FUJIOIL

Explanation of the front page

Soy protein foods

"To produce final products from sov proteins and successfully bring them to market"—this has been one of our core business objectives since the company was launched. Our soy protein foods are now being incorporated into people's daily diets, for example, in school lunches and at elderly nursing facilities as well as restaurants

Chocolate



Palm oil

Palm oil, along with coconut oil, is symbolic of a significant point in the history of Fuji Oil: The point at which we started to develop our unique oil and fat products. It is now also the most-produced vegetable oil in the world, having overtaken soybean oil. By using our fractionating and other technologies for processing this abundant resource of vegetable oil, we have developed a wide range of oil and fat products with variable properties, including different melting temperatures, which we supply all over the world.

Frozen pastrv

Fuji Oil's frozen pie pastry is made from high-quality butter sourced from Europe and Oceania that gives tempting rich flavor when baked. Our frozen pastries and doughs are mainly produced by Woodlands Sunny Foods in Singapore.

Soy milk products for retail sale

Highly functional soybean-related products providing health benefits under the "SOYAFARM" brand. Fuji Oil has been and will continue to offer "something good from soybeans" in terms of both health and beauty, while also focusing on foods for specified health uses.

Margarine

Making full use of available oil and fat processing technologies, we develop and supply different types of margarines to meet the diverse requirements of bakeries, confectioners and other cooked and/or processed food producers. We also provide bakeries and confectioners with product development advice.

Water-soluble polysaccharides

Vater-Soluble polysaccharides Fuji Oil produces soluble soy polysaccharides extracted and purified from soybeans using our proprietary technology. Water-soluble polysaccharides, a soybean-derived dietary fiber, can be used to enhance dietary fiber as a food ingredient. In addition to use in the food industry, it is also used for emulsifying, dispersive addition for forming and oblication empendies. dispersion stabilizing, film forming and adhesion properties.

Hard butters for chocolate

We offer various types of chocolate fats to match seasonal weather changes and different applications by using specialized technologies of hydrogenation, fractionation and interesterification. The applications widely range from chocolate bars, ice cream coating to bakery and donut coating.

Soy protein

Fuji Oil is the first in Japan to establish a technology for gelating soy protein isolate Soy protein ingredients processed using advanced technologies, play a key role in enhancing the quality and texture of various types of food products.



Whipping cream (p. 02)

Advanced emulsification and sterilization technologies supplement the shortcom-ings of conventional whipping cream to achieve stability, allowing us to produce a variety of whipped cream products. Using aseptic and sterile filling technology, we have developed a long-life whipping cream to provide tasty sweets incorporating whipped cream throughout Japan.



This brochure uses eco-friendly soy ink and waterless offset printing.

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FUJIOIL

FUJI OIL CSR REPORT 2011











Summary of Business of Fuji Oil Group

Corporate profile (as of March 31, 2011)

Corporate name	: Fuji Oil Co., Ltd.
Location of corporate Head Office	: 1 Sumiyoshi-cho, Izumisano-shi,
Established	: October 9, 1950
Capitalization	: 13,208 million yen
President & CEO	: Yoshitaka Ebihara
No. of employees	: 1,117 (non-consolidated), 3,574 (
Subsidiaries/Associated companies	: 29 consolidated subsidiaries, 2 a
	accounted for under the equity n

Business description (major product categories)

Oils and fats

 Hard butters for chocolate •Confectionery oils and fats •Fats for frozen confectionery Frving oils and fats •Fats for whipping cream •Emulsified/ Powdered oils & fats •Food-grade lubricants/

Sales by business division

16.8%

demolding oils

¥95,759 million

¥37,335 million

Soy proteins

Oils and fats

Net profits

12.000

million yei 10,000

8,000

6.000

4 000

2.000

-2,000 -

¥89.619 million

Chocolate Colored chocolate Chocolate for baking •Chocolate for ice cream coating

Incredients for

confectionery and baking

Emulsified and fermented foods •Whipping cream/Margarine •Filling/Cheese ingredients

nsolidated net sales

134,411

Consolidated net profits

10 726

5 298-

Non-consolidated net profits

9.783

Import of food materials

Frozen dough/Cooking ingredients

•Prepared milk powder products/

Soy milk





Major management indices

40.2%





Numb	er of en	nplo	ye	es
4,000 - (Employees) 3,500 -		3	3,45	6
3,000 -	3,043			
2,500 -				
2,000 -				
1,500 -				
1,000 -	1,06	5	1,0)55
500 -				•••

2006

2006 2007 2008 2009 2010 (fiscal year)

Operating profits 7,655 5,396 2007 2006

03

2007

"Simply Unique" Fuji Oil

"Simply Unique" is reflected in our company name, "Fuji," which consists of the kanji characters for "not" and "two." We debuted this motto on October 9, 2010 in commemoration of our 60th anniversary. Fuji Oil operates its business in a spirit of innovation, never imitation, while we work closely with our customers to develop products that utilize our oils and fats, confectionary & baking ingredients, and soy protein preparations. Our "simply unique" technologies, experiences and ideas lead to "simply unique" products and recommendations, which bring satisfaction and peace of mind to our customers. Aspiring to be a one-of-a-kind company is rooted in our foundation and in our motto "simply unique". Fuji Oil takes pride in the technologies and products that we have developed since our founding 60 years ago. With this spirit still strong today, we are determined to continue to better serve our customers with our one-of-a-kind products. The words "simply unique" symbolize that determination.

At Fuji Oil, that is what each and every employee aspires to and is our pledge to society.

- , Osaka
- (consolidated) associated companies method

Soy protein

Soy protein •Soy protein isolate/ Textured sov protein

Soy protein ingredients •Water-soluble polysaccharides •Soy peptide/ Soybean beta-conglycinin

Soy protein food products

•Soy milk for industrial use/ Retail sov milk products





2008 2009

INDEX

Summary of Business of Fuji Oil Group Major uses of Fuji Oil Group's products top message CSR by Fuji Oil

special section

- Fuji Oil's Palm Business Fuji Oil's Soybean Business
- Process until high-quality chocolate reaches customers
- 23 Environmental vision and policy

Editorial policy

The CSR Report 2011 presents our company's CSR vision, action policy, operation system, and medium-term CSR activities to help better understanding of our stance toward CSR and how we incorporate CSR into our business activities.

The report for this year includes feature articles on "palm oil" and "soybeans" to introduce our efforts towards global, sustainable growth as a manufacturer of food materials. In this report we have focused on providing accurate and comprehensive information in a way that is easy to understand.

Reporting period

The report covers achievements in fiscal year 2010 (April 1, 2010 to March 31, 2011), but also includes some activities outside of that period.

Reporting scope

The report mainly covers non-consolidated activities of Fuji Oil Co., Ltd. As for environmental data, efforts by the following Group companies in Japan are included: Toraku Foods Co., Ltd., Fuji Fresh Foods Co., Ltd., and F&F Co., Ltd. In cases where information on other companies is provided, the scope is described along with the data

Month of issue

November 2011 (the next report to be issued in November 2012)

Guidelines used for reference

The Japanese Ministry of the Environment's Environmental Reporting Guidelines 2007 **GRI** (Global Reporting Initiative) Sustainability Reporting Guideline 2006

Major uses of Fuji Oil Group's products

Fuji Oil Group's ingredients and products are used for various purposes.



Oil and fat products

Oils and fats

- 1 Hard butter for chocolate
- With functions exceeding those of cacao butter 2 Fats for frozen confectionery
- For adding flavor to ice cream 3 Frying and spraying oils
- Used for frying and cooking instant noodles and fried confectionery
- 4 Fats for whipping cream Used for whipping cream and coffee creamer 5 Food-grade lubricants/demolding oils Used as lubricants for food manufacturing ma-

chinery and as demolding agents

Chocolate

- 6 Chocolate
- from various places around the world
- easily add gloss 8 Molded chocolate
- Chocolate which keeps its shape even after being baked in dough
- 9 Chocolate for ice cream coating Coating chocolate for ice cream

- Chocolate using carefully selected cacao beans
- 7 Compound coating chocolate Chocolate used to coat cakes and bread to

04

Emulsified and fermented foods

- 10 Whipping cream Vegetable cream with a rich milky taste and re-
- freshing after taste 1 Soft-serve ice cream
 - Liquid mixture for soft-serve ice cream with a smooth texture
 - 12 Custard cream
 - Cream with a rich milky taste and egg flavor 13 Margarine and shortening
 - Provides a crispy texture to baked confectionery 14 Ingredients with a fermented flavor
 - Ingredients for desserts manufactured using emulsification and fermentation techniques

Oil and fat products

Food materials 15 Béchamel sauce

White sauce containing high levels of dairy products

16 Frozen pie and cookie dough

Used for pie crusts and cookie dough sheets

Soy protein products

Soy protein

17 Soy protein isolates

- Gelling and water retaining properties, improving texture 18 Textured soy proteins
- Offering a juicy and meaty texture with high water retention

Soy protein ingredients

- 19 Soy peptides Ingredients rich in essential amino acids and with high absorbability
- 20 Water-soluble polysaccharides
- Used for stabilizing acidic lactic beverages and preventing cooked rice and noodles from becoming sticky

Soy protein food product	s
--------------------------	---

2) Flavored deep fried tofu

Used for instant noodles (Udon)

2 Gan-mo

It is not necessary to run hot water over this gan-mo before cooking, and it will not break into pieces while cooking 23 Frozen tofu

It is possible to store this tofu frozen and use only the quantity needed

Soy milk

23 Soy milk for industrial use Soy milk without the raw flavor of soy

Finished products

25 Soy milk

Prepared soy milk designated as food for specified health uses

26 Pudding Kobe Pudding

27 Supplements

ISOFLA-BALANCE by mail order

28 Sports drinks Peptide-Athleata by mail order

<u>top message</u>

Providing "simply unique" value and contributing to creating a sustainable society, as a manufacturer of food ingredients



President & CEO Fuji Oil Co., Ltd.



FUJI WA

Corporate philosophy

Contributing to healthier and happier living through the creation of contemporary eating habits as well as fine foods.

Corporate message

"Simply Unique" Fuji Oil

I would like to take this opportunity to express my sincere sympathies to the people affected by the Higashi Nihon Daishinsai (The Great East Japan Earthquake). I wish for your safety and the earliest possible recovery.

Fuji Oil Group has started its new medium-term management plan for the fiscal years 2011-2013. It was in the midst of our discussion on the preparation for the plan when the Higashi Nihon Daishinsai occurred. The corporate philosophy of Fuji Oil is "to contribute to healthier and happier living through the creation of contemporary eating habits as well as fine foods." When "healthy and happy living" is lost in a blink, how could Fuji Oil contribute to achieving "healthier and happier living?"; how could we contribute to helping people and communities affected by the disaster? I strongly believe we should seriously consider these questions in order to fulfill our social responsibilities.

Strong awareness of sustainability

In the face of the unprecedented earthquake and tsunami disaster, the significance of the existence of companies is being questioned. Under these circumstances, Fuji Oil's business activities should be sustainable in a variety of ways.

Fuji Oil places emphasis on implementing sustainable projects that contribute to achieving "health" and "happiness." It has been reported that vegetable proteins, including soy proteins, which Fuji Oil develops, are more environmentally friendly and more energy-efficient than animal proteins. In recent years, while massive consumption of resources has started in emerging nations owing to their remarkable economic growth, the number of starving people around the world has reportedly reached one billion. We believe that we can contribute to addressing these issues and to ensuring the sustainability of the globe through enhanced efforts focused on developing ingredients that help soybean and soy proteins, which have long been studied by our company, taste better.

Management policy

□ Management philosophy

To place top priority on safety, quality, and environmental integrity.

□ Basic management principles

To achieve ceaseless growth by accomplishing customer satisfaction.

To challenge innovation continuously with a spirit of creativity.

To enrich individual character through vigorous self-enlightenment.

Information technology (IT) brought many benefits in the last years of the 20th century. In the 21st century, companies that address sustainability issues, including appropriate use of resources, resource saving, and elimination of disposal and waste, and identify solutions to these issues are those that will grow and survive.

The definition of "sustainability" put forward by the United Nations is "to meet the needs of the present without compromising the ability of future generations to meet their own needs." In line with this definition, Fuji Oil will continue to focus on promoting sustainable efforts to help not only the present generation but also future generations make full use of their abilities

Launch of the new medium-term management plan

The new medium-term management plan that has been launched is the second step of the 10-year vision to become a food ingredients manufacturer that offers good health and taste in global, niche and specialty markets and deserves favorable recognition by customers around the world. The company positions this second step as the "three years of evolution." The underlying concept of the following three basic management principles is to share and practice the philosophy of the "FUJI WAY" throughout the Group:

1. Promotion of global management

In global management, under the slogans of "quality in domestic markets" and "quantity in overseas markets," Fuji Oil promotes investment of corporate resources in overseas markets and development of a globally competitive workforce. To achieve "quality in domestic markets," emphasis is placed on added value and customer relationships in order to maintain and expand our market share. To achieve "quantity in overseas markets." Group companies are focused on ex-

Fuji Oil Group's 10-year Vision

Goal in 10 years

08-1

Become a food ingredients manufacturer that offers health and taste in global, niche and specialty markets and deserves the favorable recognition by customers around the world.

management plan	management plan	management plan
First step "Innovation and Action 2010" "Three years of management structural reform" Focusing on core business areas Strengthening the business basis	Second step "Global & Quality 2013" (Evolution I) "Three years of evolution" toward qualitative growth on a global level	Third step Evolution II "Four years of further advancement" toward the achievement of the vision

panding global markets to further accelerate our growth.

2. Promotion of technological management

In regard to technology management, we have focused on enhancing the collective strengths of the organization, including our strengths in production and sales, to enable a concerted commitment to proposing new techniques, ingredients and applications. In these efforts, new ingredients serve as the driving force. Our basic strategy in developing new ingredients is to focus on strengthening our core business areas and enhancing the customer relationships and the driving force behind research and development.

3. Promotion of sustainable management

In regard to sustainable management, we place emphasis on CSR and environmentally conscious business management. It is our aim to become "Simply Unique" Fuji Oil through fulfilling the corporate philosophy to contribute to building a sustainable society.

CSR management unique to Fuji Oil

The corporate message "Simply Unique" was established last year. In line with this message, Fuji Oil has launched full-scale efforts to fulfill its corporate social responsibility, primarily aiming to achieve harmonious coexistence with nature and society with limited global resources and to provide "simply unique" value to stakeholders. Throughout this fiscal year, sustainable management will be promoted through implementation of the new medium-term management plan started this year alongside strengthened efforts to address the medium-term issues in CSR

Fuji Oil Group will continue its efforts as a food ingredients manufacturer to meet social expectations and, through communication with many people, will help build a sustainable society, with the end goal of "Simply Unique" Fuji Oil always in sight.



Concept of Fuji Oil CSR

Fuji Oil recognizes that its CSR is to materialize its corporate philosophy and contribute to solving social issues through its business activities. Believing that "CSR is, after all, management itself," Fuji Oil aims to achieve sustainable development of both society and our company by meeting the expectations and demands of stakeholders, constantly providing new value, and contributing to addressing-and solving-related issues



CSR promoting system

Fuji Oil established the Corporate Social Responsibility (CSR) Committee in May 2011 to further promote socially responsible management. The Committee, with the President as chairman, discusses how the company should carry out its CSR activities. It has been tasked with formulating a CSR action policy and plan and monitoring the progress of CSR activities.



Fuji Oil Group CSR Vision and Policy

Our new CSR vision and related policies were established in 2011, as shown below, to clarify the objectives and the concept behind our commitment to CSR.

CSR Vision

The CSR vision of Fuji Oil Group is to fulfill its corporate philosophy:

"Contributing to healthier and happier living through the creation of contemporary eating habits as well as fine foods." In the spirit of innovation, "never wanting to imitate," our efforts are focused on offering valued products and services

so as to build public trust and become "Simply Unique" Fuji Oil for which people hold high regard.

CSR Policy

I. Efforts to create contemporary eating habits as well as fine foods

1. Creation of new value

To fulfill the corporate philosophy, our efforts are focused on developing new ingredients mainly from oils, fats, and soy proteins and providing new values of health and taste through the manufacture of products that meet the demands of customers around the world.

2. Safety, security and quality of foods

Our continuing efforts are centered on ensuring safety and improving quality and providing customers with reliability and satisfaction.

3. Sustainable procurement

We also focus on the research and development of sustainable food resources and sustainable procurement of raw materials throughout the supply chain to ensure a balance between the environment and stable supplies.

II. Efforts regarding human rights and resources 1. Human rights

Fuji Oil Group, as a corporation engaged in international business, pays full consideration to human rights not only within the group companies but also across the supply chain, and complies with the international code of human rights.

2. Human resources

Human resources are essential for the development of Fuji Oil Group. Our emphasis is on improving the workplace environment so that employees with different value can fully demonstrate their abilities safely and effectively. We also provide full support to all employees so that they can grow to fulfill the corporate philosophy.

III. Efforts regarding the environment

Fuji Oil Group, as a corporation that truly values the environment, places emphasis on the effective use of materials, water and en-

ergy; the prevention of global warming; the reduction of waste, and the procurement of raw materials that will not interfere with biodiversity and maintains harmony between the business and the environment.

IV. Efforts regarding social contribution

Fuji Oil Group promotes social contributions centering on the three key components of the corporate philosophy: food, health and happiness. It also aims to enhance its connection with local communities as a good corporate citizen so it can contribute to a better society.

V. Efforts regarding CSR

1. Corporate philosophy and group CSR management While ensuring widespread recognition of the "FUJI WAY" throughout the group companies, we have implemented a system that helps promote CSR management from a global perspective, aiming at constant improvement.

2. Compliance and risk management

To achieve highly transparent and consistent management and continue to earn the public's trust, we promote compliance and enhance risk management to help promote sustainable business activities

3. Communication with stakeholders

Emphasis is placed on building trust with all stakeholders through communications that meet their expectations. We also endeavor to reflect their opinions into CSR activities.

4. CSR supply chain management

Efforts are placed on ensuring fair and legal transactions with business partners, strengthening collaboration with them, and promoting procurement in line with our stance on CSR.

CSR issues and efforts of Fuji Oil

The following table shows company-wide efforts and action plans designed to achieve sustainable management in line with the CSR action policy:

	Area	Priority theme	Medium-term issues	Action plans for 2011
Creation of contemporary eating habits as well as fine foods	Creation of value	Solutions to food issues	Development of new technology for products and new products that take into account safety, security and health	 Promotion of development of safe and secure, consumer-oriented technology Development of tasty health products for elderly people
			Development of nutrition and health markets and new market development using food products made mainly from soybeans, by creating new value in our soybean business	 Promotion of development of products designed for elderly people and infants Promotion of consumer-oriented food products mainly made from soybean
	Safety, security and quality	No quality accidents No serious complaints	Improvement of hazard analysis technology of Fuji Oil Group	 Development of analysis techniques to identify unexpected substances Establishment of techniques for analysis of trace metals and for rapid analysis of microorganisms
	Sustainable pro- curement	Sustainable, stable procure- ment	Strengthening of relationships with supply sources Establishment of the supply chain for stable procurement, taking into account natural disasters such as earthquakes	 Maintenance and strengthening of relationships with suppliers of raw materials Review of the current supply chain
		Environmentally conscious procurement of raw materials	Establishment of the RSPO ^{*1} supply chain	 Gathering information on supply chain accreditation schemes, and establishment of relationships with ac- credited farms
Human rights and resources	Human rights	Understanding of human rights issues	Understanding of human rights issues on a global basis Promotion of consideration of human rights in the supply chain	 A survey on the relationship between business activities and human rights issues Discussion on whether to conduct a survey on the state of human rights of major suppliers
		Improvement in human rights awareness Human rights-conscious labor management	Improvement of human rights awareness among employees Promotion of human rights-conscious labor management of Group companies	 Discussion on measures to educate employees on human rights Surveys on the state of human rights and labor rela- tions at overseas Group companies
	Human resources	Strengthening of human resource development	Improvement of in-house training and as- sistance for career development	 Improvement of training for the executives Assistance to develop a career plan
		Development of globally competitive workforce	Development of employees who will play a leading role globally and improvement of systems for overseas expatriates	 Discussion and implementation of training programs for overseas employee
		Promotion of diversity	Creation of a corporate culture that respects diversity	 Employment of foreign staff Review of regulations for re-employment after retirement Expansion of opportunities for female employees
		Promotion of better work-life balance	Promotion of establishment of systems to support better work-life balance	 Promotion of improvement of efficiency both by employees and management Discussion on systems to support various kinds of working styles Adoption of a re-employment system for former employees who left the company for a specific reason
		Prevention of occupational hazards and accidents	Risk assessment Establishment of a cross-organizational network for safety	 Adoption and regular implementation at all offices Gathering of overseas information and periodic patrols
		Creation of healthy workplace environment	Support for employees on leave for mental illness to return to work Improvement of the rate of employees receiving health checkups and accurate follow-up of those who have received health checkups	 Availability of counseling services at Group companies in Japan Collaboration with Group companies in Japan

*1 RSPO stands for Roundtable on Sustainable Palm Oil.

	Area	Priority theme	Medium-term issues	Action plans for 2011
Environment Ress (Rec Glob Bioc		Prevention of global warming	Co ₂ emissions: 20% reduction in 2020 (in comparison with the reference year) ² Promotion of reform of logistics to make it more environmental friendly Introduction of energy-saving technology	 Achievement of 2,500 kl/year in Japan for fiscal 2011 Use of "soft tanks" and expansion of "modal shift" Adoption of energy-saving technology: Target of 2,190 kl/year
		Conservation of water re- sources	20% reduction in 2020 (in comparison with the reference year) $\tilde{\ }^{2}$	 Achievement of reduction in the amount of supplied and discharged water of 30,000 m³ in Japan for fiscal 2011
		Resource recycling (Reduction in wastes)	Achievement of a recycling rate of 99.8% in 2013	- Promotion of recycling and achievement of a recycling rate of $\geq 99.7\%$ - Reduction of waste
		Global greening Biodiversity conservation	Development of an action policy on biodi- versity and promotion of efforts to achieve the policy	 Continuing greening activities and spread of these activities to other offices A survey on the relationship between business activities and biodiversity Identification of important issues on diversity and selection of measures to address the issues
Social contribution		Organizational promotion of social contribution activities	Development of activities in Japan and abroad according to the social contribution policy	- Planning of a policy for social contribution and estab- lishment of a system to promote the policy
Corporate gover- nance CSR management CSR management Compliance Risk management CSR supply chain management	Corporate gover- nance	Improvement of transparency of management	Promotion of corporate governance for high- er transparency and soundness that meet stakeholders' requirements and expectations	- Review of the system for the special service bonus for retiring executives
	CSR management	Spread of principles through- out Fuji Oil Group	Spread of the philosophy of "FUJI WAY"	 Implementation of the "FUJI WAY Meeting with President" throughout Japan Preparation of tools for promoting the principles of "FUJI WAY"
		Wide spread of CSR	Promotion of education on CSR	 Sequential provision of training on CSR as part of department training programs Distribution of the CSR report to Group companies' employees Distribution of "CSR Newsletter" on the intranet on a regular basis
		Improvement and implemen- tation of systems for CSR promotion	Establishment of a CSR promoting system and active implementation of CSR activities Development of CSR visions and action policies and establishment of a CSR management system	 Launch of the CSR Committee and regular organiza- tion of Committee meetings Implementation of third party dialogue Development of CSR visions and action policies Confirmation of the status of progress of action plans
	Compliance	Improvement of awareness of compliance and enhance- ment of compliance among Group companies	Restructuring of the compliance promotion system and strict implementation of compli- ance Establishment of global compliance	 Establishment of the global code of conduct A survey of the extent of compliance by Group companies in Japan and abroad
	Risk management	Enhancement of risk man- agement	Restructuring of risk management Company-wide promotion of BCM ^{'3}	 Gathering and understanding of information on Group risk Development of the BCP^{'4} for earthquake safety
	CSR supply chain management	CSR procurement manage- ment	Strengthening of efforts in CSR procurement	- Development of guidelines for supply chain CSR procurement

*2 Reference year: Mean value of the period from '03 to '05.

*3 BCM: Business Continuity Management, a management method to ensure the continuity of business activity in the case of risk occurrence that could result in the discontinuation of the activity. *4 BCP: Business Continuity Plan, a strategic earthquake preparedness plan to allow the company to continue its business activity in an emergency.

special section 01

Sustainable use of palm oil by making full use of its benefits

Fuji Oil's Palm Business

Palm oil is the most produced and most consumed oil in the world. Its popularity stems from the fact it can be harvested throughout the year and used for a wide variety of applications thanks to its high heat stability and antioxidant properties. Fuji Oil, the largest manufacturer of palm oil in Japan, is currently striving to expand potential uses of palm oil and at the same time to contribute to its sustainable production.

To better understand palm oil

Oil palms originate in the tropics in West Africa, and the plants are now extensively cultivated, mainly in Malaysia and Indonesia.

Palm oil, mainly containing palmitic acid⁻¹ and oleic acid⁻², is obtained from the fruit of the palm, while palm kernel oil, which contains lauric acid⁻³ and is similar in composition to coconut oil, is obtained from the kernel. Two kinds of oils can be obtained from one plant, making oil palms a very unique plant.







Palm oil, the world's most-produced vegetable oil

Palm oil is currently the most produced and most consumed oil in the world. In Japan, its consumption last year surpassed that of soybean oil and ranked next to canola oil.

The yield of palm oil per hectare is more than 10 times larger than that of soybean oil. Unlike soybean and canola,

World vegetable oil production



which are annual plants, palm is a perennial and can be harvested throughout the year. This is why palm oil boast's the world's highest production.

Palm oil- closely related to our daily life

Do you know how palm oil is used in our daily life? Ninety percent of the palm oil consumed in Japan is used for food. It is processed in •Usage of palm oil in Japan

food. It is processed in many ways and used for an extensive range of purposes, such as frying and spraying oils, margarine and shortening oils, and hard butters for chocolate.



Characteristics of palm oil

Being highly stable against heat and oxygen, palm oil is particularly suitable for deep-fried products and products that require a long shelf life. Palm oil is solid at room temperature but can be fractionated^{*4}, depending on the purpose. In recent years, due to concerns over health issues associated with trans-fatty acid^{*5}, demand for palm oil has

12



been increasing worldwide because it does not contain any trans-fatty acid.

- *1 Palmitic acid: Saturated fatty acid with a 16-carbon chain.
- *2 Oleic acid: Monounsaturated fatty acid with an 18-carbon chain.
- *3 Lauric acid: Saturated fatty acid with a 12-carbon chain.
- *4 Fractionation: Technology to separate oil into fractions according to the melting point.
- *5 Trans-fatty acid: Unsaturated fatty acid generated when cooking oil is heated at high temperature or is hydrogenated to make it harder.

Fuji Oil, a leading supplier of palm oil

Fuji Oil has been using palm and palm kernel oils for a long time. Fuji Oil started importing palm kernels to crush in 1954 and now, in 2011, is the biggest user of palm and palm kernel oils in Japan. Usage has been expanding due to a combination of improved oil pressing technology and oil and fat processing technology (fractionation, transesterification, etc.), which is the basis of the company, contributing to the growth of the market for palm and palm kernel oils in Japan.

These oils contain a large amount of natural antioxidant components such as beta carotene and tocotrienol, which have been confirmed in recent research to be beneficial to our bodies, raising expectations for even greater use of palm oil in the future.



History of oils and the fats business of Fuji Oil

Development of tropical oils

Fuji Oil was established in 1950 as a late entrant in the oils and fats industry. As a latecomer, it was difficult to obtain an import quota of rapeseed and soybean, which were major ingredients for oils and fats back then. For this reason, the company was forced to operate under tough business conditions for many years. To address this difficult situation, following the advice of Seiichi Ueno (Prof.) of Osaka University and Toyozo Kikuchi to "explore coconut oil from the south" we started dealing with tropical oil. After establishing an expelling and extraction method of copra crushing, which was the first of its kind in Japan, Fuji Oil managed to successfully extract oil and coconut oil was first introduced to the Japanese market for inedible usage.

Development using fractionation technology

Our next step was focused on palm kernel oil. Aiming at commercialization of hard butters for chocolate, a solvent fractionation facility was created and, in 1956, lauric hard butter for chocolate was launched to market. Subsequently, hard butters for chocolate made from shea nuts grown in West Africa were commercialized. Gradually adding new functions, such as fat bloom resistance, Fuji Oil successfully developed new markets both in Japan and abroad.

Our efforts have since then been focused on developing oils and fats with new functions through searching



Hard butters for chocolate

for new ingredients for oils and fats and using new interesterification technology.

Aiming for harmonization with the environment

Concerns over biodiversity-related to palm oil have been raised in some regions.

The Roundtable on Sustainable Palm Oil (RSPO) was established in April 2004 with the objective of promoting the growth and use of sustainable oil palm products through cooperation among organizations involved in supplying palm oil and dialogue with stakeholders.

The Fuji Oil Group became an official member of the RSPO in 2004 to support its efforts to protect the global environment and biodiversity so that people can use palm oil for many years to come. We are constantly aware of the environmental issues and impacts on lo-

cal communities in those countries producing palm oil and cooperate in the management of sustainable palm oil plantations.



RSPO General Assembly in 2010

Palm in the future

In July 2011, Fuji Oil and BPPT (Indonesian Agency for the Assessment and Application of Technology) signed a joint research agreement on improvement of oil palm. BPPT is the public research institute under the Ministry of

Research and Technology (RISTEK) of Indonesia, the largest producer of palm oil in the world. Through this joint research, we aim to contribute to the palm



Signing ceremony on July 7, 2011

VOICe · Joint palm research with BPPT

Fuji Oil has long been engaged in palm-related businesses, as in the soybean business, and our affection for palm is very strong. Particular efforts are therefore focused on joint research with BPPT as Fuji

Oil owes its growth to palm. The improvement of the production efficiency of oil palm cultivated in limited tropical rain forests will help prepare for the anticipated food crisis linked to the world's growing population. It will take some time to achieve results but our efforts will be continued in the future.



Director, Chief Operating Officer for R&D Division



oil industry in Indonesia, for example, by improving the efficiency of palm oil production.

Stable procurement of raw materials

Fuji Oil, as the largest palm oil manufacturer in Japan built a refinery in Johor State, Malaysia in 1985 to secure high-quality palm oil. The company now has suppliers also in East Malaysia and Indonesia and, for some special raw materials, has signed long-term purchase contracts, for stable procurement.

Before selecting a new supplier, Fuji Oil staff, along with an engineer, conduct on-site inspections and a final decision is only made after careful evaluation of the safety of the site. Since 2010, a Fuji Oil employee dedi-

cated to tropical oils has been stationed in Singapore to help maintain and strengthen relationships with existing suppliers and develop new suppliers.



Plant inspection by a customer and Fuji Oil employee

Global efforts

Technical information exchange meetings

Fuji Oil Group holds internal meetings of overseas Group companies dealing with oils and fats, inviting R&D and sales staff to attend.

This year the meeting was held at Fuji Vegetable Oil Inc. in Savannah, GA. in the United States, with 19 staff members from six countries taking part.

At the R&D meeting, various issues from a global perspective were discussed, including the market circumstances facing each company, new products and technology, and R&D targets in the future. At the sales meeting, business circumstances concerning markets, customers and raw materials were shared and future strategies were discussed. These meetings are intended to discuss issues on a global scale. This year,



participants also discussed issues relating to palm oil certification.

Technical information exchange meeting

special section 02

Pursuing the potential of healthy and sustainable soybeans - Fuji Oil's Soybean Business

Soybeans have long been familiar to Japanese people.

As Japanese foods have become increasingly popular overseas, interest in soybeans is also growing. Soybeans are also attracting attention as they provide higher quality protein than meat and have a lower environmental impact.

Fuji Oil has been pursuing the potential of soybeans for more than a half century.

Soybeans—friendly to humans and the environment

Japanese and soybeans

Japanese people are known to live the longest in the world and one of the reasons for this is said to be the traditional Japanese diet, with rice as the staple, and highquality proteins obtained from fish and soybeans.

Tofu, natto and *abura-age* form a major foundation of Japanese people's daily diets and fermented foods made from soybeans such as *miso* and *shoyu* are decisive elements of Japanese cuisine.

One of the reasons that soybeans have long been favored in Japan is that they are rich in high-quality proteins. Amino acids, components of proteins, are indispensable to synthesize cells and hormones within the human body. Soybeans contain a well-balanced combination of nine essential amino acids that cannot be synthesized in the body.

Soy protein is also known to lower cholesterol and it has been proven in studies over many years that they also contains physiologically active substances such as isoflavone and saponins.

Soybeans-friendly to the global environment

Soybeans are also an excellent food resource in terms of the global environment. It has been reported that in countries such as China and India, which are undergoing rapid growth, meat consumption is predicted to rapidly increase, resulting in a shortage of feed for stock. For example, it takes about 12 kilograms of feed to produce 1kg of meat. A comparison of energy efficiencies^{*} indicates that the energy efficiency of soybeans is much higher than other foodstuffs.

*Energy efficiency: the ratio of energy recovery to energy input.



In addition, as the population increases, water shortages will start to pose a serious problem. Limited water resources must be used effectively. For example, while it requires 20.6t of water to produce 1kg of meat, it only takes about 2.5t of water to produce 1kg of soybeans.



Soybeans carry infinite possibilities as a food resource and it is therefore no surprise that soybeans are gaining growing attention worldwide.

History of Fuji Oil's soy protein businesses

Start of the soy protein business

Fuji Oil maintains a policy that, if it deals with soybeans, defatted soybeans should play a central role in the soybean business because of the abundant protein they contain. The reason for this policy is that by simply extracting oil from soybeans, Fuji Oil cannot compete with others who are producing soybean oil on a large scale.

Research and development of defatted soybean started in 1957. Since 1961, when the ban on soybean imports was lifted, Fuji Oil has placed particular emphasis

on soybeans, leading to a sequential launches of defatted soybean products for soy sauce, tofu and abura-age. Despite our efforts, this project did not achieve the success we predicted at the beginning.





Top-ranked manufacturer in the Japanese market

Amid a spate of withdrawals of competing companies from the market, Fuji Oil went on to develop differentiated highly purified soy protein and, launched isolated soy proteins in 1967. Improved quality by gel* formation

and better texture of the products made ranked Fuji Oil in the top position among manufacturers in the Japanese market. Later, further efforts



ts Isolated soy protein (Fujipro A)

have been focused on technology sophistication and new product development, expanding product lines such as textured protein, soy protein food products, and soy peptide and water-soluble soy polysaccharides. Even though



not seen by consumers, Fuji Oil contributes daily to people's diet and health.

Soy protein foods *Gel: soft and elastic like a pudding.

Establishment of Fuji Foundation for Protein Research

In 1979, the Research Committee of Soy Protein Nutrition was established to spread the word on "soy protein". The Committee provided support for to research and organized various meetings such as debriefing sessions, international symposiums and lectures, drawing attention from business partners. In 1997, when the company received a permit to establish a foundation, the Committee was reorganized as the Fuji Foundation for Protein Research,



Extensive use of soy proteins

Fuji Oil's soybean products are used for a wide range of food-related functions

Fuji Oil successfully commercialized soy protein isolates before any other company. With their superior emulsifying, water-retaining and adhesion properties, soy protein isolates are used to enhance the quality and stability of ham and kamaboko. The texture and dispersion property of soy protein isolates have been improved in response to recent attention regarding cholesterol and other nutrient functions so that soy protein can be used for nutritious health foods as a source of protein with well-balanced essential amino acids.

In addition, Fuji Oil was the first in the world to achieve successful mass production of water-soluble soy polysaccharides, a dietary fiber made from a byproduct after extracting protein from defatted soybeans. Known for their excellent dispersion stability, film forming and other properties, water-soluble soy polysaccharides are used for acidic lactic beverages and rice dishes in countries



Water-soluble soy polysaccharides

throughout the world. Soy peptides, which are produced in the enzymatic degradation process of soy protein, can raise dietary effects



Soy peptide

because of their success in relieving fatigue and enhanc-



ing physical elements of muscle. For this reason, it is widely used in health foods and sports nutrition products. A wide variety of tasty food products are provided for various purposes, for example, food for school lunches and hospital meals and for use at restaurants. Such products include "*gan-mo*," which absorbs flavor quickly, and "*frozen tofu*" which can be stored for long periods.

We also offer supplements containing ample nutrients derived from soybeans and soy milk, which has been designated as a food for specified health effect in lowering cholesterol. These were developed using our extensive

clinical and basic research data gathered over many years. These products are sold by TORAKU, a Group company, and also online through the SOYAFARM CLUB.



Spreading the good word on soybeans

We provide study sessions on soybean upon request and also organize study tours to manufacturing plants on a regular basis for our customers as well as nutritionists responsible for school lunches. The objective is to provide information on nutrients and functions of soybeans as well as highlight the benefits of soybeans as a food resource. Through these sessions, we have successfully helped participants deepen their understanding of soybeans. In



2010, more than 20 sessions were held throughout Japan.

Study session on soybeans (held upon request)

Future development of the soybean business

Amid the rising world population, in Asia and Africa in particular, experts have predicted serious food shortages amid depleted water and energy resources. Against this backdrop, the role of soybeans will be increasingly important. Fuji Oil is now working on developing a business model to provide soybeans as an inexpensive and effective protein source, particularly in developing countries. Efforts for "the creation of contemporary eating habits as well as fine foods"

Process until high-quality chocolate reaches customers

Chocolate is indispensable to making delicious sweets, and is one of the main products of Fuji Oil. The following is the process we use, from manufacturing high-quality chocolate through to delivery to customers.

Manufacturing of high-quality chocolate starts with customers and ends with customers

Fuji Oil's product manufacturing activities starts with customers' needs.

The first thing we do is identify customers' needs and better understand their issues and problems. Our focus is always on "how we can provide better products and services than customers expect."

In manufacturing high-quality chocolate, we gather

What is the ideal chocolate?

Listening to pâtissiers' opinions

design that reflects customers' needs, prototype development and commercialization, but are also deeply involved in the procurement of the main raw materials. Particularly with regard to cacao beans, they inspect farms to ensure that they are well maintained and also assess the process of fermentation and drying. They apply manufacturing and processing techniques unique to Fuji Oil in selecting the best conditions for roasting and conching* to add richness and taste, and thereby develop high-quality chocolate for pâtissiers.

Fuji Oil pursues and develops "new food

Our chocolate researchers are not only involved in product

possibilities" using its own technology

Eight steps of product development

. Concept (specifications, individual characteristics) . Blending of ingredients 1 Product design . Identify the manufacturing process 2 Selection of main raw materials (cacao beans, milk products) 3 Establishment of manufacturing conditions (roaster, conche) 4 Prototypes 5 Internal evaluation 6 Evaluation by pâtissiers (concept, details of quality) 7 Brushing up 8 On-site manufacturing (completion)



Aroma from cacao stimulates pâtissiers' inspiration, producing new confectioneries-with this in mind, we are engaged in developing high quality chocolate.

* Conching: Kneading in a machine called a conche at a certain temperature

Evaluation of quality and communication with local people

To ensure safety and security, we inspect the quality of flavor at production sites and also test for residual pesticides and heavy metals. Recently, we have also been focused on selecting production areas in Asia that can offer a stable supply with minimal environmental impact (food mileage).



Purchasing



Communication with cacao farmers

We conduct on-site inspection of cacao plantations from which we purchase cacao beans and, in return, present chocolate made from it to them. This way, we are able to develop partnerships and work toward the same goal-producing good chocolate-rather than it simply being a producer-purchaser relationship. Through such efforts, we have gained their understanding of fermentation testing to obtain higher quality cacao beans, resulting in a better taste and a better working relationship.

Customer

Opinion

he opinions of pâtissiers and

checked their needs. For example, Discussion among Sales, Manufacturing they might say: "We want chocolate and R&D staff (Chocolate Subcommittee made in Japan with a quality as high

> as that of overseas brand chocolate. If such chocolate is available in Japan, it would be best in terms of freshness and prices."

> In this case, our response was: "we will do whatever we can to meet our customers' needs. With our longestablished history, technology and emphasis on selecting only the very best raw materials, we believe we can provide chocolate that is better than or at least the same as overseas brand chocolate in terms of textures, properties and tastes." This attitude has gone down well with pâtissiers.

> The production of high-quality chocolate is planned and developed by an internal group called the "Chocolate Subcommittee" which consists of staff from the Sales, Manufacturing and Development departments. We seek pâtissiers' evaluation of our chocolate from the prototype stage in order to produce higher quality products.

Safe and secure manufacturing and careful small-batch roasting

Cacao beans purchased from various countries around the world contain some defective beans and foreign matter. To remove these, we "clean" beans with a vibrating sieve machine. We then roast the cleaned beans, which is important to develop the flavor of the chocolate. We can obtain cacao mass with different characteristics by setting optimal roasting conditions for different purposes. Cacao beans used for high-quality chocolate are roasted in a small batches with a direct fire roaster that allows the fine flavors inherent in each bean to come to the fore. In roasting beans, emphasis is placed on controlling time and temperature, which are the keys to bringing out the individual characteristics of the cacao beans.



tank after conching

Cacao beans roasted over direct heat

Cacao mass obtained after roasting is then mixed with sugar, milk powder and other ingredients to make chocolate. This mixture is refined using roll refiner. The refined mixture then undergoes a kneading process called conching using a conche at a pre-selected temperature to develop the rich chocolate flavor and yield a smooth texture.

Branding

Our objectives are to propose new food values and contribute to customers, convey the real value of products to customers and gain better understanding, and to encourage them to use our products. It is our hope, as an intermediate food material manufacturer, to create new eating habits as well as fine foods together with our customers.



Presentation at Fuji Sunny Plaza

We cannot simply expect that high quality chocolate will automatically lead to actual sales. Pâtissiers place priority on quality in general, particularly on individual characteristics and the concept behind each product. It is therefore necessary to build a strong brand that pâtissiers recognize as one of high quality. Our efforts have therefore been focused on creating high-end branding that is totally different from existing products in terms of not only quality but also product name, packaging, and concept.





DUOFLORE

Blending high-guality cacao beans from Latin America and enriched power milk from France

Origin of the name: The two ingredients, each with excellent characteristics, are blended in an exquisitely balanced manner to form a rich milk chocolate. This process is expressed in the name Duoflore, named after Flora, the goddess of flowers, who married Zephyros, the god of the west wind, in Roman mythology.

Chocolate Workshop and proposal marketing

After developing a new high-quality chocolate product, we start introducing and selling the product to famous pâtissiers at flagship sites throughout Japan. As part of our marketing efforts, we have been organizing the "Chocolate Workshop," since 2004 inviting top pâtissiers in Japan. Famous pâtissiers are also invited from Belgium, the world's best known chocolate producing country, to provide lectures. At the workshops, participants are also provided with the opportunity to taste samples of chocolate and exchange opinions with lecturers and other participants.

In our daily sales activities, we apply a proposal marketing approach, aiming to solve customers' issues together. Through frequent visits to pâtissiers and technicians and by presentations at Fuji Sunny Plaza, where Fuji Oil staff and customers work jointly to develop products, our sales efforts are designed to meet customers' needs and expectations.

These activities have been well received, not only by top-class pâtissiers but also by the wider confectionery customers.



Lecture by a Belgian pâtissier at a Chocolate Workshop

Efforts for "the environment"

Environmental vision and policy

Our goal is to further enhance our business activities in harmony with the natural environment through the establishment of the environmental vision and the implementation of efforts to promote environmental management.

Environmental Vision 2020

In June 2011 the Fuji Group Environmental Vision 2020 was established as guidelines for the Group's environmental activities. The target for the absolute reduction in CO2 emissions and the amount of supplied and discharged water by 2020 was set at 20%. Efforts are also focused on greening the Earth and conserving biodiversity. We have started participating in activities, including Satoyama conservation and tree planting projects, with the purpose of passing our beautiful environment onto future generations. As for CO₂ emissions, we have also set reduction targets for overseas Group companies. Since the combined energy consumption is larger in overseas than in Japan, energy saving at overseas Group companies is an important environmental issue for Fuji Oil Group.

In particular, in order to achieve the 20% reduction of CO2 emissions, it is important for the Group to continue its steady efforts to save energy, such as by replacing aged facilities with those designed to save energy and implementation of the productivity improvement and challenge (PIC activity), as well as promoting a reduction of water used and discharged. It is also essential to establish innovative energy saving techniques. Given these factors, our vision is not so easy to achieve, but by integrating our resources and the wisdom of the entire Group and with our constant awareness to reduce the influence of our business activities on the environment, each and every Fuji Oil Group employee is determined to accomplish the Environmental Vision 2020.

Fuji Group Environmental Vision 2020

Domestic Group

Global warming prevention

CO2 emissions: 20% reduction by 2020 (in comparison with the reference year*)

Water resources conservation

Amount of water supplied and discharged: 20% reduction by 2020 (in comparison with the reference year*) *Reference year: Mean value of the period from '03 to '05.

Resource recycling

Recycling rate: ≥99.8% by 2020

Active engagement in global greening and biodiversity conservation

Overseas Group

CO₂ emissions: 20% reduction by 2020 (in comparison with 2006)

Concept behind environmental management in the medium-term management plan

To focus on promoting environmental management, "promotion of sustainable management" is included in the 2011-2013 medium-term management plan as one of its fundamental poli-

- (1) Development of environmentally conscious products (natural resource saving, global warming prevention) and improvement and reform of plant operation processes
- (2) Environmentally conscious procurement (biodiversity) of raw materials
- (3) Commitment to global environmental conservation as a corporation (corporate citizen)

Our primary efforts are focused on implementing these activities based on our belief that improvement of our corporate value through such activities forms the basis of our environmental management.

Highest ranking achieved on the DBJ's environmental rating loan list

Fuji Oil achieved the highest environmental rating for its "particularly innovative environmental efforts" from the Development Bank of Japan (DBJ) in May 2011 and was awarded a DBJ Environmental Rating Loan. The DBJ's financing program, based on its own environmentally responsible ratings, offers

three levels of preferential interest rates according to the level of each organization's environmental achievement. This is the first of its kind in the world.



Certified as a top rated company eligible for the DBJ's Environmental Rating Loan

Fuji Oil received particularly high points for the following:

- 1. Developing various products using by-products from processing at high percentage.
- 2. Reducing waste and sustaining a high food recycling rate through a sludge drying facility and by-product oil boiler, in order to achieve zero-emissions.
- 3. Promoting a modal shift to railroad transportation as a logistics policy, with an aim to increase 3,000 tonsworth of railroad transportation per annum.