

Sustainable materials sourcing

The Ajinomoto Group has products in more than 130 countries and regions and sources raw materials from even more geographies. Our business is built on a resilient food system consisting of a stable supply of food resources supported by a rich and abundant global environment.

But we recognize the burden our business places on the environment. All processes from raw material production to the final products emit greenhouse gases, create plastic waste, and result in food loss and waste, all of which pose environmental and societal risks. In addition, when natural forests are damaged, peatlands developed, and water and soil contaminated, ecosystems are damaged, making it difficult to maintain food resources. It is therefore urgent that businesses such as ours take measures to further decrease our environmental impact across the entire value chain.

This also includes supporting a healthy and vibrant society through the defense of human rights for all people involved in the supply chain and ensuring their occupational health and safety are protected. In addition, since we use animal-based raw materials, it is necessary for us to improve animal welfare.

We will work together with stakeholders throughout our supply chain to address these issues and make improvements to build a supply chain that positively impacts the environment and society.

Specific examples

- Biodiversity impacts
- Deforestation control
- Elimination of child labor and forced labor
- Supply chain management
- Sustainable land use
- Animal welfare
- Animal and plant nutrition

Related opportunities and risks (○ Opportunity ● Risk)

- Creating business opportunities by developing products in consideration of resource recycling and biodiversity
- Failure to procure raw materials, product recalls due to quality issues in the supply chain
- Failure to procure raw materials and damage to corporate value due to delays in addressing social and environmental issues in the supply chain
- Supply chain disruptions due to natural disasters, pandemics, or delays in responding to export restrictions in certain regions
- Failure to procure raw materials due to food resource depletion

Key initiatives by the Ajinomoto Group

- Visualize issues in the supply chain
- Conduct human rights impact assessments
- Pursue animal welfare
- Establish traceability and purchase certified products
- Ensuring fair competition and providing thorough employee training
- Contributing to sustainable agriculture by using co-products

Related SDGs



Sustainable Materials Sourcing

Initiatives related to key raw materials

Approach

GRI301-DMA

- > Ajinomoto Group Palm Oil Procurement Guidelines
- > Ajinomoto Group Paper Procurement Guidelines
- > Participation in RSPO
- > Participation in CSPU
- > CDP Forests
- > ASV Report 2022 (Integrated Report) P49

Identification of key raw materials

The Ajinomoto Group identifies priority raw materials derived from agriculture, forestry, and fishery sources which demand more focused action. The identification process involves determining all the raw materials used in business operations, which are then analyzed by internal divisions and external experts including NGOs. We base our assessment on an overall perspective that includes several factors such as dependency on the materials used, availability of alternative materials, and relevance to global environmental sustainability. Priority raw materials are reviewed every year in line with changes in business and global environmental conditions.

We recognize that deforestation has a substantial impact on climate change, biodiversity, and human rights issues. The Ajinomoto Group has created Palm Oil Procurement Guidelines as well as Paper Procurement Guidelines, and has promoted the procurement of certified raw materials, cooperation with various initiatives, and establishment of its own traceability and auditing system. In fiscal 2021, we also designated sugarcane, coffee, beans, beef, and soybeans as priority raw materials. Going forward, we plan to procure these products sustainably, as we do with palm oil and paper.

Ajinomoto Group priority raw materials

	Priority raw materials	Major countries and regions of procurement
Agriculture and forestry resources	Palm oil, an ingredient in packaged food products and specialty chemicals	Indonesia, the Philippines, Vietnam, Malaysia, Thailand, West Africa, Colombia, Brazil, Peru, Papua New Guinea
	Paper, used as office paper and in containers and packaging for packaged food products	China, Indonesia, Cambodia, the Philippines, Vietnam, Malaysia, Thailand, Bangladesh, EU, Turkey, West Africa, the United States, Canada, Mexico, Argentina, Uruguay, Colombia, Paraguay, Brazil, Peru, Bolivia, Australia, New Zealand, Papua New Guinea
	sugarcane, used in fermentation process of amino acids	Each country where our factories are located
	Coffee beans	Indonesia, Vietnam, West Africa, Mexico, Colombia, Brazil, Papua New Guinea
	Beef, an ingredient in frozen foods, etc.	Japan, China, Thailand, India, EU, Turkey, the United States, Canada, Mexico, Argentina, Uruguay, Brazil, Australia, New Zealand
	Soybeans, an ingredient in packaged food products, etc.	Japan, China, South Korea, Indonesia, Cambodia, Thailand, India, EU, Turkey, the United States, Canada, Mexico, Argentina, Brazil, Australia, New Zealand
Fishery resources	Skipjack, an ingredient in <i>HON-DASHI</i> ® and in bonito flakes	Japan
	Shrimp, an ingredient in frozen foods, etc.	Thailand

Sustainable Materials Sourcing

Performance

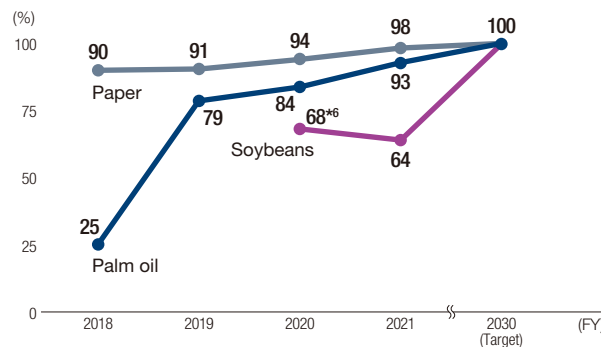
> Participation in Initiatives

Initiatives related to raw materials

In order to procure raw materials sustainably, it is necessary to reduce risks from various perspectives such as climate change, human rights, and biodiversity. To that end, the Ajinomoto Group collaborates with external organizations such as international initiatives and certification organizations. In addition, we are striving to clarify the status of procurement for the priority raw materials we have identified and prioritize the procurement of certified materials. Going forward, we will promote procurement of certified materials as well as establishment of traceability.

Sustainable procurement ratio

- Paper, Palm Oil, Soybeans



[1] Procurement conversion for businesses in Japan

- FY2030 target of sugarcane, coffee beans, and beef: 100%

Sustainable procurement of palm oil

The Ajinomoto Group has established Palm Oil Procurement Guidelines which stipulate criteria that must be met by the palm oil we procure. The Ajinomoto Group uses palm oil in a variety of products and applications, from specialty chemicals to packaged food products such as cup soup, instant noodle, and coffee creamer, that are used in Japan, Southeast Asia, Europe, and South America. Certain products use palm kernel oil, which is harder to procure in certified form. Further, certain regions have limited supplies of certified palm oil. Therefore, the Group defines palm oil certified by RSPO or traceable by the Group to sustainable sources as a sustainable material. In regions where it is difficult to procure RSPO-certified oil, we make every effort to procure palm oil that is confirmed as traceable. In so doing, we ascertain whether production takes place in regions where environmental destruction is a concern. In addition, we can respond quickly if human rights violations or other problems occur.

We had set a fiscal 2020 target of 100% sustainable procurement of palm oil, but were unable to achieve this due to difficulty in procuring certified oil for some areas/products. We have set a new target of 100% by 2030, and continue to work towards this goal. In fiscal 2021, our performance was 93%. The rate of RSPO-certified palm oil procurement was 37%. From fiscal 2021 onwards, we plan to focus on establishing traceability for palm oil in applications and regions for which certification and traceability have not yet been established, and on further expanding initiatives toward achieving this goal.

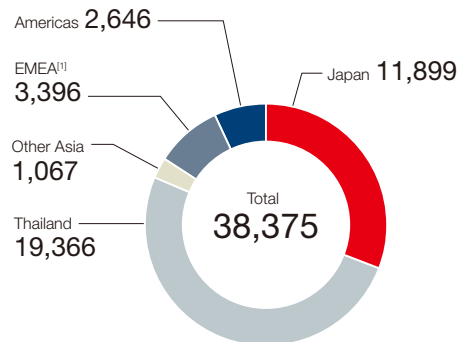
Performance

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Performance

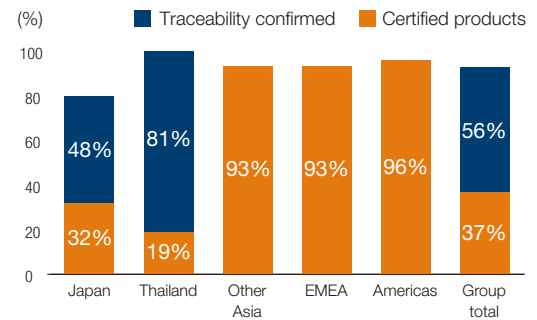
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Fiscal 2021 palm oil procurement (tons)



[1] Europe, the Middle East and Africa

Fiscal 2021 sustainable palm oil procurement ratio

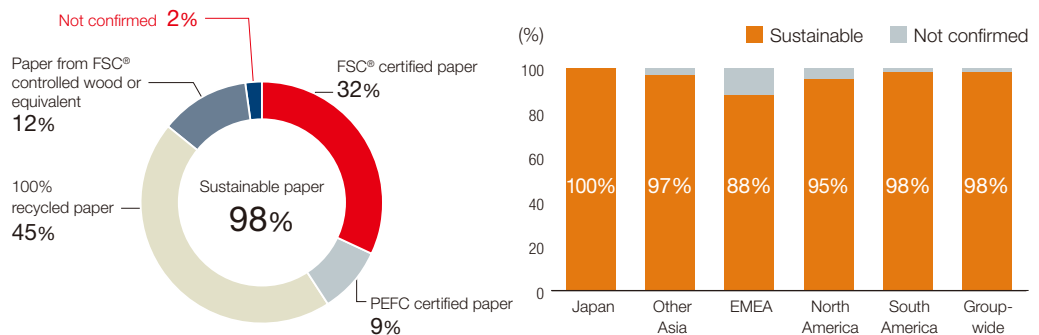


Sustainable procurement of paper

The Ajinomoto Group has established Paper Procurement Guidelines which stipulate criteria that must be met by the paper we procure. These guidelines define sustainable paper as paper that is not derived from deforestation in areas of high conservation value and paper that is procured from suppliers who use proper production procedures in accordance with local laws and regulations, as well as in line with international human rights standards. Sustainable paper includes paper certified by FSC[®], as well as recycled paper and paper made from FSC[®] Controlled Wood.

We had set a fiscal 2020 target of 100% sustainable procurement of paper, but were unable to achieve this because neither certified nor recycled paper are widely used in some areas. We have set a new target of 100% by 2030, and continue to work towards this goal. In fiscal 2021, we achieved a figure of 98% sustainable paper usage in packaging.

FY2021 Sustainable paper procurement ratio



Promoting procurement of sustainable sugar crops

The Ajinomoto Group uses sugar obtained from various crops such as sugarcane, sugar beet, cassava, and corn as a raw material in the fermentation process. In fiscal 2021, we reassessed the risks involved in the sustainable procurement of these crops, and decided to add sugarcane, which has been reported to pose a hazard to biodiversity, to our list of priority raw materials. From fiscal year 2022 onwards, we will visualize the country of origin, procurement volume, and usage volume in each region for cane sugar used by the Ajinomoto Group. At the same time, we plan to begin discussions with overseas companies that handle these products in order to promote initiatives aimed at the procurement of sustainable sugar.

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Approach

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Sustainable procurement of coffee beans

Coffee beans are grown in areas of the world rich in biodiversity, often by small farms.

The Ajinomoto Group has endeavored to procure coffee beans produced at farms that adhere to standards set by the 4C certification system. This system aims to improve environmental conditions at coffee farms and better the lives of farm workers, while encouraging sustainable production and distribution. In fiscal 2021, 58% of all the coffee beans procured by Ajinomoto AGF, Inc. were from farms that adhere to the 4C standards. Starting with the first 4C certification logo in Asia on the packaging for stick coffee released in August 2020, we have promoted ethical consumption related to the sustainable procurement of coffee beans. As of March 2022, a total of 42 products now have the 4C certification logo. The Group has been continuing with tests in different coffee-producing regions with the goal of using high value-added fertilizers made from by-products (co-products) of fermentation processing of amino acids. Our hope is that, eventually, this coffee will be part of a Group circular economy. In particular in Indonesia, Brazil, and Vietnam, we are expanding support to farms with *AJIFOL*[®] co-product fertilizer, and have started putting together a system for improving product value and communicating value to consumers.

■ Indonesia

We will expand and continue to support the application of *AJIFOL*[®] co-product fertilizer in the Pagar Alam, and Sidikaran areas of Sumatra and in the Surabaya area of Java. We have also started surveying the effects (sugar content, ratio of red fruit, size) on the yield and maturity of the harvested crops.

■ Vietnam

We will expand and continue to support the application of high value-added fertilizer in the Krong Nang/Ea H'leo districts of Dak Lak province, and the Ham Rong/Dak Doa districts of Gia Lai province. We have also started surveying the effects (sugar content, ratio of red fruit, size) on the yield and maturity of the harvested crops.

■ Brazil

We will continue to work to bring to market beans from supported farms, such as BAU farms and the Kopelkam Agricultural Cooperative, by providing *AJIFOL*[®] co-product fertilizer. We have also started surveying the effects (sugar content, ratio of red fruit, size) on the yield and maturity of the harvested crops.

Sustainable procurement of beef

The Ajinomoto Group aims to procure 100% sustainable beef by fiscal 2030. We are currently considering specific initiatives such as ensuring traceability. In fiscal 2021, we conducted a comprehensive assessment of various hazards such as climate change, water, soil, biodiversity, and human rights, and identified associated high-risk areas such as Brazil and Australia. From fiscal 2022, we plan to launch initiatives such as visualizing the beef supply chain and identify corporations working on important initiatives.

Sustainable procurement of soybeans

The Ajinomoto Group aims to procure 100% sustainable soybeans by fiscal 2030. We are currently considering specific initiatives such as ensuring traceability. In fiscal 2021, the percentage of soybeans and soy oil used in Japan by the Ajinomoto Group that conformed to the United States Soybean Sustainable Assurance Protocol was 64%. On the other hand, because the remainder of the soy products included those from South America, which is considered be at high risk of deforestation, and others whose country of origin was unknown, we plan to start discussions with suppliers regarding sustainable soybean procurement from fiscal 2022. Furthermore, we plan to begin visualizing the corporations that purchase soybeans whose country of origin is unknown and their supply chains.

Sustainable Materials Sourcing

Performance

> WCPFC

Sustainable procurement of fishery resources

The Ajinomoto Group uses skipjack as an ingredient in *HON-DASHI*[®], our popular flavor seasoning product in Japan. We are committed to conserving resources and sustainable procurement.

Therefore, we have conducted the joint skipjack tagging survey with the National Research Institute of Far Seas Fisheries (NRIFSF) in Japan since 2009. In fiscal 2020 and fiscal 2021, due to the impact of the COVID-19 pandemic, travel to Taiwan and the remote islands of Okinawa Prefecture, where we had previously conducted skipjack tagging surveys, proved difficult and we were unable to conduct further tagging surveys. From fiscal 2022 onward, we will resume the skipjack release survey in the ocean around Amami Oshima, where the migration of skipjack was confirmed in previous surveys. Our goal is to compile data on skipjack migration routes in the Nansei Islands and to clarify the effects of the meandering of the Kuroshio Current and rising seawater temperature on skipjack distribution.

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Supply chain management

Framework

GRI204-DMA
GRI308-DMA
GRI407-DMA
GRI414-DMA

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Performance

GRI204-DMA
GRI407-DMA
GRI414-1

> Group Shared
Policy for
Suppliers

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Ajinomoto Co., Inc. creates procurement policies for the Group. Group companies create and implement plans and strategies based on these policies. We hold an Ajinomoto Group Global Procurement Conference to share procurement policies and best practices within the Group. We also use tools that allow persons within the Group to access necessary information, providing timely communications on pertinent topics.

Supply chain initiatives

The Ajinomoto Group states our expectations to suppliers related to sustainability in the Group Shared Policy for Suppliers, and asks our suppliers for their understanding and cooperation to ensure social and environmental sustainability in the supply chain. In fiscal 2018, the Group joined Sedex. In fiscal 2020, we voiced our support for the Tokyo Declaration 2020 on Responsible Acceptance of Foreign Workers formulated by the Global Alliance for Sustainable Supply Chain (ASSC) regarding the recruitment of foreign workers with intern training program or special skills visa status, and we have requested that our suppliers create an environment in which foreign workers can be active in their work. In fiscal 2021, as a member of the CGF's Japan Social Working Group, we participated in the formulation of the "Responsible Employment Guidelines for Migrant Workers as Technical Intern Trainees and Specified Skilled Workers in Japan". Using Sedex^[1] as a base, we aim to set up a supply chain management system with common standards within the Ajinomoto Group by fiscal 2025.

After conducting an audit, we began transactions with three new suppliers during fiscal 2021.

[1] Supplier Ethical Data Exchange. A global membership organization that provides data on labor standards, business ethics, etc. within the global supply chains.

Supplier audits in fiscal 2021

Audited organization	Audited items	Number of audits
Ajinomoto Co., Inc.	Raw materials	129
	Packaging materials	48
Ajinomoto Frozen Foods Co., Inc.	Raw materials	147

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GRI204-DMA
GRI408-DMA
GRI409-DMA
GRI411-DMA
GRI412-DMA
GRI412-1
GRI414-DMA
GRI414-2

> Group Shared
Policy on Human
Rights

> Human Rights
Due Diligence

Supplier hotlines

The Ajinomoto Group established a supplier hotline in fiscal 2018. The hotline complements the hotline available to Group executives and employees. Reporting from suppliers facilitates the early detection and correction of Ajinomoto Group executive and employee behaviors that are potentially in violation of the law or the Ajinomoto Group Policies (AGP).

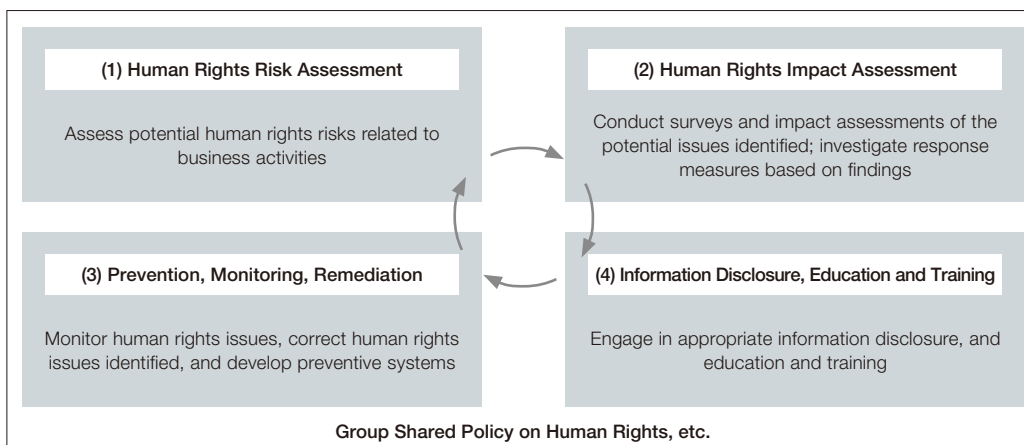
In fiscal 2020, we introduced a Workers' Voice system for monitoring the opinions of migrant workers at three Group companies in Japan. This will use multilingual support provided by NPOs to receive reports of day-to-day problems, and can be used as a hotline for labor and human rights related consultations that can be sent to the Group. We have been participating in an advisory capacity since the 2020 establishment of the Japan Platform for Migrant Workers toward Responsible and Inclusive Society (JP-MIRAI) created by the Japan International Cooperation Agency (JICA) together with other stakeholders including companies, lawyers, and NGOs. This aims to resolve issues faced by foreign workers undergoing technical training and those with special skills. In fiscal 2022, we participated in the Pilot Project of Consultation and Remedy for Migrant Workers launched by JP-MIRAI. Moving forward, we intend to expand this system to cover the whole supply chain and utilize it in the early detection of issues with labor and human rights.

Human rights due diligence

The Ajinomoto Group engages in the human rights due diligence process in accordance with the Group Shared Policy on Human Rights and other relevant policies. Under these policies, we conduct dialogues and consults with stakeholders and collaborate with human rights experts.

The Ajinomoto Group's human rights due diligence process is as follows.

Ajinomoto Group human rights due diligence process



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With regard to human rights due diligence, we have worked with external experts to conduct human rights risk assessments throughout the entire business in 2014, 2018, and 2022, and are carrying out human rights impact assessments starting in industries and regions with comparatively high risk. In fiscal 2019, we carried out field interviews in the marine processing (shrimp) and poultry industry supply chain in Thailand, and in fiscal 2020 and 2021, we carried out desktop surveys and remote interviews with stakeholders in the sugarcane and coffee industries in Brazil. As a measure in our prevention, monitoring, and correction process, we have implemented a supply chain management system utilizing Sedex to monitor the voices of foreign workers at three of our group companies in Japan. In addition to disclosing our human rights initiatives through our website, we conduct human rights awareness and education activities aimed at nurturing individuals who have a strong sense of human rights. We are keeping a keen eye on global trends including the 2022 enactment of the EU's Environmental and Human Rights Due Diligence Legislation, and will take measures as necessary.

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Animal welfare

Approach

GRI204-DMA

- > Group Shared Policy on Animal Welfare
- > Commitment to Minimizing Animal Testing

Performance

GRI204-DMA

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Creating policies and holding dialogues with society

The Ajinomoto Group deals with animals throughout our businesses and product development. Animal-derived ingredients such as meat, eggs, and extracts are essential for the food products we produce. In the Group Shared Policy on Better Mutual Relationships with Animals established in 2018, the Group defines our approach to procurement in keeping with the concept of animal welfare, and shares this policy with all primary suppliers in Japan when we start working with them. Also, so that we can respond flexibly to social trends and demands, we hold dialogues with experts in the field of animal welfare and exchange opinions with stakeholders regarding livestock. Given these, the Group policy above was renamed in 2021 to the Group Shared Policy on Animal Welfare. This was updated with more specific content, and shared with all primary suppliers within Japan. Based upon this revised Group policy, looking forward we will aim to build a better symbiotic relationship with all animals in our supply chain.

Livestock traceability survey

The risk assessment of Ajinomoto Co., Inc.'s domestic suppliers of meat and meat extract for fiscal 2020 found a combined traceability to original farming sites of just 10% on a numerical basis for fully traceable and conditionally traceable suppliers. One of the reasons for this result was that farming management guidelines have not been fully embraced in Japan, with widely varying degrees of awareness among suppliers. We plan to continue our work in spreading awareness of these guidelines as we as to conduct a similar survey at our Group companies.

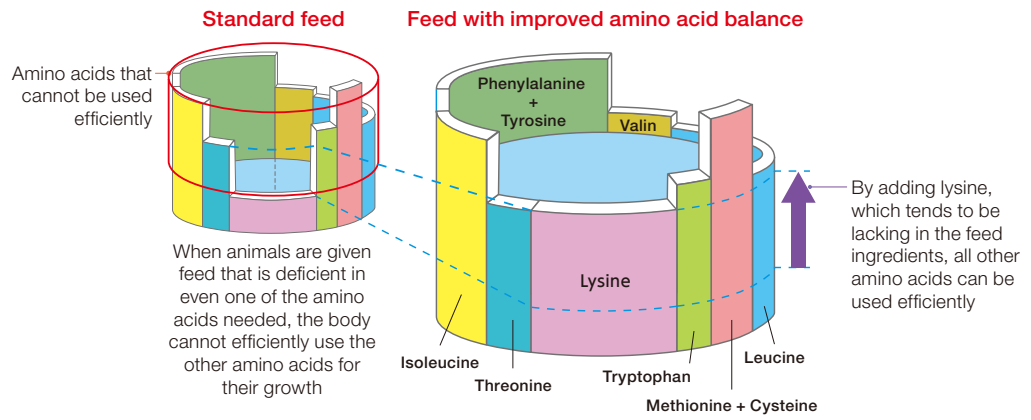
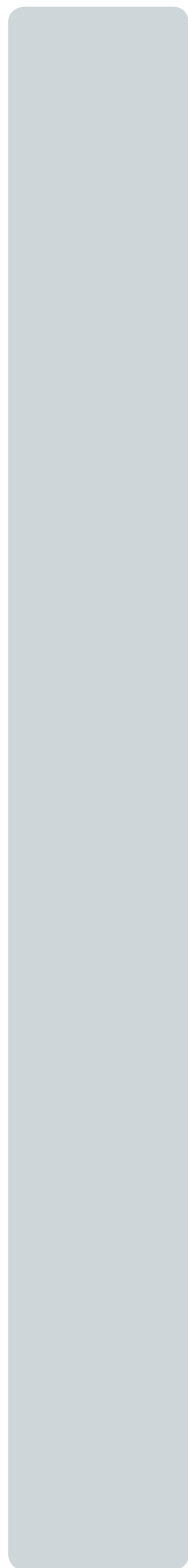
Overseas, the Group tracks the status of legal developments regarding animal welfare in each country and region. We are sharing our policies and issues on the subject with Group companies.

Amino acids for animal nutrition as a solution to livestock nutrition issues

Animal bodies are made up of approximately 20 types of amino acids. Several of these amino acids cannot be synthesized internally in sufficient quantities. These amino acids, called essential amino acids, can be supplemented through animal feed.

Adding amino acids for animal nutrition can improve the essential amino acid profile of feeds that consist mainly of wheat and/or corn and thus are poorly balanced. The improved amino acid balance not only increases feed efficiency and promotes growth, but also reduces environmental impact by reducing excreted nitrogen.

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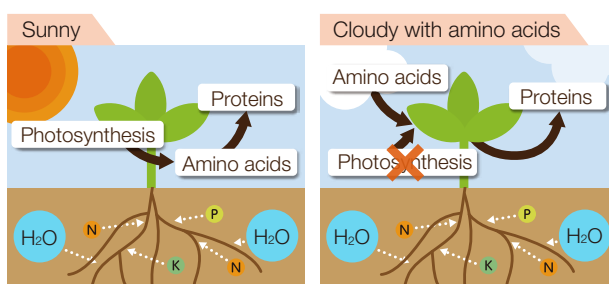
Sustainable Materials Sourcing

Contribution to sustainable agriculture

Approach

GRI203-2

Plants synthesize amino acids from absorbed nitrogen and sugars gained through photosynthesis, then use amino acids to synthesize proteins necessary for growth. Even under poor photosynthesis conditions caused by cloudy weather or low temperatures, plant growth can be stimulated by supplying amino acids as fertilizer. For more than 40 years, the Ajinomoto Group has effectively utilized the nutrient-rich co-products of amino acid production as amino acid fertilizers. By fortifying these co-products with suitable amounts of phosphoric acid and potassium, for example, we have developed fertilizers with higher added value. Continued experiments and research have made it clear that these amino acid-enriched fertilizers enhance root development, plant growth, and harvest yields.



Ajinomoto Group agriculture initiatives around the world

■ Japan

Ajinomoto Co., Inc. produces high-quality fertilizers, making effective use of co-products generated during the amino acid fermentation process. Cell drying technology using heat from compost significantly reduces the amount of CO₂ emitted during the course of drying co-products. This fertilizer not only reduces environmental impact, but also is expected to improve soil quality, and increases the amino acid content and sugar content of crops, while stabilizing quality. It therefore contributes to expanded sales channels for these crops.

■ Vietnam

Vietnam is one of the world's leading exporters of rice. The Mekong Delta in the south is a center of rice production, where rice cultivation takes place two or three times a year. Continued use of nonorganic fertilizers in this region has degraded soil fertility, resulting in unstable quality and yields, making farmers difficult to make a living through rice cultivation. In 2007, AJINOMOTO VIETNAM CO., LTD. began conducting research using a co-product called *AMI-AMI*[®] (liquid fertilizer) in small-scale test farms. Today, this co-product business in Vietnam, which maintains soil fertility while keeping farm production costs down, is essential among local communities, leading to sustainable agriculture.

■ China

Improving crop yields is also a primary goal in China. *FERTIGRAIN FOLIAR*, a foliar biostimulant based on amino acids containing essential micronutrients formulated specifically for extensive crops, and *TECNOKEL AMINO MIX*, a mixture of micronutrients with amino acids, are sold in China by Ajinomoto Group company AGRITECNO FERTILIZANTES, S.L.(Spain), which sells agricultural materials. The use of these two materials improved grain yields by about 18%. We will continue to contribute to the development of sustainable and stronger agriculture through the supply of agricultural materials.

Performance

GRI203-2

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Sustainable Materials Sourcing

GRI203-2

■ Thailand

In Thailand, a major cause of PM2.5 particulates is the burning of sugar cane leaves after harvest. However, spraying the co-product *AMI-AMI*[®] (liquid fertilizer) on the fields acts not only as a fertilizer, but also promotes the composting of leaves and is helpful in preventing burn-offs.

In Thailand, where the Ajinomoto Group has its main production site, 40% of the population is involved in agriculture. However, the low added value and productivity in this field is of concern. Given that agricultural produce makes up most of the Group's raw materials, in June 2020, we set up a project to support farmer autonomy to contribute to the sustainability of Thailand's food resources. In fiscal 2021, we provided seed stems free of the cassava mosaic virus to 187 farmers in Kamphaeng Phet Province, where our plant in Thailand is located. We confirmed that the use of appropriate fertilizer management based on soil diagnosis and the use of plant growth promoting rhizosphere microorganisms (PGPR), a prototype of which was produced under the transfer of manufacturing technology from the Thai Department of Agriculture, improved the yield of cassava roots per unit area by approximately 30%. We also launched sale of our own fertilizers covered by weather index insurance with an insurance company and others.

In fiscal 2022, we will expand the number of supported farmers to 500 and also begin to study the traceability of the roots harvested there. We will also work with the Thai Tapioca Development Institute, universities, and farmers to improve the quality (starch content) of cassava roots by selecting and distributing varieties that are suited to the soil of Kamphaeng Phet Province.

■ Brazil

AJINOMOTO DO BRASIL INDÚSTRIA E COMÉRCIO DE ALIMENTOS LTDA. (ABR) sells co-products such as liquid foliar fertilizer and fertilizing material *AJIFOL*[®] and soil mineral fertilizer *AMIORGAN*[®] mainly to coffee and fruit plantations. More recently, we have seen a movement among plantations toward sustainable management, making a full-scale transition from chemical fertilizers to co-products from ABR. In fiscal 2021, we conducted tests on the high value-added fertilizer *Amino Proline*. Results showed improved productivity of bananas when compared to ordinary fertilizers. In addition, we use *AJIFOL*[®] at coffee plantations that AGF supports in the production region to further improve quality.