

1. Approaches Taken by Domestic

1) Efforts at Chitose Factory

<Refer "Greening of Chitose Factory received the Minister of Economy, Trade and Industry Award as a good model of the greening of factory," Sustainability Report 2005>

Chitose Factory of Kikkoman Corp. is situated near to the center of the Chitose-Rinku Industrial Park. Under the Kikkoman Environmental Philosophy "keeping harmony with the environment," greenery was carefully laid and maintained in its premises taking natural settings into consideration, including leaving the natural forest as it is. The green area has been opened to the public for their comfort.

Total area of the premises: 88,822 sq. m.

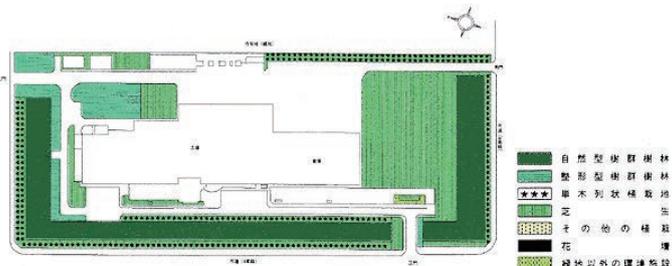
Green occupation: 51%

- natural wood: 35%

- trimmed trees: 14%

- plantation: 18%

- plant cover: 32%



At the 23rd national assembly of the Promotion of the Greening of Factories on October 1, 2004, the Chitose Factory (then) received the Minister of Economy, Trade and Industry Award for its merit in promoting greening of its premises.

The landscaping of the premises with consideration to the nature of Hokkaido incorporating the existing natural forest, and offering a place of comfort to local people such as "visiting factory" and offering the green areas for organizing an "insect photo exhibition" were highly recognized. The policy and practices of the Chitose Factory were in line with the policy of the Chitose city government to build a city where "people who are environmentally considerate and who are filled with happy feelings interact."

2) Cooperation with the Wildlife Preservation Bureau of Hokkaido Corp.

<Refer "Cooperation in the protection of endangered wild life," Sustainability Report 2004>

Since 1999, Chitose Factory of Kikkoman Corp. has been cooperating with the Wildlife Preservation Bureau of Hokkaido Corp. that conducts activities to protect, survey and research endangered animals and to educate the public about them. The organization is now placing an emphasis on the protection of shima owls. The owls have been cherished by indigenous Ainu people in Hokkaido as the "guardian deity of forests," but its population has decreased and it is now estimated to be around 120.

● Symbol Mark of the Wildlife Preservation Bureau of Hokkaido Corp.



3) Participation in the Japan Business and Biodiversity Partnership

<Reported in FY2013>

The Kikkoman Group joined the Japan Business and Biodiversity Partnership in May 2011. To promote the activities of biodiversity by business corporations, the Partnership invites many businesses to join and encourages them to share and exchange information and experiences among themselves, and with economic associations, environmental NGOs, academia and public organizations. Business corporations which agree to the prospectus of the Partnership, and which take action in line with its action guidelines are eligible as members.



4) Release Salmon Project

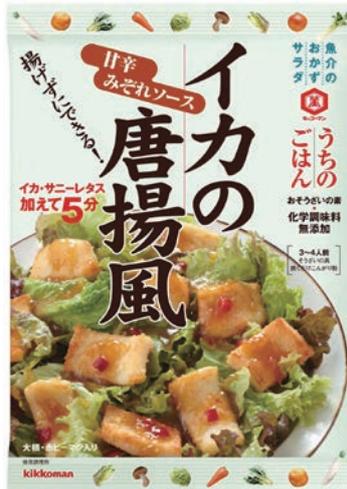
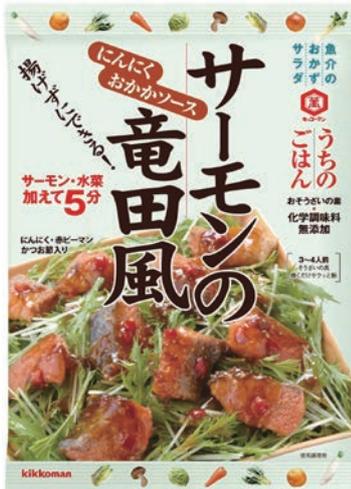
<Reported in FY2016>

The volume of salmon catches in Iwate prefecture peaked in 1996 with over 70,000 tons after which the volume has continued to

decline, falling to less than 10,000 tons in 2011 and 2012 consecutively.

Kikkoman Food Products Co. supported research on raising salmon homing rates by Iwate University, using a portion of sales of the three food items launched between September and November 2014, namely "Gyokai-no-Okazu Salada (Seafood salad)" in "Kikkoman Uchi-no-Gohan (our home meal)" series.

● "Gyokai-no-Okazu Salada (Seafood salad)" in "Kikkoman Uchi-no-Gohan (our home meal)" series.



Eggs collected in December 2014 were raised carefully, and in April 2015, about 152,000 juvenile salmon were released into the river Katagishi in Kamaishi city and went into the ocean.

● Collecting salmon eggs



● Releasing juvenile salmon into Katagishi river



2. Approaches Taken by Overseas

1) United States of America

(1) Environmental Preservation Activities at the California Plant

<Refer "topics - KFI's California Plant Wins WRAP Award for Sixth Consecutive Year," Corporate Citizenship Report 2007>

In FY2007, KFI California Plant received a Waste Reduction Awards Program (WRAP) award for the 7th time and sixth consecutive year from California State. This award is given to organizations for their energy saving, waste reduction and other environmental

preservation efforts. KFI California Plant's continuous efforts for improvement have led to its consecutive receipt of the award.

The plant also received the Business Environmental Resource Center Award for three consecutive years from the government of Sacramento county in which the plant is located. This is an unprecedented case, and in particular, in this year, the highest rank of the award was given.

The winning of these awards has been warmly praised from neighboring communities, and has led to the KFI California Plant's enjoyment of a high reputation. It is the result of the everyday plant-wide environmental preservation efforts made by the cooperation of the environmental manager and the whole employee.

KFI's California Plant's major achievements in environmental preservation

- Making soy sauce cake into livestock feed
- Reducing waste by recycling cartons and plastic packages
- Replacing old mercury lamps with more energy-efficient fluorescent lights
- Closing down boilers on weekends during the summer
- Installing an ambient temperature sensor on a refrigerator to automatically shut it off during the winter
- Installing equipments to recover drained residual steam in order to re-use the energy
- Preventing a water leak through proper handling of flushing hoses

● California Plant, Kikkoman Foods, Inc. (KFI) (U.S.)



<Reported in FY2013>

The KFI California Plant has been recognized by the community for its praiseworthy efforts in such areas as energy and water conservation, pollution prevention, and waste reduction.

The plant received the Waste Reduction Award Program (WRAP) Award from the State of California in 1999, 2001-2006, and 2008-2011; the Pollution Prevention Award (PPA) and Sacramento Sustainable Business (SSB) Award from Sacramento County (where it is located) in 2004-2006, 2007-2009, and 2011; the Sacramento Environmental Commission (SEC) Award from the Sacramento Environmental Commission, an environmental conservation organization in the county, in 2007 and 2009; and the Green Leadership Award from the county's trade paper, The Business Journals, in 2012.

● KFI employees awarded with WRAP Award, SSB Award, and SEC Award (2008-09)



(2) Donation through the Kikkoman Foods Foundation Inc.

<Refer "Kikkoman Foods Foundation Inc." in Corporate Citizenship Report 2014, detailed edition (web edition)>

Kikkoman Foods Inc. (KFI), a soy sauce manufacturer in the United States, established the charitable foundation, Kikkoman Foods Foundation Inc. in 1993. Through this foundation, KFI has been donating to educational institutions and to people affected by disaster there.

In 2013, Kikkoman Foods Foundation, as part of the 40th anniversary of the initial shipping of the product from KFI, donated one million dollars to the University of Wisconsin- Milwaukee (UWM). This donation was used as part of the funds to help its School of Freshwater Sciences (SFS) to establish the Kikkoman Healthy Waters Environmental Health Laboratories to study water resources.

2) Netherlands

(1) Cooperation with Environmental Purification

<Refer "Cooperating with natural preservation," Sustainability Report 2004>

Kikkoman Foods Europe B.V. (KFE) has been cooperating with the water quality improvement project of Lake Zuidlaardermeer in Groningen state in the Netherlands since 1997. The background for KFE to be involved in this project is as follows.

The history of the Netherlands is that of struggles against water. The people have built dykes on the swampy land and installed pump units at many places to pump out water to reclaim the land for living. In the 1990s, however, frequent floods troubled the people. The main reason for floods is said to be the rise of sea surface due to global warming added by the deterioration of pump units. Furthermore, in Groningen state, the ground sinkage due to natural gas extraction worsened the disaster.

Lake Zuidlaardermeer is the second largest freshwater lake in the state and is an important water source for local people. However, water pollution worsened to a critical level as to damage the ecology, and the populations of fish, small animals and wild birds that used to abound in the lake decreased. The solutions to the problem required the management of the amount of water, the purification of water, and the recovery of its ecology. Het Groninger Landschap, an NGO aiming for environmental preservation, initiated a project to improve its water quality. Currently, the European Union, Netherlands government, Groningen state, Hoogezand-Sappameer city, WNF (related organization of the World Wide Fund for Nature) and other organizations support this project.



In 1997, the above NGO requested KFE to cooperate with the project. KFE agreed to become a major donor. It was because the project fitted the company's policies "to keep harmony with nature," and "to become a company whose existence is meaningful to the society." KFE considered this was a good opportunity to express appreciation to nature and the local community. The windmill to pump water to the lake purchased by the KFE fund was named "Kikkoman Windmill."



The mechanism of water purification of this project is "to purify water by the healing capacity and power of nature." A large water-purifying pond is constructed adjacent to the lake, to which lake water is pumped little by little by the windmill. While the water flows in the pond, water is purified by the work of hydric plants and microorganisms in the pond, and then flows back into the lake. Since this is a long-term project, and no remarkable result has been witnessed as yet. However, it has been reported that the water quality and ecology are beginning to show a sign for betterment. The project has been widely covered by the media and is reputed as a water management system with little burden on nature. It is hoped that such natural preservation efforts will spread to other areas.

KFE has agreed to continue its donation until at least 2012. The maintenance and improvement of the system and the purifying pond are the major activities now and in the future. The system is still on the experimental level, and if successful with Lake Zuidlaardermeer, the system could be applied to any place. There may be a day when a windmill can be seen anywhere in the world. The participation of the EU may prove the great interest shown by other countries.

<Reported in FY2012>

The results of the 10-year observation have been published concerning the water quality improvement project in Groningen state to which KFE continues to offer its donations.

Improvements found are as follows:

- 54 species of birds have been identified.
Within these, 8 species have been identified as endangered species.
- 129 kinds in flora have been identified.
Within these, 6 kinds have been identified as being endangered .
- 8 kinds of fish have been identified.
- Over 25 types of butterflies have been identified.

In the future, KFE will continue to not only help preserve the biodiversity of wildlife inhabiting the lake but also improve people's living, educational and recreational environments.

<Refer “Winning EDEN award 2013” in Corporate Citizenship Report 2014, detailed edition (web edition)>

- Kikkoman Foods Europe B.V.
(KFE, Netherlands)



- “EDEN award 2013”
commemorative shield



The ongoing environmental protection activities by Kikkoman Foods Europe B.V. (KFE, Netherlands) were given high regards by the government of the Netherlands, and in FY2014, KFE was selected as a winner of EDEN award 2013. KFE determined to provide this water quality improvement project with 20,000 Euro every year until FY2018 when KFE celebrates the 20th anniversary of its foundation.

<Reported in FY2019>

In FY2018, KFE determined to donate 20,000 Euro to the water quality improvement project every year until FY2023 in commemoration of KFE 20th anniversary of its establishment.

- “Kikkoman Windmill”



(2) Support to a Forestation Project

<Refer "Support to a forestation project," Sustainability Report 2005>

As part of its contribution to the community environment, KFE supported the Greening Funds (Het National Groenfonds) of the Netherlands in 2002 in commemoration of the 5th anniversary of its founding. The Funds are promoting forestation projects in the country to improve the environment as well as to slow global warming. Kikkoman's donation was allocated to plant 30,000 seedlings in wide Het Hikerveld Natural Park located 60km southwest from the plant. When these seedlings grow, there will be wild birds and wild animals visiting them. In this park, there are cultural facilities including the Local Cultural Museum, and the demonstration of the traditional sheep breeding using sheepdogs as partners. Traditionally, support to the Funds has been given mainly by public organizations. The KFE donation is highly appreciated as "it may draw attention to the Funds from the private corporation."



3) Singapore

(1) Supporting the Development of a Man-made Lake

<Reported in FY2012>

Expressing Kikkoman's awareness of the importance of water and biodiversity, KSP made a donation in 2010 to support a part of the construction expenses of a man-made lake project in the national park in Marina Bay at the center of Singapore.

The man-made lake (Kingfisher Lake) is expected to serve as a place of relief for citizens. In addition, by growing aquatic plants, it is expected that the following will occur:

- The aquatic plants act as a filter, improve murky water, and remove sediment.
- Bundles of aquatic plants and reeds will be planted in the lake to absorb nutrients such as nitrogen and phosphorus, controlling the growth of algae and creating good quality water.
- Maintaining aquatic plant diversity, good water circulation and aeration will allow fish and dragonflies to grow.

As such, the lake aims to maintain a favorable aquatic environment where a variety of fish and insects can live.

● The Man-Made Lake “Kingfisher Lake”



(2) “Nature Heritage Tree” was awarded to KSP

<Refer “Contribution to Preservation of Singapore’s Natural Environment,” in Corporate Citizenship Report, 2012>

As part of its 25th anniversary, Kikkoman (S) Pte Limited (KSP) made a donation of SGD \$1,000,000 to a project called Kingfisher Lake. The man-made lake was created in a section of Singapore’s Gardens by the Bay, a national park being developed by the Singaporean government. The theme of the project is the ability of aquatic plants to purify water. The lake project provides residents and travelers with a green space, and is designed to showcase Singapore’s concept of striving to coexist with nature. It has been designed with special biotope features such as functions for cleaning of the water by aquatic plants, nutrient enrichment of the water, and nurturing of aquatic creatures.

The Singaporean government awarded KSP with a “Nature Heritage Tree”* at a ceremony for promoting beautification and greenery, in recognition of the company’s contribution to the greening of Singapore.

*Nature Heritage Tree ...The 80-year old Rain Tree is planted close to the top of Fort Canning Hill. At the base of the tree a plaque reads, “The heritage tree is dedicated to Kikkoman in appreciation of their support for the Garden City Fund.”



(3) Support to Mangrove Plantation

<Reported in FY2017>

Singapore has seen a growing decline in mangrove forests that has resulted in a situation which threatens tropical species of flora and fauna. The Singapore government has seriously addressed the problem to improve the situation. One of its efforts can be seen in mangrove planting along the coastline of the Sungei Buloh Wetland Reserve, the natural heritage in northern Singapore that opened in FY2016. Commemorating its 30th anniversary, KSP has donated SGD \$500,000 to natural conservation activities (including the tree planting mentioned above) and environmental education.

● Tree-planting activity in the Sungei Buloh Wetland Reserve



● Commemoration of tree planting

