

Using food as a means to resolve social issues, we aim to be a "strong company" capable of sustainable growth.

Naoyuki Terada, President & Representative Director

and formulated a new Mid-term Management Plan (2016-

Naoyuki Jerada

Mid-Term Management Plan and Long-Term Vision

Kagome's origins lie in the company policy of "Japanesestyle collaboration" that was formulated in 1962. Ever since establishing the company, Ichitaro Kanie, the founder, has continued to repeat these words to express the meaning of "everyone working in collaboration for the development of the company." In 2000, as we were about to enter the 21st century, we redefined this policy and, drawing from many of Kagome genes including appreciation, harmony, creation, nature-orientedness, Kagome quality, and fairness and transparency, established "appreciation," "nature" and "corporate openness" as the corporate philosophy that forms our management spirit. By making this corporate philosophy and our brand statement (our promise to society and consumers) of "True to Nature, the Flavor of Kagome" that we formulated in 2003 central to our management, we have contributed to people's healthy diets by developing and providing products using the value of tomatoes and more of nature's bounty.

However, 2014, the year I took office as president, was a critical year for our company. Our core domestic vegetable beverage business suffered sluggish sales, and external factors such as the depreciation of the yen caused a rise in the prices of raw materials. For our company, which relies on overseas countries for many of our raw materials, this situation resulted in a significant reduction in profit due to increased costs. Under these circumstances, we spread crisis awareness within the company and embarked on reforms to lower our break-even point, including improving marginal profits that were expected to decrease and reducing fixed costs, in order to overcome the crisis. These reforms were the company-wide measures to "reform our earnings structure" and "reform the way we work" that we commenced based on specific goals. In 2015, in order to further accelerate these reforms, we revamped our internal organizational structure

2018). The reason that Kagome found itself in a crisis situation, to put it simply, is that its structure was "fragile to change." I believed that if this was the case, rather than responding to changes after they occurred, we should instead overcome our weaknesses by forecasting the environment after ten years and anticipating changes in advance. When formulating the Mid-term Management Plan, we undertook in-depth environmental forecasting, but what these forecasts revealed was the escalation of domestic social issues. The market in Japan will inevitably shrink due to the declining population and the aging society. However, we concluded that the resolution of social issues is the role of corporate entities, and that this in itself presents major business opportunities. In particular, the "extension of healthy life expectancy," which is Kagome's biggest social issue and concern, is an issue that we must address first and foremost, while "turning agriculture into a growth sector," "regional revitalization," and "the global food shortage" are also recognized as issues closely connected to Kagome. We therefore decided that our Ten-Year Kagome Vision is "to become a strong company capable of sustainable growth, using food as a means to resolve social issues." This vision is also the response to the question of what Kagome should do to become a company that survives as the domestic market continues to shrink. In our efforts to achieve this Ten-Year Kagome Vision, we formulated the three-year Mid-Term Management Plan, presented mid-term key issues from the executive level down, and enabled each Division to further break down these issues to continue a cycle of PDCA throughout the company. We believe that the steady achievement of mid-term issues is the means by which we will reach our mid-term quantitative targets. Our goals in this Mid-Term Management Plan are to press forward with a transition to a profit structure and internal reforms aimed at becoming a company with a supportive and rewarding work environment. In addition, during fiscal 2016 we established the long-term vision of transforming from a "tomato company" to a "vegetable company" and also presented our aims beyond the Mid-Term Management Plan which lasts until 2018 within and outside of the company by announcing "net sales of ¥300 billion and operating income of ¥20 billion in fiscal 2025" as quantitative targets. Furthermore, in order to become a "vegetable company," we also set "raising the daily level of vegetable intake per person in Japan from 293g (*) to the target level of 350g or more

recommended by the Ministry of Health, Labor and Welfare" and "increasing the ratio of green and yellow vegetables supplied by Kagome in Japan from approximately 12% to 15% or more" as quantitative targets other than financial targets to clarify the direction we should take. Further, we have set "50% of the workforce consisting of women - from employees to executive officers" as a future long-term vision, and have begun to transform into a company that creates new innovation by promoting diversity.

> * From a Ministry of Health, Labor and Welfare National Nutrition Survey in fiscal 2015

Fiscal 2016 Results – Responding to Diversified Health Awareness

In fiscal 2016, as a result of our effective adoption of diversified health awareness and progress made with "reforming our earnings structure" and "reforming the way we work," we were able to achieve record net sales and profits at all levels. In the domestic processed food business, sales were favorable for its mainstay beverages. The launch of Tomato Juice, the first product to focus on the diversified health needs in vegetable beverages, as Japan's first "food with functional claims" that boosts highdensity lipoprotein (HDL) or "good" cholesterol, gained the support of consumers in their 40s who are concerned about their cholesterol levels and led to a 30% increase in sales over the previous fiscal year. "Yasaiseikatsu 100 Peel & Herb" and "Yasaiseikatsu 100 Smoothie," launched as beverages that offer a healthy refreshment and delay hunger while ensuring vegetable intake, expanded a new beverage concept aimed at working women in their 30s and 40s.

In the food business, although sales decreased and earnings increased due to a review of underperforming products, promotions of reduced-salt menu items that incorporate tomato ketchup and collaborative promotions of "Tomato Pazza," a menu

item in which seafood items are braised in tomato sauce in the institutional, industrial as well as consumer markets contributed to increased sales of "Tomato Sauce."

In the domestic agri-business, sales of high-lycopene tomatoes, which meet the needs of consumers seeking the efficient absorption of vegetable nutrition, grew to account for 40% of fresh tomato sales

Meanwhile, in the international business, despite higher earnings and profit in real terms excluding the impact of foreign exchange, earnings decreased and profit increased due to the depreciation of the yen. In line with the globalization of food, sales of culinary sauces for the global food service business benefited from the growth of its main customers such as pizza chains and Chinese fast food businesses, allowing Kagome Inc. to post increases in both earnings and profit. A subsidiary whose core business is the manufacture and sale of tomato paste also increased production volume as the result of greater harvests of tomatoes. The consumer business posted a net increase due to the 12-month consolidated results of Preferred Brands International, Inc., which became a consolidated subsidiary in



Mid-Term Management Plan 2016-2018

Reform our earnings structure

- Enhance the value of existing products New product innovation
- Focus on existing products and new
- Reduce product retention, disposal and
- Reduce fixed costs
- ⇒ KPI¹: Marginal income ratio / Ratio of break-even point to sales

Reform the way we work

- Ban overtime after 8 p.m. Introduce a telework system
- Introduce a stagger commuting hours system Selected under the Certified Health and
- Productivity Management Organization (White 500) program

MARROLLA

Fiscal 2018 Quantitative targets

Net sales	¥220 billion
Operating income	¥13.2 billion
Operating income ratio	6%
DOE	00/

- *1 KPI: Key Performance Indicator
- *2 Selected under the Certified Health and Productivity Management Organization (White 500) program by the Ministry of Economy, Trade and Industry and Nippon Kenko Kaigi. We will contribute to the health of our customers by promoting health management measures according to these principles and by achieving improvements in the health and work motivation of our employees.

May 2015. Meanwhile, the deficit on business in Asia was reduced following the completed review of the business structure, and profit grew significantly.

We have upwardly revised quantitative targets for fiscal 2018 in some areas due to results which exceeded our goals for fiscal

Although we have not made any changes to the target of ¥220 billion in net sales, we have raised our targets to ¥13.2 billion operating income, 6% operating income ratio, and 8% ROE as we have become certain of our ability to secure profits.

Initiatives for fiscal 2017 – Reinforcing "reforms in our earnings structure" and "reforms in the way we work"

In fiscal 2017, we will introduce new products which proposes new "foods with functional claims" and the smoothies with new consumption concept for beverages within the domestic processed food business. With regard to the food business, while strengthening promotions for household recipes, we will work on initiatives to raise consumer interest and promote demand by proposing recipes that link items for consumer markets with items for institutional and industrial markets including pre-cooked menu items and restaurant items.

In the domestic agri-business, we will strengthen sales of our mainstay "High Lycopene Tomatoes" as well as tomato products that emphasize functionality, including "Beta Carotene Tomato" and "GABA Rich Tomato," as part of our "super-vegetable series." We will also increase the number of contracted greenhouses in order to achieve a stable supply throughout the year, and further expand our supply base. We will also upgrade and actively develop our supply base for baby leaf lettuce, which will lead to the realization of our becoming a "vegetable company." We plan to expand our sales area for packed salads.

In the international business, we will make the most of our global network of group companies in our sales activities, and strengthen initiatives in the institutional and industrial market, particularly in Asia. Additionally, we will reinforce our partnership with Ingomar Packing Company LLC, with whom we formed a business and capital alliance in 2016, and pursue synergies by reinforcing a streamlined, vertically integrated value chain of tomatoes in the United States, from seeds to processing and sales.

We still have much to do when it comes to reforming our earnings structure. In fiscal 2017, we will improve our cash flow by reducing inventory to cut storage expenses and disposal costs. We are also facing numerous issues in terms of food distribution, including a shortage of truck drivers, rising distribution costs, and environmental protection measures such as reductions in CO₂ emissions. For these reasons, F-LINE, a joint venture distribution business, was established this year among four food manufacturers, including Kagome. Our aim is to achieve an effective and stable distribution system by establishing our own food company distribution platform and continuing to reorganize our distribution bases.

We are also continuing to reform the way we work. To ensure diversification by promoting diversity, as well as to further eradicate unreasonableness, waste and inconsistency in work. over 50% of our new recruits from fiscal 2016 are women. We also introduced a telework in April 2017 and are trying out a stagger commuting hours system. As a result of these measures, we will increase productivity and at the same time set the companywide target of 70% paid holidays taken. Based on the idea that way of working reforms will lead to lifestyle reforms, we will move forward with reforms so that each and every individual can work in a meaningful way and achieve a high level of performance.

Kagome's Long-term Outlook and Strategies

Helping people live longer, healthy lives through food – transform from a "tomato company" to a "vegetable company"

In 2007, Japan became a super-aged society whereby 21% of its population was aged 65 or older. It has been estimated that the number of senior citizens will continue to increase to the point where 40% of the population, or 1 in 2.5 people, are aged 65 or older by 2060. The population will decrease in line with the declining birth rate and aging society, and the scale of the processed food market is likely to shrink in trillions of yen. We must assume that our sales will also decline as the market contracts

As the super-aged society becomes more prominent, nursing care issues that arise between healthy life expectancy and the average life expectancy will come to the fore. The average life expectancy for Japanese is approximately 81 years for men and 87 years for women. However, the gap between the average life expectancy and the healthy life expectancy, whereby people are able to lead healthy lives, is as long as nine to twelve years.

Extending healthy life expectancy is also important if we are to reduce the difficult periods of ill health suffered by the patients and their families and ease the burden on the country in terms of the medical and nursing care costs borne by society overall. If we focus on the improvement and prevention of various diseases and physical disorders and further expand this focus to include beauty and anti-aging measures, consumer spending on ways to continue to remain healthy will no doubt soar further. We firmly believe that supplying the health information and products sought by consumers is a business opportunity that will allow us to utilize the expertise of our research and development department.

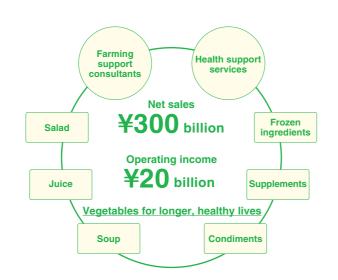
The Innovation Division, which is responsible for research and development, commenced in October 2015 with the research institute founded in 1979 as its base. The Division has two main missions. The first is to undertake research into functionality, varieties and cultivation technology, and materials and processing technology by "creating research-driven innovation." The second is to undertake product quality and safety evaluations and the protection and utilization of intellectual property by "strengthening the business support infrastructure." In particular, we are working on research on the functionality of tomatoes, vegetables and plant-based lactic acids based on the theme of the value of health, and are collecting evidence so that we may deliver health to all generations through our functionality research.

One example of the results of this research is Tomato Juice as a food with functional claims mentioned earlier. The number of people identified with high cholesterol levels has been increasing in recent years, and this trend is evident in both men and women over the age of 50. In this context, our company has been gathering scientific findings regarding the role of tomato-sourced lycopene in increasing HDL ("good" cholesterol) in the blood, and launched Tomato Juice as a food with functional claims after our notification of functional labeling was accepted by the Consumer Affairs Agency.

Although it has widely been known that Tomato Juice is good for the health, the verification and dissemination of this information has increased the value of the product.







We have created a roadmap to increase business opportunities, increase opportunities to expand profits, and achieve sustainable growth by applying research and development expertise that can actively support good health and longevity to the development of products and menu promotions. To get there, we needed an easy-to-understand mission-type vision with which people could identify. This is how we came up with our vision of transformation from a "tomato company" into a "vegetable company." Kagome already supplies 11.9% of the green and yellow vegetables consumed in Japan. Yet this is still 57g short of the Ministry of

Health, Labor and Welfare recommendations for a daily vegetable intake of 350g for each Japanese person. By expanding the agribusiness that is engaged in the sale of fresh vegetables and increasing sales of new products made from vegetables to improve this situation, we will eliminate the shortage of vegetables in the Japanese diet and extend healthy life expectancy. Increasing Kagome's sales is tantamount to increasing the vegetable consumption of Japanese, and an increase in sales is the most important KPI in this long-term vision

Shareholder policy – promoting dialogue with investors

As a result of efforts in pursuit of "the Creation of 100,000 Kagome Fans (shareholders)" that we have been working on since 2001, we have already achieved a figure of approximately 200,000 "fan shareholders."

Surveys and other research activities have shown that "Kagome Fans" who are individual shareholders supporting our products and company retain their shares in the company on a long-term basis and also purchase our company's products at a rate 10 times greater than general customers. Estimates based on purchasing amounts suggest that the daily vegetable intake of these shareholders is 350g or more. A great many of the over 2,000 shareholders who attend the Annual General Meeting of Shareholders held in March every year are healthy, active senior citizens. We will continue to develop products and disseminate information so that all Japanese people can enjoy a healthy life in their senior years by consuming a large volume of vegetables, just like our "Kagome Fan Shareholders."

In addition, we have been providing opportunities for direct dialogue and interactions with our "Kagome Fan Shareholders"

through "Talks with the President" since 2014. We post the questions we receive that day on our website, and have found that these questions cover a diverse range of topics that often lead to suggestions regarding company management. This year we plan to hold these talks in Tokyo, Osaka, Nagoya and Hokkaido, a record-high number of locations.

Although our focus in the past has been on creating individual "Kagome Fan Shareholders," since last year we have been strengthening dialogue with institutional investors. The words of encouragement we receive from our individual "Kagome Fan Shareholders" give us courage and joy but if we are to become a strong company, we must also listen carefully to the critical opinions of analysts and institutional investors. Apart from financial results briefings, we also hold small meetings with analysts and institutional investors aimed at promoting dialogue. Going forward, we will step up our engagement by exchanging opinions on the growth potential of health and agriculture, and will enhance our corporate value.

Regional revitalization and agricultural development – turning agriculture in Japan into a growth sector

We believe that our domestic agri-business is the solution to turning agriculture in Japan into a growth sector, an issue that was also noted in the Trans-Pacific Partnership (TPP) negotiations. Despite the fact that agriculture is one of the main industries supporting local communities, it faces a serious shortage of

successors. The absence of successors and the increase in abandoned farmland not only means a decrease in crops and the collapse of the industry itself, but also means that the environmental protection of "satoyama" (the areas between mountain foothills and arable flat land), in which the agricultural

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industry had been engaged, will lapse. The Ministry of the Environment is also accelerating efforts to protect "satoyama" by taking heed of the fact that the biodiversity, pleasant landscape, and culture of "satoyama" have been handed down through various human efforts associated with agriculture and forestry.

I am from Matsue, in Shimane Prefecture, a rural "satoyama" where the original landscape was blessed with an abundance of nature. Inhabited by frogs and red dragonflies, it was a region that seemed to symbolize a harmonious environment where humans and nature coexisted. I believe that agricultural activities conserve the original landscapes of the regions of Japan. Recently, the regional "satoyama" have become an important tourism resource to attract overseas visitors to Japan. I think that to halt the collapse of the agriculture industry and turn agriculture in Japan into a growth sector requires private enterprises to become agricultural leaders.

History suggests that it is highly unlikely that the issue of abandoned farmland, which is spreading throughout every area in Japan, can be resolved by the policies of national and local governments alone. As a measure to combat this abandonment of farmland, I would like to promote the revitalization of the domestic agri-business utilizing the expertise that we have developed thus far in the agricultural sector, including cultivation technology, human resource training and development. Therefore, in April 2017 we launched the agri-support business to establish and manage greenhouses and provide guidance in agricultural technology in order to resolve the issues facing producers of fresh tomatoes. The business, led by staff from our Agri-Business Division, provides agricultural consulting services in various areas including planning, construction management, agricultural technology, and greenhouse management, and will contribute to turning agriculture into a growth sector by fostering successors.

A World Food Problem – Tomato Consumption Growing at a Rate of 1 Million Tons per Year

Meanwhile, countries outside of Japan are not only working on SDGs such as food shortages, famine and poverty caused by population growth and climate change, but are also facing social issues such as obesity in developed nations and malnutrition in emerging nations. We believe that these issues also serve as business opportunities where we can leverage our expertise and strengths.

We recognize that our international business centering on Kagome Inc., a company that offers menu proposals to many customers in the global food service business, must tackle obesity in developed nations and other health issues going forward. Kagome Inc. started out in the production and sale of pizza sauce but today, it produces a growing range of sauces and is also seeing an increase in customers. Kagome Inc.'s top priority is to respond to customers' requests for B-to-B business, but it believes that, along with food globalization, it is also important to raise awareness of health and nutrition issues among people all over the world by means of menu proposals.

We are also building a vertically integrated value chain overseas for tomatoes, from seed development to field cultivation, primary processing and product production. In contrast to the population decline in Japan, the consumption of vegetables is increasing elsewhere as the global population grows. The

consumption of tomatoes in particular, which is the most popular vegetable, is forecast to increase by 1 million tons per year and it is expected that the production and sales of processed tomato products will continue to be a global growth industry.

In anticipation of the future growth of the global tomato industry, last year we established the Agri-Business Research and Development Center in Portugal and began new research in agriculture utilizing big data. We are conducting field inspections from the sky using drones to collect data using various sensors, and are using the big data gathered to conduct research into new cultivation methods. The agricultural industry in general harvests crops once a year and it therefore requires several years to increase yields through trial and error. If it is possible to control the growing conditions using big data, it may be possible to increase crop yields right from the first year.

On the other hand, although the consumption of tomatoes in emerging nations is high, the majority of this consumption consists of fresh tomatoes prepared in dishes at home, with some countries not yet having reached the economic phase where consumers purchase processed tomato products. At the Agri-Business Research and Development Center, we are developing seeds for Africa and elsewhere, and are also starting cultivation demonstration tests on tomatoes for processing. This is a major

project that requires a long period of time from the point of experimental cultivation until industry creation but if it succeeds, it will ensure an income and food supply for agricultural workers in developing countries and will contribute to the elimination of hunger and poverty. Furthermore, by providing the food materials for a healthy diet and the know-how to bring about economic independence, we will also be a step closer to resolving social issues.

To our stakeholders

The reason that we have so far focused on turning agriculture into a growth sector not only in Japan but also overseas is that all of our products utilize the value of nature's bounty, including tomatoes, vegetables and fruit. Unless we can obtain good raw materials, our business model falters. That is why it is important for agriculture to develop as a growth industry not only in Japan but throughout the world.

Up until now and onward, Kagome will continue our corporate philosophy of "appreciation," "nature,' and "corporate openness," an inherited management spirit that pervades through changing times, and our corporate philosophy-based management that values our brand statement, "True to nature, the flavor of Kagome." Likewise, we will contribute to the healthy lives of people using nature's bounty that includes tomatoes and other vegetables and

fruits by means of "What Kagome Strives for" and our "long-term vision." By developing value utilizing these bounties of nature, we aim to be a strong company that can overcome competition in global markets and be capable of sustainable growth. The reason we can do this is that we are a unique company that is involved in seeds and fields. We hope that you will continue to look forward to the future of Kagome as we create value together with our stakeholders through food.



We will contribute to the healthy lives of people using nature's bounty that includes tomatoes and other vegetables and fruits by means of "What Kagome Strives for" and our "long-term vision."

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Connecting Our Global Network to Become

Mid-Term Management Plan for FY2016 to FY2018 Quantitative Targets

Net sales ¥220 billion

Operating income ¥13.2 billion

Operating income ratio

Dividend payout ratio **40**%

KAGOME

カゴメ株式会社

Kagome Co., Ltd.

In the Mid-Term Management Plan, we set quantitative targets according to the growth stage of each segment. In the mainstay domestic processed food business, we aim to help people live longer, healthy lives by offering vegetables in various products, and plan stable growth targeting net sales of 153,000 million yen (an increase of 4,700 million yen compared to fiscal 2016) and operating income of 9,500 million yen (an increase of 700 million yen compared to fiscal 2016). The domestic agricultural business has continued to grow by increasing contracts with greenhouse farms, and we plan to increase net sales by 14,000 million yen (an increase of 2,500 million yen compared to fiscal 2016) while planning to decrease operating income (by 200 million compared to fiscal 2016) to 700 million after including fixed costs for business expansion. In the international business, business restructuring in Asia has been completed, and we plan to grow significantly targeting net sales of 53,000 million yen (an increase of 10,300 million yen compared to fiscal 2016) and operating income of 3,000 million yen (an increase of 1,800 million yen compared to fiscal 2016).

a "Strong Company" that Grows Sustainably

11.5 billion

Domestic processed foods business P28

Research and development

9.5 billion yen

Aiming to solve the issue of lack of vegetable intake

148.3 billion yen

8.8 billion yen FY2016 (Results) FY2018 (Planned)

Domestic agri-business P30

Operating income 0.9 billion yen FY2016 (Results) FY2018 (Planned)

International business P32 53 billion yen 42.7 billion yen

Operating income 1.2 billion yen FY2016 (Results)

3 billion yen FY2018 (Planned)

Research and development to utilize nature's bounty to the fullest extent

* Figures are rounded to the nearest hundred million yen
* After eliminations and adjustments of intersegment transactions

Kagome Agri-Business Research And Development Center, Unipessoal Lda (Portugal)

Research and development focused on agriculture, developing new businesses within the value chain

Transformadora do Tomate, SGPS S.A. (Portugal)

Holding da Industria

Since 2007, Production and sales of processed tomato products such as tomato

United Genetics Turkey Tohum Fide A.S (Turkey)

Since 1987 Production and sales of seed and seedlings

United Genetics Holdings LLC (United States)

Since 1990, Global development, production, and sales of seeds for tomatoes, vegetables Kagome Inc. (United States) Since 1998

Production and sales of industrial use chains



Preferred Brands International, Inc. (United States)

Since 1994 Sales of ready-made ethnic foods for

Vegitalia S.p.A. (Italy)

Since 2003.

Processing, freezing, and sales of Mediterranean vegetables grown in collaboration with contracted farmers



Tasty Bite Fatables Ltd. (India)

Production of ready-made ethnic foods for consumer use, and production and sales of frozen vegetable pies and pâté, tomato ketchup, and more for institutiona and industrial use



Kagome Longson Sdn. Bhd. (Malavsia)

Since 2014. Sales of Halal condiments for Kagome (Tianjin) Food Industry Co., Ltd

Since 2013,

Production and sales of condiments in film containers

Taiwan Kagome Co., Ltd. (Taiwan)

Since 1967,

Production and sales of condiments and beverages

Ingomar Packing Company, LLC

Production and sales of tomato paste

(United States)

and diced tomatoes

Since 2010.

processing, and production and sales of processed tomato products Kagome Foods, Inc. (United States)

Since 2007

Production and sales of margarine and other vegetable oil-based products in addition to various sauces for institutional and industrial use

Suppliers of raw materials overseas

* Listed suppliers of raw materials are as of May 2017.





Since 2014, Imports and sales of heverages

Kagome Australia Pty Ltd.

Production of tomatoes for



Kagome's Strategies for Growth

Research and Development

Research and Development to Utilize Nature's Bounty to the Fullest Extent



Recent Research Results



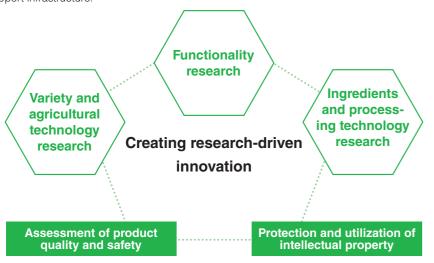
May 2015	Consumption of approximately 200ml of vegetable juice before a meal was found to be effective in suppressing rises in blood-sugar levels after a meal (Announced at the 58th Annual Meeting of the Japan Diabetes Society)
August 2015	Tomatoes were found to contain many anti-inflammatory components [Joint research by the Molecular Function of Food Lab. and the KAGOME Tomato Discoveries Lab. of the Graduate School of Agriculture, Kyoto University] (Announced at the 62nd Annual Meeting of The Japanese Society for Food Science and Technology)
September 2015	Mixed vegetable and fruit juice was found to enable more efficient absorption of beta carotene than eating raw carrots (Announced at the 29th Symposium of the Japanese Society for Carotenoid Research)
August 2016	Consumption of tomato juice in the morning was found to lead to efficient absorption of the functional component "lycopene" (Announced at the 63rd Annual Meeting of The Japanese Society for

Food Science and Technology)

Initiatives to Promote Growth

Research and Development Aimed at "Creating Research-Led Innovation" and "Strengthening the Business Support Infrastructure"

The Innovation Division is made up of five departments, responsible for the functions of variety and agricultural technology research; functionality research; as well as ingredients and processing technology research aimed at "creating research-driven innovation," and the functions of protection and utilization of intellectual property as well as assessment of product quality and safety aimed at "strengthening the business support infrastructure."



Strengthening the business support infrastructure

Research and Development that Covers All Stages of the Value Chain, from Seed to Table

Functionality Research

We promote functionality research mainly on green and yellow vegetables, submit functional claims of food, and distribute information on health. In FY2016, we published releases concerning the "relationship between timing of tomato juice consumption and absorbency of functional components" and "relationship between tomato juice and skin tone recovery." Furthermore, we conducted the "analysis of tomato components" with the Graduate School of Kyoto University using the big data analysis method, and made further progress in the "exploration of anti-inflammatory components" in tomatoes.







Lycopene, a component that comes from tomatoes, boosts high density lipoprotein (HDL) cholesterol in the blood stream

Variety and Agricultural Technology Research

Having accumulated 7,500 varieties of tomato genetic resources, we conduct the development of new varieties and agricultural technology research in our own testing fields. Through the development, improvement and cultivation of varieties with superior attributes, we will raise the value of tomatoes. In FY2016, we applied for the registration of a total of ten varieties including a fresh tomato variety with disease resistant properties. Also, by spreading the tomato varieties and agricultural technology from Japan to other countries, we are contributing to an increase in the yield of tomatoes overseas. Furthermore, we are enhancing our vegetable research as we work towards achieving our long-term vision.





Cross-breeding, eval-

uation, selection

Development of varieties for specific uses

[Number of parent varieties: 990] [Genetic resources: 7,500 varieties]

Ingredients and Processing Technology Research

We promote activities that raise the added value of our products, by developing new ingredients that draw out the original flavors and characteristics of tomatoes and vegetables, and improving processing technology. By employing fractionation technology in our research on tomato ingredients, we have developed and launched various processed tomato products such as tomato extract and tomato pulp. In recent years, in order to create new value on an unprecedented scale, besides developing in-house technologies, we are also actively engaging in partnerships using technologies from other companies.









Products that use tomato extract

Tomato pulp

Tomato puree

Assessment of Product Quality and Safety

To strengthen the safety infrastructure that will support the Kagome Group's business expansion over the medium term, we will conduct both process management and verification through analysis to ensure we offer safe and reliable products. To provide safe and reliable products to our customers, we will implement three initiatives: conduct risk prediction activities, set up analysis and assessment technology, and evaluate the safety of raw materials.

Protection and Utilization of Intellectual Property

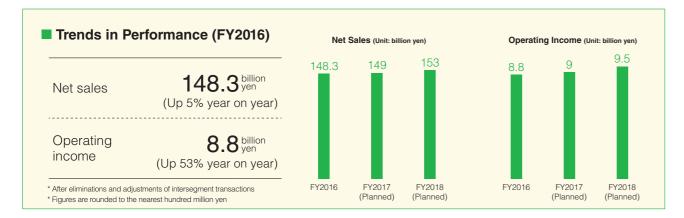
To support efforts in maintaining sustainable competitiveness, we will make discoveries and inventions via in-house research and development activities, as well as strengthen the intellectual property-related infrastructure (acquisition, protection, and prevention of obstruction and lawsuits of intellectual property) by periodically investigating other companies' patents

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Domestic Processed Foods Business

Aiming to Resolve the Problem of a Lack of Vegetables in Japanese Diets





Initiatives to Promote Growth

Contribute to tackling social issues regarding the extension of healthy life expextancy, by aiming to resolve the problem of a lack of vegetables in diets via providing various products that utilize vegetables

In a super-aging society, it has become an important issue on the level of the society, the household and the individual to help people live longer, healthy lives. In Japan, while a long-term population decline and the shrinking of the processed food market are anticipated, consumer spending on goods and services related to the maintenance of good health is expected to rise. Capturing these widespread health needs, Kagome provides various products that utilize vegetables. In addition to our mainstay products such as the "Yasai Seikatsu 100 Series," "Yasai Ichinichi Kore Ippon," tomato juice and tomato ketchup, we also offer products such as frozen foods, soups and supplements that allow vegetables to be conveniently and easily consumed. Through offering such products, we will contribute to resolving the problem of a lack of vegetables in Japanese diets and the goal of giving people longer, healthy lives.



Raise the level of vegetable intake of Japanese people from 293g* to 350g.
 Raise our share in the supply of green and yellow vegetables in Japan from 11.9% to 15%.
 From the 2015 National Health and Nutrition Survey conducted by the Ministry of Health, Labour and Welfare

■ Beverage Department

Functional Research on Vegetables Successfully Led to Launch of Products with Functional Claim Labeling

In February 2016, we started selling tomato juice with functional claim labeling that reads "For those worried about their blood cholesterol levels." Popular among women in their 50s and above concerned about their cholesterol levels, sales of tomato juice increased by 30% year on year. Instead of adding components with new functions to existing products, just by including research results on the label of the same product, the product itself does the job of value selling. In fall of 2017, we are planning to release the Kagome Vegetable Juice with functional claim labeling as well.

Responding to Various Health Needs and Consumption Situations

New products that make it easy for people to incorporate vegetables into their diets, which respond to various health needs and consumption situations, are selling well. The Yasai Seikatsu 100 Smoothie is filling and has become a highly popular snack replacement. The Yasai Seikatsu Peel & Herb has also been praised as the "flavorful but not overly sweet" drink that is ideal as a refresher. We are planning to further launch a new product lineup going forward.

Promoting "Locally Grown, Nationally Consumed" Campaign with Yasai Seikatsu 100 Seasonals Series

The "Yasai Seikatsu 100 Seasonals Series" is the product that promotes the "locally grown, nationally consumed" campaign to consume locally produced agricultural products all over Japan. The series sells in sequence at least ten different flavors each year. We will continue contributing to local agriculture as well as good health and longevity by selecting new vegetables and fruits as ingredients in our products.

Food Department

Focusing on Umami Component of Vegetables, and Proposing Salt-Reduced Recipes

According to the "Dietary Reference Intakes for Japanese 2015" published by the Ministry of Health, Labour and Welfare, the reference amount salt intake for males is less than 8.0g per day, and for females is less than 7.0g per day. Male and female adults are said to need a reduction of 30% in their daily salt intake levels. This is where we zeroed in on the "umami" (savory flavor) component of glutamine acid in tomatoes. On a nationwide level, we are proposing "recipes with 30% or more reduced salt" that use tomato ketchup to replace half the normal amounts of miso or soy sauce used in cooking.

Easy-To-Cook Healthy Recipes are Popular among Working Women

As people become increasingly health-conscious, the need for easy-to-cook fish recipes is rising. Therefore, we proposed a new Tomato Pazza (seafood and vegetables braised in tomato sauce) recipe, which uses our "Kihon no Tomato Sauce." As it can be easily prepared by braising seafood such as sliced fish and tomato sauce in a frying pan for about ten minutes, it is highly popular among working women. Besides usage in households, the recipe has also been adopted for institutional and industrial use due to their ease of preparation, such as in restaurants where there is a shortage of staff.































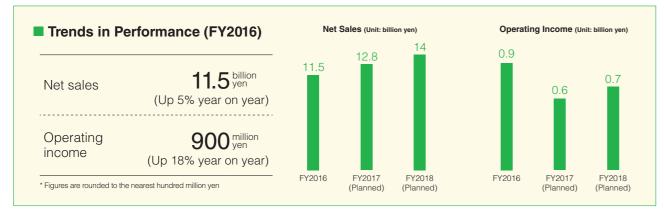




Domestic Agri-Business

Working with Contracted Greenhouses to Turn Agriculture in Japan into a Growth Sector





Initiatives to Promote Growth

Overcome Agricultural Risks with Kagome's Technology and Expertise, and Work with Contracted Greenhouses to Contribute to Efforts in Turning Agriculture in Japan into a Growth Sector

Our fresh tomato business started in 1998. Today, we have large-scale directly managed greenhouses under the scope of consolidation at four locations, large-scale contracted greenhouses at 10 locations, and general contracted greenhouses at 35 locations. Altogether,

they have a total area of 77 hectares (large-scale greenhouses: 53; others: 24), and each year we ship out 17,600 tons of produce (3% share). Overcoming agricultural risks (weather, diseases, pest damage, prices, etc.) with Kagome's technology and expertise, we have established agriculture as a business. We aim to achieve further business expansion by providing technology we have cultivated and the accumulated skills of our human resources to contracted greenhouses. Fresh tomatoes have the highest handling cost among vegetables, and while shops such as mass market retailers wish to sell them throughout the year, procurement becomes more difficult as production sites shift according to the season. Through its own distribution bases from its seven production locations in Japan, Kagome directly delivers products to stores of mass market retailers and other customers throughout the year, and its one-stop services have been highly acclaimed by customers.



Agriculture in Japan Decline in working population due to an aging society

Unprofitable agricultural industry with many small-scale farms

Provide operating expertise from directly managed greenhouses that we have invested in to large-scale contracted greenhouses, with the aim of continued growth

Developed Super Vegetables Series with High Value-Added Tomatoes

Fresh tomatoes labeled with the Kagome brand are sold through mass market retailers across Japan. In particular, sales of "High-Lycopene Tomatoes," which contain 1.5 times the amount of lycopene in regular tomatoes of Kagome, have been increasing in recent years and have grown to make up 40% of the overall sales turnover of fresh tomatoes. We also launched the Super Vegetables Series, which has tomatoes with special features such as a high amount of a healthy vegetable component. Such products include Beta Carotene Tomatoes, which have an abundance of the orange pigment beta carotene as much as carrots and pumpkins, and GABA-Rich Tomatoes, which contain 1.5 times the amount of the natural amino acid GABA in regular tomatoes of Kagome. The series has been well-received. These products are truly characteristic of Kagome who, as a company, has thoroughly researched tomatoes across the world and owns 7,500 varieties of genetic resources, the largest of any private company in the industry.



Among fresh vegetable products of Kagome, in addition to tomatoes, another fresh vegetable product that we are handling is baby leaf lettuce. These are baby leaves of vegetables harvested 30 days after sprouting, and are rich in elements necessary for the growth and development of leaves. Up until now, baby leaf lettuce has been procured from companies through business and capital alliances. However, from 2017, a new large-scale production facility will open in Hokuto, Yamanashi Prefecture, and we will begin full-scale shipping to the metropolitan area. Currently, the annual intake of baby leaf lettuce in Japan is about 18g per person. We will aim to expand sales and increase this intake level to 50g, equivalent to that in European countries. We predict that such efforts will triple the baby leaf lettuce market in Japan from the current scale of 10 billion yen to about 30 billion yen in 2020.

Entering the Business of Producing and Selling Packed Salads

To allow fresh vegetables to be consumed easily, we have entered the business of producing and selling packed salads. In Kanagawa Prefecture, we have jointly established a large-scale processing plant with another company as a supply location. The packed salads, which combine high value-added High-Lycopene Tomatoes, baby leaf lettuce, and other vegetables, are mainly sold in the metropolitan area.

Strengthening Responsiveness to Demand and Supply by Launching the Agri-Support Business

To expand our fresh tomatoes business, it is necessary to increase the number of locations where we have large-scale contracted greenhouses. This led us to the idea of creating the agri-support business, a new business of offering Kagome's operating expertise to existing players in the market on the condition that they are to become contracted greenhouses of Kagome. At the same time, Kagome will also sell materials that it has developed based on its expertise. Through such efforts, we will work towards the goal of "turning agriculture into a growth sector" by supporting agriculture in a wide range of areas.













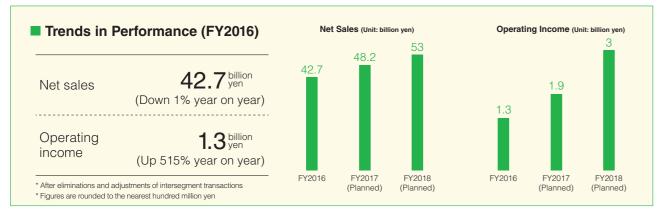




International Business

Aiming to Become the Top Global Tomato Supplier





Initiatives to Promote Growth

Seeing Business Opportunities in Greater Consumption of Tomatoes for Processing as World Population Increases, and in Globalization of Food

The United Nations announced that the world population is expected to grow from the current estimate of 7.3 billion to 9.7 billion in 2050. In line with this, demand for tomatoes, the most consumed vegetable worldwide, is expected to increase. The annual global consumption volume of tomatoes is currently about 140 million tons, including around 100 million tons of fresh tomatoes, and around 40 million tons of tomatoes for processing used to make products such as tomato paste and ketchup. Tomato paste that uses tomatoes that have gone through primary processing has a longer shelf life and is more convenient. While demand for such tomato paste has doubled over the past 15 years, as the trend of consumption shifting from fresh food to processed food continues in line with population increases and economic growth, demand is expected to further increase by 10 million tons in the next decade. Demand for tomato condiments that use tomato paste as an ingredient, such as pizza sauce, is also increasing in line with the globalization of food. Kagome Inc. conducts the business of B to B sales of culinary sauces to restaurant chains that are engaged in the food service business globally, and plans to expand its business along with its customers' growth.







H.I.T. plant Culinary sauces production line

Kagome Inc.

Seed Development and Seedlings Suited to Each Country's Farming Conditions and Market

United Genetics Holdings LLC., with bases in eight countries including California, United States, develops its own varieties of vegetables such as tomatoes, and provides seeds and seedlings in over 80 countries worldwide. Developers, called breeders, spend years improving varieties using traditional cross-breeding technology instead of genetic modification, and develop varieties suitable for each country's farming conditions and market needs through trial and error. Vegetables developed via this method are highly resistant to diseases, thus enabling a large increase in yield and significantly contributing to raising the productivity of agriculture.

Research on ICT in Agriculture to Predict Risks and Raise Yields

At the Agri-Business Research and Development Center in Portugal, research is being conducted on how to utilize ICT in agriculture to achieve sustainable agriculture. After collecting image data obtained through satellites or drones, data obtained from weather and soil moisture sensors, data on cultivation methods and farming data such as irrigation, fertilizer use, and pesticide spraying, a virtual field is constructed on a computer. By running growth simulations on this virtual field, the optimal amounts of inputs such as water, fertilizer and pesticides according to weather conditions and the growth of the crops can be determined with a high level of precision.

Tomato Paste Production Business with High-Quality, Competitive Products

Consolidated subsidiaries of our company have tomato paste production bases in Portugal, Australia, and California, United States, the major production areas of tomatoes for processing. Together, the three companies handle about 200 million tons of fresh tomatoes, the second largest in the world in terms of volume. Each production base is in charge of primary processing in the vertically integrated value chain from seed to table, generating high-quality, cost-competitive products. As only a few companies have a global tomato paste production business like Kagome, through alliances, we aim to expand sales and share best practices, as well as minimize business risks through mutually complementary relationships. Also, as Kagome has production expertise on B to C products in Japan, it understands the value sought by and the needs of large food companies as sellers of tomato paste and is able to respond accordingly.

B to B Business of Culinary Sauces Expanding Across the World

Kagome Inc., which sells food products in the United States, plays a central role in the business of B to B sales of culinary sauces to restaurant chains that are engaged in the food service business globally. While its mainstay product was pizza sauce in the 1990s, through research on market needs and the strengthening of its development capabilities, it has raised its ability to make proposals and extended its product range to include white sauce, teriyaki sauce, and more. Striving for further growth, it proposes new recipes to customers using the test kitchen that it opened in California. A major pizza chain currently has around 16,000 stores worldwide, and plans to increase this number to 20,000 by opening stores mainly in Asia and Europe, showing that the market is expanding beyond the United States into the world. As Kagome has production bases that can meet the needs of food services not only in the United States, but also in Europe (Portugal), Asia (Taiwan, Tianjin), and Australia, it plans to expand its business along with its customers' globalization.









Tomato Processing Volume World Ranking

(thousand tons)

Rank	Company	Processing Volume
1	Company M (United States)	3,900
2	Company C (China)	1,760
3	Ingomar	1,460
4	Company S (Portugal)	1,210
5	Company J (United States)	1,090
13	Kagome	596





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