread of the virus, sales of consumer products such as tomato ketchup are growing at supermarkets due to the acceleration of stay-at-home consumption. On the other hand, sales for certain beverages and products for institutional and industrial use declined due to lower sales at convenience stores in office districts as a result of a shift to telecommuting and the contraction of food service markets due to stay-at-home measures. This has resulted in lower sales for some beverages and decreased sales of commercial products. To respond to changes in demand, we are operating certain manufacturing lines at full capacity. Due to production capacity limits, there is a possibility that we will be unable to meet dramatic increases in demand but we will continue to propose food consumption that is aligned with new lifestyle norms.



Domestic Agri-Business

We will expand profits and contribute to the development of Japanese agriculture by building a new business model and strengthening our procurement platform to support our further growth as a vegetable company.

Satoshi Yamaguchi
President & Representative Director and
Vegetable Business Division Director

Performance trends (FY2019)

*After elimination and adjustment of inter-segment transactions

Revenue **9.6 billion yen**
Down **14.3%** year on year

Core operating income **-0.2 billion yen**
Unchanged year on year

Recognition of general business conditions

The Domestic Agri-Business, which we started in 1998, sells fresh tomatoes cultivated year-round at large-scale vegetable farms to mass retailers. In 2014, we started production and sales of baby leaf lettuce as part of business activities to transform from a tomato company to a vegetable company. While net sales since FY2015 have grown to surpass 10 billion yen, the more we engage in business expansion, the clearer it has become that climate and other factors causing market price fluctuations for fresh tomatoes

can have a significant impact on the Domestic Agri-Business. Currently, we are engaged in earnings structure reforms, including initiatives to control supply volume in response to fluctuating fresh tomato market prices, as we aim to establish a new business model and strengthen our procurement platform to support further growth as a vegetable company.

Strength

- Established as a national brand for fresh tomatoes
- Advanced tomato breed development abilities and processing technology
- Kagome's own logistics network that enables stable deliveries year-round and a sales network comprising 100,000 stores nationwide

Opportunity

- Government promoting agricultural industry growth and stimulation measures
- Lack of agricultural successors and increase in dilapidated farmland
- Increased need for processed vegetable products due to labor shortages

Weakness

- Lack of prediction accuracy and ability to adjust supply/demand in response to market price fluctuations for fresh tomatoes
- Lack of consumer recognition for new fresh produce such as baby leaf lettuce
- Lack of breeds and production sites for vegetables other than tomatoes and baby leaf lettuce

Threat

- Intensifying competition among vegetable processing businesses
- Accelerating population aging resulting in decrease in farm operators
- Global warming and other climate change resulting in decline in suitable cultivation land and emergence of new pests



Results and issues to be addressed

In FY2019, revenue was down 14.3% year on year to 9.6 billion yen and core operating income was -0.2 billion yen, representing a third consecutive fiscal year of operating losses.

Market prices for fresh tomatoes have declined since 2017 due to a continued state of oversupply driven by an increase in large-scale glass greenhouses, among other factors. Amid such conditions, we purposely reduced supply volume between May and June, when market prices tend to drop, to secure increased income for the second quarter (nonconsolidated). However, losses increased due to the inability to secure sufficient procurement volume from August through November, when market prices tend to rise, due to delays in forming summer and autumn agricultural lands.

We will aim to return to a profitable state in FY2020. To address intensifying competition and oversupply on the fresh tomato market, we will implement additional measures, such as linking procurement prices to market prices and promoting cost reductions at agricultural sites. As we aim to become a vegetable company, this fiscal year we will focus on creating a structure for the seamless provision of various vegetable products, from fresh produce to processed goods. As part of this initiative, we will search for new vegetables and increase our processing formats. We will engage in open innovation and form external partnerships to increase the speed of our initiatives. We also will address climate change risks by strengthening our platform for the stable provision of raw material vegetables and fresh produce in Japan.

Matters requiring focus in the mid- to long-term

Fresh vegetables business

We will reduce volatility in the fresh vegetables business and stabilize revenues by enhancing fresh tomato QCD and expanding sales routes and reducing costs for baby leaf lettuce. For fresh tomatoes, we will advance the shift to delicious-tasting breeds and restore our competitiveness at mass retailers while continuously engaging in revenue improvement policies, including linking procurement prices to market prices and expanding farm-direct sales.

Vegetable processing business

By increasing vegetables that promote a seamless supply structure for everything from fresh produce to processed goods, we will increase our ability to use vegetables to provide vegetable solutions that meet the needs of our customers. In October 2019, we launched sales of Kalish®, a new leafy vegetable developed in collaboration with Nagano Prefecture. Kalish®, which is derived from kale and daikon radish, is a new leafy vegetable containing high levels of the popular health compound sulforaphane. We will follow up Kalish® by continuing to develop new fresh vegetables as we strive to create engines for new growth.

Domestic procurement of source vegetables

We will work to stabilize our procurement of source vegetables in Japan by strengthening every aspect of our value chain from seeds to produce and by responding to changes in Japan's agricultural industry. We will respond to farmer aging and labor shortages and strengthen our seed collection and sapling cultivation functions, the foundation of our domestic source vegetables procurement, by collaborating with overseas subsidiaries to build a global seed collection network.

Specific measures to address weaknesses and threats

- Use latest technology to increase accuracy of harvest predictions, research and development in areas such as harvesting robots
- Strengthen ability to control yield without engaging in selloffs
- Consolidate knowledge and human capital cultivated through fresh and commercial tomato procurement, provide vegetable solutions that take advantage of our existing domestic sales network
- Create a network linking collaborative sales activities for consumer use, food service use, and agri-business (fresh vegetables) products with vegetable production sites and processing plants
- Partner with research and development department to develop new high-function vegetables

Impact of COVID-19 pandemic

As a future risk, there is a possibility that we may not be able to secure sufficient labor forces needed during harvesting and processing periods for produce such as tomatoes. However, we are working to strengthen our platform for domestic source vegetable procurement and for ensuring the stable supply of fresh vegetables.



International Business

We will contribute to solving global food shortages by making the great taste and value of tomatoes and vegetables available to people all over the world.

Norito Ebata

Executive Officer, Director of International Business Division, General Manager, Global Tomato Business Department

Performance trends (FY2019)

*After elimination and adjustment of inter-segment transactions

Revenue **37.5 billion yen** **Down 4.8% year on year**

Core operating income **0.8 billion yen** **Up 49.1% year on year**

Recognition of general business conditions

By 2050, the world's population is expected to reach 9.8 billion people. With concerns that population increase will lead to food shortages, demand for tomatoes, the vegetable most consumed around the world, is expected to increase. In this environment, we are engaging in the International Business based on a vertically integrated business model spanning from the development of tomato seeds and agricultural production to product development, processing, and sales.

Results and issues to be addressed

In FY2019, revenues were down 4.8% year on year to 37.5 billion yen while core operating income was up 49.1% year on year to 0.8 billion yen, resulting in decreased revenue but increased income.

In recent years, unbalanced demand and supply has resulted in a decline in tomato market prices. In particular, conditions have been difficult in the primary processing domain. On the other hand, with increasing demand from

Strength

- Reliable quality unique to Kagome, from seed to table
- Ability to propose solutions to food service chains in North America, Asia, and Europe
- World-class global primary processing network

Weakness

- Lacking in total cost competitiveness (including logistics)
- High level of dependence on specific high-volume customers
- Lack of brand recognition on consumer market (B to C)

Opportunity

- Advancing food globalization due to global expansion of pizza chains and fast food chains
- Growing needs for simplified foods and takeout due to women's engagement in the workforce, low birth rates, and population aging
- Population growth and economic development in major tomato consumer regions such as India, Middle East, North Africa, and West Africa

Threat

- Increase in raw material production losses due to global climate change
- Emergence of structural market decline due to growing competition for primary processed tomatoes
- Damage to tomato farmland due to worsening water shortage in California, the world's largest producer region



customers for cost reductions, we are faced with the need to pursue aggressive structural reforms. In response to these conditions, in FY2019 we reviewed the global tomato business to identify and eliminate unprofitable transactions business as well as implement business management reforms. We feel that we have achieved a certain degree of success. In particular, we worked to reform management of agricultural operations involving an advanced degree of difficulty. Among these efforts, our greatest achievement thus far has been the stabilization of profitability at Kagome Australia Pty Ltd. In the global consumer business, we are working to increase sales by expanding sales routes. Led by Kagome Nissin Hong Kong's efforts to expand into Hong Kong and Chinese markets, we will enthusiastically engage in enlightenment activities to establish Kagome brand value in regions such as Taiwan, Singapore, the ASEAN region, and Mongolia.

Expanding on initiatives from FY2019, in FY2020 we will aim to establish a structure for focusing on highly profitable domains and promote advanced structural reforms.

Matters requiring focus in the mid- to long-term

Achieve profitable growth for the global tomato business by strengthening cost competitiveness

Cost competitiveness is essential to elevating overseas Group companies from a focus on profit stabilization

to a growth stage. In FY2020, we started a Cost Competitiveness Improvement Project based on a company and Group-wide collaborative effort so we can strengthen cost competitiveness by applying Japan's cost reduction knowhow to group companies.

Expanding vegetable beverage business in Asia

We will create demand through Japanese unique culture of consuming vegetables through juice. We will use our external value chain to achieve speedy sales growth and establish Kagome brand value in the Asia region. In addition to sales in the Taiwan, Hong Kong, and China areas, we will strengthen market development activities in East Asia and the ASEAN region to become a leading company for vegetable juice in Asia.

Focus on quality to strengthen global business platform

Kagome has a high-level quality assurance structure. We will integrate this structure into our overseas Group companies to establish a Group quality assurance structure. Establishing this quality assurance structure will reduce quality loss and promote cost reductions. We will also integrate the 5S and other education tools used at Japanese production sites to achieve "Quality First" management that is backed by our Group's unique quality assurance standards.

✓ Specific measures to address weaknesses and threats

- Develop value-added products, strengthen solutions proposal abilities and Group partnerships, develop new customers
- Diversify raw material centers, optimize processing scope, strengthen cost competitiveness, use climate data analysis to establish advanced tomato cultivation technology
- Farm management support business for commercial tomatoes based on AI developed in collaboration with NEC
- Form brand strength by enhancing sales promotions for the vegetable beverage business in collaboration with Nissin Foods (H.K.) Co., Ltd.
- Create commercial tomato cultivation platforms, manufacture and sell processed tomato products in future growth markets Senegal and India

✓ Impact of COVID-19 pandemic

With governments placing restrictions on the food and beverage industries of their respective nations, market conditions remain unclear. In the US, business to major food services was impacted by lower sales. Moving forward, we expect sales to decline due to a stagnant food and beverage industry. And like conditions in Japan, decreased opportunities to engage in sales activities could result in new product sales and new customer numbers that fall below plans. However, we will aim to establish a structure for focusing on highly profitable domains and promote advanced structural reforms.

Innovation (Research)



We are engaged in research themes to promote the resolution of social issues using the power of vegetables. We will contribute to sustainable growth for the Kagome Group by linking those results to business operations.

Hiroyuki Ueda
Executive Officer
Director of Innovation Division

Policy of Innovation Division

- Develop ability to target meaningful research themes towards becoming a vegetable company based by identifying social environmental changes and technology advancements 10 and 20 years into the future.
- Maintain strong awareness of strengths and weaknesses, continuously embrace open innovation that widely engages internal and external resources.
- Embrace the mentality of proactively learning from mistakes and constantly taking on new challenges to increase the level of research results.

processing technologies to maximize the flavor and aroma, properties, nutritional value, function, and taste of tomatoes and vegetables. In addition to internal R&D, in this field we also proactively pursue technology partnerships with other companies.

(3) Functionality research

We engage in functionality research mainly for green and yellow vegetables, registering Foods with Function Claims, and disseminating health-related information. In FY2019, we demonstrated that sulforaphane glucosinolate reduces liver damage in middle aged and elderly persons and helps improve blood ALT scores (one of the markers indicating liver health status).

(4) Assessment of product quality and safety

To deliver safe, reliable products to our customers, we are strengthening our basic technologies for assuring safety throughout the supply chain starting in the fields, including conducting activities to predict risks, acquiring analysis and evaluation technology, and conducting raw material safety assessments.

(5) Protection and use of intellectual property

To maintain continuous competitiveness, we are working to strengthen our intellectual property foundation (acquisition, protection, and prevention of obstruction and litigation) by engaging in invention and discovery based on in-house R&D as well as periodical searches of other companies' patents. We also launched initiatives related to the effective use of our retained IP outside the company.

Descriptions of each research project

(1) Research into variety and agricultural technologies

We are engaged in accumulating tomato genetic resources, developing new varieties, and researching cultivation technologies. In FY2019, we filed a total of 6 Plant Variety Registrations, including for a fresh tomato variety focused on delicious taste and seedlings for gardening. We also enhanced and promoted research in the vegetable domain as part of our initiative to become a vegetable company.

(2) Research into ingredient and processing technologies

We engage in activities to increase product value, including developing new ingredients and advanced

Promotion of open innovation to help resolve social issues

Joint research with the Hokkaido Agricultural Research Center, NARO Succeeded in developing a tomato with *globodera rostochiensis* resistance and density reduction effect

Globodera rostochiensis (golden nematode) is a foreign pest first confirmed in Japan in 1972 in Hokkaido. This pest lives in the roots of nightshade plants such as potatoes and tomatoes, preventing their proper growth. In Hokkaido, preventing the spread of and eradicating golden nematode is a major agricultural issue. Kagome applied our more than 50 years of experience in tomato seed development to develop a breed of tomatoes for processing that retain resistance to golden nematode. Working with the Hokkaido Agricultural Research Center, NARO, we confirmed that not only with this breed prevent the settling of golden nematode, it also has the effect of reducing golden nematode density in soil.



Current breed cyst formation status (Potato golden nematode)
Yellow arrow indicates cyst

COVID-19 causing renewed focus on immune system strength

Relationship between vitamins absorbed through vegetable consumption and immune system strength

There is a deep link between immune system strength and vitamin consumption. The MHLW recognizes seven types of vitamins as being allowed to using the language "nutritional elements that help maintain healthy skin and mucus membranes" as labeling on a dietary supplement. Those seven vitamins are A, C, B1, B2, B6, niacin, and pantothen.

Japanese people get most of their vitamin A (as β -carotene) and vitamin C from vegetables. Japanese people also consume 10% or more of their B1, B6, and pantothen from vegetables. Consuming a sufficient amount of vegetables is vital to maintaining immune system strength.

Through functionality research pursuing vegetable nutrition and physiological stimulation, Kagome is aiming for the resolution of social issues using the power of vegetables.

Contribution of vegetables in the consumption of vitamins related to the immune system

- Vitamin A (as β -carotene): 53.1% (Rank: 1)
- Vitamin C: 40.0% (Rank: 1)

Source: National Health and Nutrition Survey (2018)



Message from the Director of Innovation Division

The difference between research activities and other operations is that, with research, there is high level of uncertainty and the road to beneficial results can be quite long. This is why we establish output and delivery deadlines (milestones) for each theme characteristic and why it is important that we evaluate the external environment and implement course correction for our research themes. Research activities also require flexible and creative human resources who are capable of adapting to change. We believe it critical that we foster the development of young personnel who can act as game changers while adapting to new rules.

Recent research findings

Sep. 2019

Savior from pests causes serious damage to the Hokkaido farming industry. Success developing tomato with resistance and density reduction effect on *globodera rostochiensis*. Enables agricultural expansion for commercial tomatoes and contributes to sustainable agriculture (Presented at the 27th Japanese Nematological Society Conference)

Nov. 2019

Demonstrated that the functional ingredient sulforaphane glucosinolate reduces liver damage in middle aged and elderly persons and helps improve blood ALT scores (one of the markers indicating liver health status). (Presented at the 7th International Conference on Food Factors)

Nov. 2019

Demonstrated that combined consumption of *Lactobacillus brevis* KB290 (Labre lactobacillus) and β -carotene improved stomach condition (stomach pain, bowel movement frequency) in otherwise healthy people suffering from irritable bowel syndrome with diarrhea (IBS-D). (Presented at the 7th International Conference on Food Factors)