

# Three Value-Creating Businesses

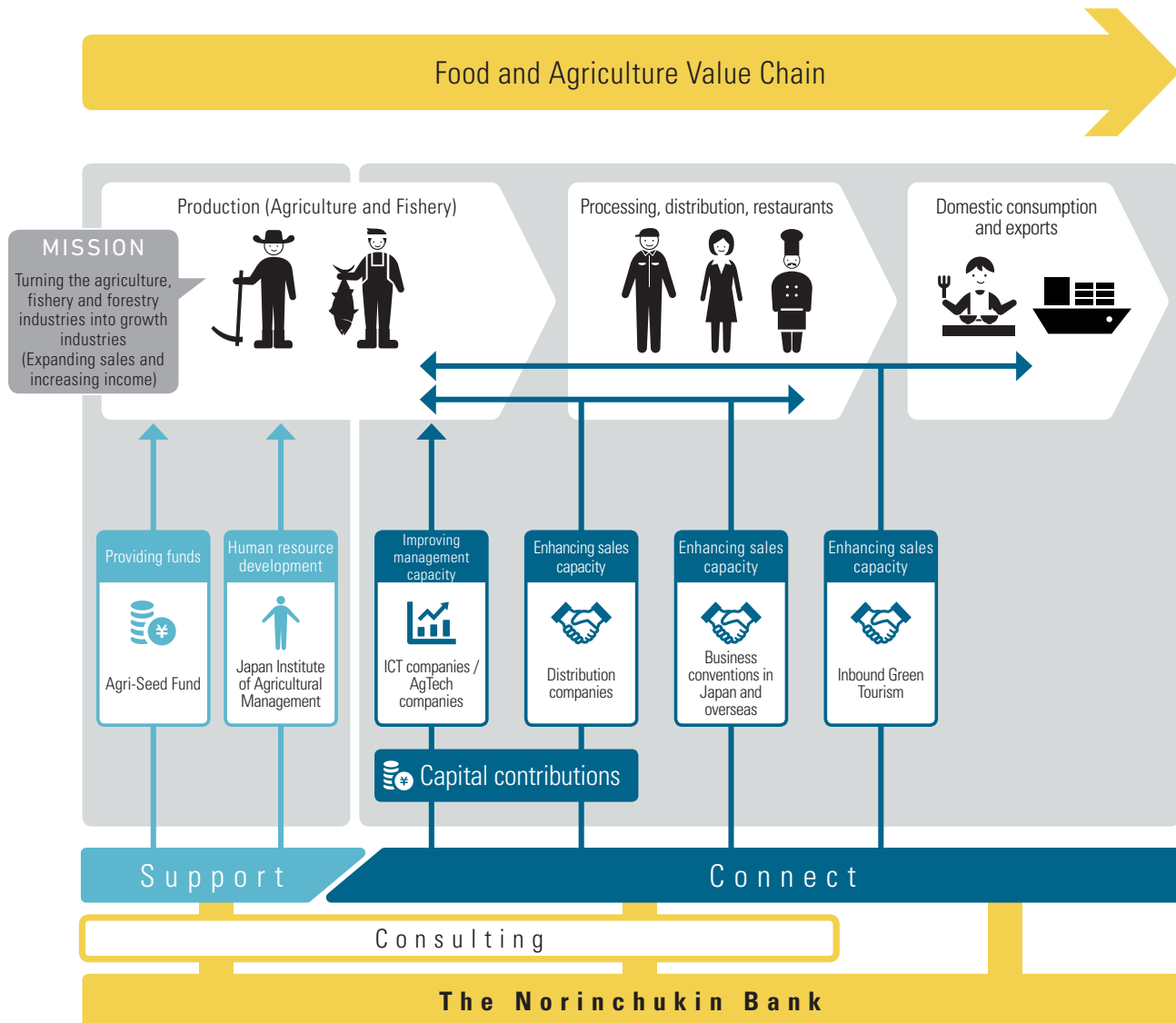
The Norinchukin Bank continues to offer various kinds of value to local communities, residents and national land via collaboration with cooperative organizations consisting of Japan Agricultural Cooperatives (JA), Japan Fishery Cooperatives (JF) and Japan Forestry Cooperatives (JForest). Such value is created by our three businesses.

The three businesses are the **Food and Agriculture Business** to support and connect the food and agriculture value chain; the **Retail Business** to provide various financial functions as a member of JA Bank and JF Marine Bank; and the **Investment Business** to ensure the stable return of profits via sophisticated fund management through globally diversified investments.



# Food and Agriculture Business

Aiming to be the “First Call Bank”  
in the Food and Agriculture Value Chain



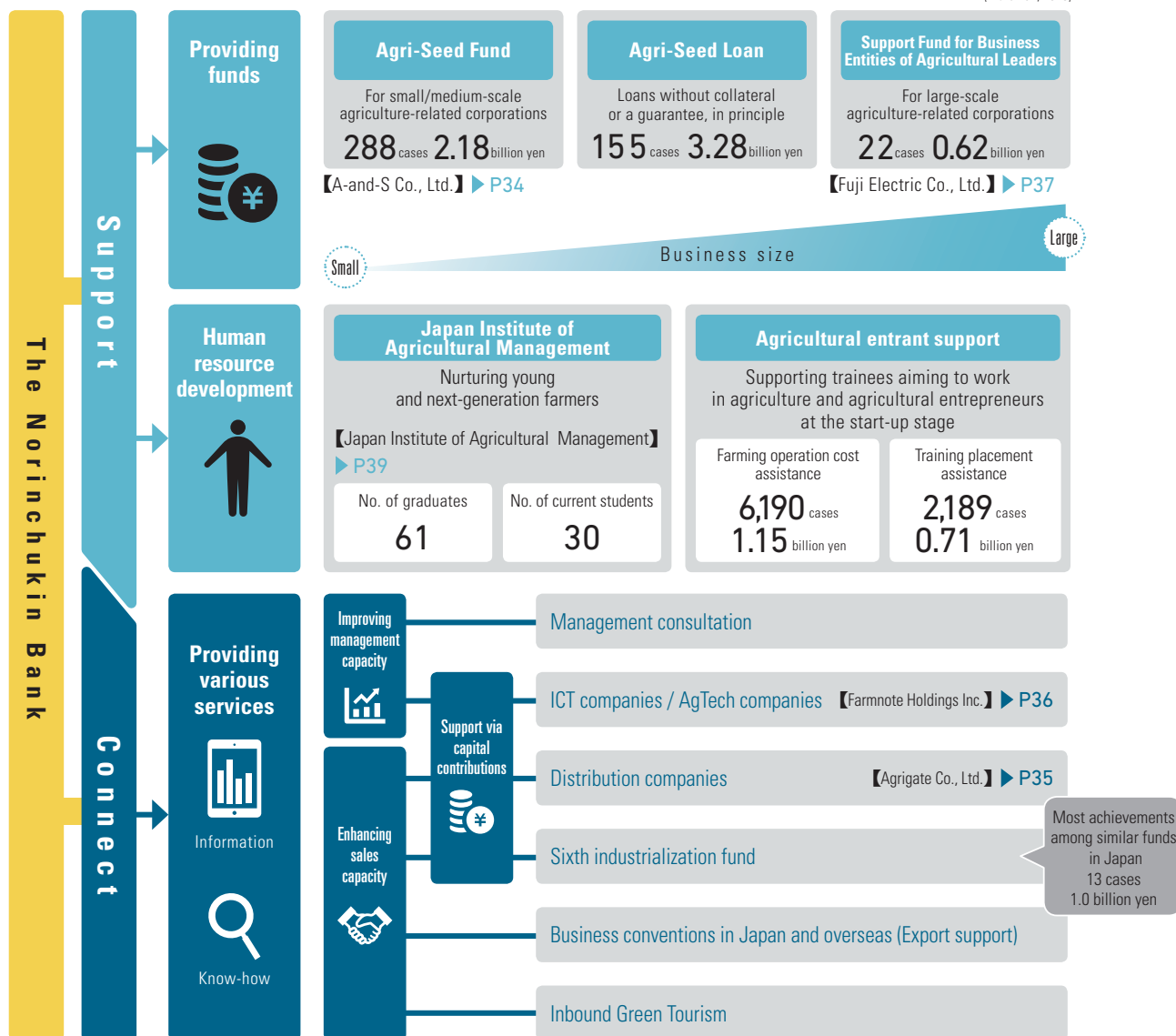
## Combining and utilizing funds, information, and know-how

We established the Food and Agriculture Business as one of the new pillars of our businesses under the Medium-Term Management Plan (fiscal 2016 through fiscal 2018). This business aims to contribute to turning the agriculture, fishery and forestry industries into growth industries by supporting and connecting each part of the food and agriculture value chain covering the upstream (produc-

tion), midstream (food-related industries such as processing, distribution and restaurants) and downstream (domestic and overseas consumption) to increase the value added of the entire chain. Our goal is to be reliable for all those who make up the food and agriculture value chain, that is, to become the “First Call Bank,” the financial institution that people call on first.

## Providing solutions to the producers in all managerial aspects

(March 31, 2018)



## Turning the agriculture, fishery and forestry industries into growth industries by supporting and connecting people, organizations and corporations

Various people, organizations and corporations are involved in the food and agriculture value chain. Our Food and Agriculture Business supports and connects the entire value chain with aggressive and multifaceted participation throughout the value chain. Our initiatives include providing risk money via capital investments, human resource development by supporting the Japan Institute of Agricultural Management, support for improving agriculture-related technologies and man-

agement, and enhancing sales capacity by promoting export support of agricultural, fishery and forestry products and the sixth industrialization of the agriculture, fishery and forestry industries. By supporting and connecting the people, organizations and corporations forming the food and agriculture value chain with these initiatives, we continue to push forward to turn the agriculture, fishery and forestry industries into growth industries.



## Food and Agriculture Business Supports and Connects the Entire Food and Agriculture Value Chain

The Food and Agriculture Business is a new pillar business conducted by The Norinchukin Bank. This business covers diverse areas from production, processing and distribution through sales.

Norinchukin's business partners are truly diverse including farmers, agricultural corporations, JAs, venture enterprises and major companies.

Many of the projects that we have accomplished show our future path to be wide and long.

Colorful paprika lined up in the vegetable-and-fruit corners of supermarkets; various cut vegetables available 24 hours a day at convenience stores; sharply curved cucumbers sold at a vegetables/fruits chain shop newly born in the Tokyo metropolitan area; fresh fish sent via the Tokyo International Airport (Haneda Airport) from fishery ports nationwide directly to restaurants and retail stores at various locations; minced onions used in a national brand tartar sauce available at stores; and frozen fried rice that has become a staple choice among frozen food with a surge in popularity in recent years—These various foodstuffs and food-related products have something in common. It is the deep involvement of the Food and Agriculture Business conducted by Norinchukin. Under the current Medium-Term Management Plan that began in fiscal 2016, Norinchukin established the Food and Agriculture Business. Redefining the entire flow of agriculture and food from production, processing, distribution to sales as “the food and agriculture value chain,” Norinchukin launched initiatives to enhance its contribution at each stage of the value chain. In the two years since the launch, our staff has accomplished not only growth in agricultural loans (see page 45), but also paprika, fresh fish and frozen fried rice mentioned above (see the table to the right).



Mr. Ohira,  
Representative Director,  
A-and-S

### Norinchukin and a Local JA Jointly Support an Agricultural Corporation

Among such foodstuffs and food-related products, the cabbage and onions for cut vegetables and the onions for tartar sauce are produced by **A-and-S Co., Ltd.** (hereafter “A-and-S”), in Okayama Prefecture. This agricultural corporation conducts thorough analyses of climate and soil at its 70-hectare farm on reclaimed land in Kasaoka-shi, in southwest Okayama, and conducts large-scale horticulture with a focus on cabbage, onions and pumpkins. Food business professionals highly evaluate the company's strong production capabilities that enable the consistent supply of high-quality, well-grown produce (e.g., one onion weighing more than one kilogram).

From a management perspective, A-and-S features selection and concentration. While harnessing horticultural techniques, securing vast agricultural land to increase yields, and pursuing aggressively cost reduction and efficiency, A-and-S commissions shipping and sales management operations to the local JA Kurashiki Kasaya and JA Zen-Noh Okayama. To address its funding needs, JA Kurashiki Kasaya and Norinchukin cooperate with A-and-S.

Agricultural producers' funding needs are covered by the three tiers—the local JA, the Prefectural Banking Federations of Agricultural Cooperatives (JA Shinnoren) and Norinchukin, depending on the scale of their funding needs. In Okayama, however, because the prefectural JA Shinnoren already has been integrated into Norinchukin, such needs are covered by JA Kurashiki Kasaya and Norinchukin, each having predetermined roles.

To secure large-scale agricultural equipment in fiscal 2015, A-and-S utilized the

Agri-Seed Lease provided by Norinchukin, via the JA's referral. At the end of fiscal 2015, A-and-S also received a capital investment utilizing the Agri-Seed Fund (see page 33) facility.

When A-and-S applied for an Agriculture, Forestry and Fisheries Safety Net Loan provided by Japan Finance Corporation to cope with the huge damage to onion seedlings caused by torrential rain that occurred in July 2016, the JA and Norinchukin jointly intermediated the application process and helped realize a quick crisis response. Moreover, in fiscal 2017, A-and-S received an additional capital investment from a fund related to Norinchukin. With this help, the company has realized the enhancement of agricultural equipment and the relocation and expansion of a company building and warehouses.

Takayuki Ohira, Representative Director of A-and-S, reveals his honest feelings:

“It is easy to talk with people like JA and Norinchukin, who know and understand agriculture. It is helpful that they don't hesitate to say good things are good and bad are bad and to address our funding needs. JA and Norinchukin together listen to me most of the time, which makes me feel that they are unified, but if I talk about a difference between them, JA covers my concerns on a daily basis, staying close by, and Norin-



Sato, Staff,  
Okayama Branch,  
Norinchukin

A-and-S [Okayama]



Large cabbage with tightly layered leaves stays intact, even when heads of cabbage are stuck on top of each other.



Onions cultivated by A-and-S are heavy. At harvesting, one onion weighs more than 1 kg.

chukin covers large issues at each milestone, even though staying a little distant.”

Kazuya Sato, Staff at the Okayama branch of Norinchukin, who had been in charge of A-and-S for three years through fiscal 2017, says, “A-and-S has frank requests and questions for JA and Norinchukin. In close cooperation with JA Kurashiki Kasaya, I strove to make optimal proposals to best address their requests as a good consultant of JA Bank, which resulted in making loans and capital investments. A-and-S has a warm heart toward its staff and is making efforts to contribute to increasing agricultural income and revitalizing the community. With such good company as a partner pursuing the same goal as Norinchukin, I am truly happy to have had a deep relationship with A-and-S.”

### Connecting Vegetable/Fruit Retail Business with Production and Consumption

In a different framework than that of A-and-S, **Agrigate Co., Ltd.** (hereafter “Agrigate”) received a capital investment from Norinchukin. Agrigate is a venture enterprise developing chain “new-style vegetable shops” within Tokyo. At a “Shunpachi Fruit and Vegetable Shop” operated by Agrigate, we can find juicy and inexpensive cucumbers in the peak season, albeit curved a little too much.



Ito, Manager, Food & Agri Banking Business, Norinchukin

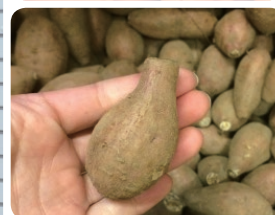
Without having to adhere to shipping criteria that disqualifies curved cucumbers, Agrigate conducts procurement on its own and sells seasonal vegetables and fruits that are superior in freshness and pricing. Recently, Agrigate opened “Shunpachi Kitchen,” which sells ready-to-eat food products made from such vegetables and fruits and has started bulk delivery of vegetables and fruits to restaurants for their salad bars.

In fiscal 2017, Agrigate planned to increase capital, aiming to further expand

its store network. Norinchukin responded to Agrigate’s plan and made a capital investment utilizing the F&A (Food and Agri) Growth Industry Investment Facility totaling 50 billion yen, which was established under the current Medium-Term Management Plan. Go Ito, Manager of the Food & Agri Business Planning Division of the Food & Agri Banking Business, has positioned Norinchukin’s business to help Agrigate as a “business offering a sales channel that helps create value for produce that does not meet the shipping cri-

### Table Examples of the Food and Agriculture Business

	Partner	Outline of project
Ventures and newly established companies	<b>A-and-S Co., Ltd.</b>	Lease/lending (including intermediation)/capital investment in a business with sophisticated initiatives toward large-scale production of commercial-use vegetables
	<b>Farmnote Holdings Inc.</b>	Joint capital investments with JA Zen-Noh in a business with technologies that contribute to energy saving and an increase in income for livestock and dairy farms. Also introducing sales channels
	<b>Agrigate Co., Ltd.</b>	Capital investment in a business for unique procurement of vegetables and fruits and retail sales development. Introducing vegetable suppliers and expanded financing for the company’s business partners
	<b>Haneda Ichiba Co., Ltd. (Tokyo)</b>	Capital investment in a business to air-transport fresh fish directly from fishery cooperatives and deliver such fish to restaurants and retail stores within the day when the fish was landed
	<b>Nileworks Inc. (Tokyo)</b>	Capital investment in a business for technologies to develop drones used for rice cultivation, soil analysis and spraying pesticides, fertilizers and other agricultural chemicals
	<b>Newly established fishing company</b>	Capital investments/lending in a business to consolidate multiple existing fishing companies to launch a new corporation
Major companies	<b>Fuji Electric Co., Ltd.</b>	Lending to HOKKAIDO SALADPAPRIKA Co., LTD., in Hokkaido, Fuji Electric’s affiliated agricultural corporation with strength in paprika production technology
	<b>Major seasonings manufacturer</b>	Lending to cover funding needs after establishing an agricultural corporation (to produce vegetables as raw materials for the company’s products)
	<b>Major transportation company</b>	Lending and introduction of farmers when the company set up an agricultural corporation. Implementing an alliance with a local JA to establish farmers’ markets
	<b>Major frozen foods manufacturer</b>	Realizing business matching to make an OEM (Original Equipment Manufacturing) contract of frozen fried rice with a JA subsidiary handling frozen foods
	<b>Major milk and foods maker</b>	Introducing a major supermarket chain in Singapore as a sales channel for cheese produced in Indonesia
Foreign and foreign-capital companies	<b>SFG HOLDINGS LIMITED (U.K.)</b>	Joint capital investment with JA Zen-Noh in a wholesaler of Asian and ethnic foodstuffs, aiming to expand exports of Japanese agricultural produce
	<b>Eat Japan Co., Ltd. (Hong Kong capital company)</b>	Capital investment in a Japanese company newly established by a major fresh fish import and wholesale company in Hong Kong. Aiming to expand exports of Japanese fishery produce
	<b>HYAKUNOUSHA HOLDINGS LIMITED (Hong Kong)</b>	Capital investment in a business for an Asia-wide rice ball retail chain using made-in-Japan rice



The number of "New-style vegetable shops" is increasing in Tokyo. They procure and sell vegetables and fruits that do not meet traditional shipping criteria. Fresh and low-priced.

teria, which currently has no value for farmers." Ito explains the significance of the capital investment in Agrigate as follows:

"Yoshinori Sakon, President of Agrigate, thanked me, saying that 'farmers have opened up and become receptive to what I say when I mentioned that Norinchukin invested in us.' In addition to capital investment, in cooperation with our branches nationwide, we can help increase the number of producers who ship produce to Agrigate. Likewise, there are many ways that we can leverage Norinchukin's strength of being close to the production sites. Therefore, I am always thinking about what kind of options I can propose."

The career history of Ito includes work in China. There, he witnessed Coöperatieve Rabobank U.A. in the Netherlands—a business partner of Norinchukin—being appreciated by Chinese major food companies for providing multifaceted support for their overseas business development and expansion. Ito wanted to engage in similar activities at Norinchukin and requested a transfer to the Food and Agriculture Business. When Agrigate concluded an agreement to deliver vegetables and fruits to a partner company of Norinchukin, Ito also expanded Norinchukin's business by making a loan to that company. "I would like to create a mechanism of growing together, in line with each stage of the growth of a corporation," said Ito.

### Supporting ICT that Changes Livestock Farming via Capital Contributions

Within the food and agriculture value

chain, Agrigate conducts sales and processing, whereas A-and-S conducts production. In terms of roles within the value chain, **Farmnote Holdings Inc.** (hereafter "Farmnote") in Obihiro-shi, Hokkaido, achieves improved productivity of dairy and livestock farming via Agtech (Agri + Technology) and supports the food and agriculture value chain.

Shinya Kobayashi, President of Farmnote, was an ICT engineer. His hometown Obihiro has many dairy farms. Mr. Kobayashi is from a family that operated agricultural farms until his grandparent's generation. With such a background, he developed the "Farmnote" system, which helps improve the managerial efficiency of dairy and livestock farming.

With the "Farmnote"—literally "notebook for a farm"—AI linked to a collar-shaped "Farmnote Color" sensor attached to each cow analyzes her activity information and allows real-time monitoring of such data on smartphones. As this system also helps improve the accuracy in capturing the estrus of cows, it becomes possible to make them pregnant at the right timing to produce more calves.

To disseminate Agtech in the fields of dairy and livestock farming, President Kobayashi believes that the alliance with the JA Group is indispensable for development targeting not only large-scale agricultural corporations but also medium- to small-scale producers including family-operated farms. In fiscal 2016, Norinchukin made capital investments jointly with the National Federation of Agricultural Cooperative Associations (JA Zen-Noh) and others, utilizing the F&A

(Food and Agri) Growth Industry Investment Facility.

Yusuke Tazawa, Senior Manager of the Corporate Business Division III of the Food & Agri Banking Business, in charge of Farmnote, discusses Norinchukin's process of evaluating a capital investment in Farmnote as follows:

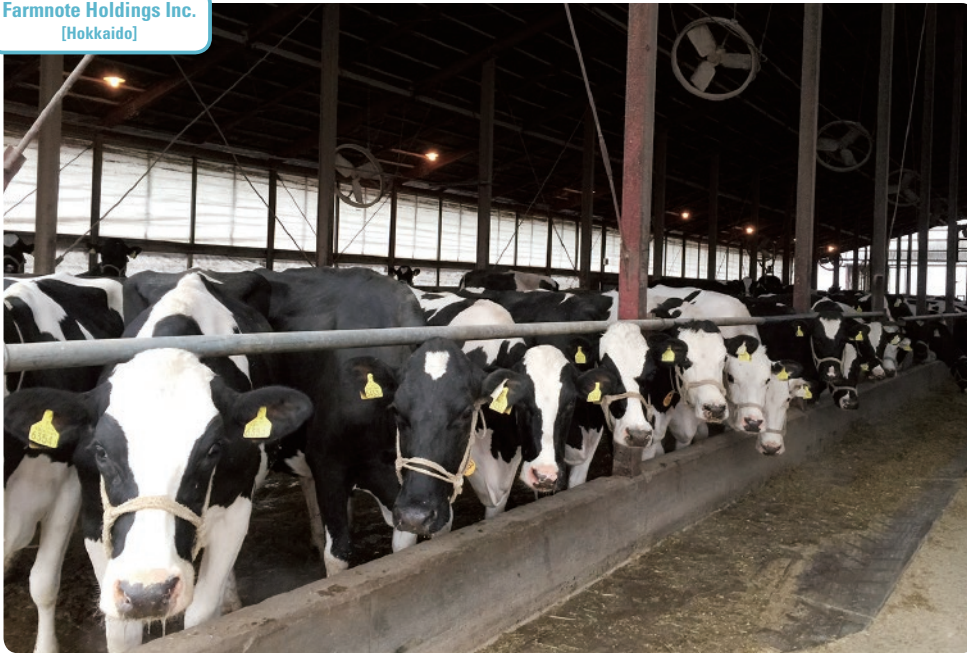
"The increase in production volume of calves directly links to the increase in income of dairy and livestock farms. We have a shortage of calves nationally. Norinchukin's support for the production of calves as a member of the JA Group by investing in a technology company is consistent with the goals of Norinchukin—to turn the agriculture, fishery and forestry industries into growth industries and improve the income of producers. Therefore, I thought that we should engage in this project as the responsibility of a financial institution involved in the agriculture, fishery and forestry industries and foods."

"It was difficult to realize the investment in an early stage technology startup company because Norinchukin had no precedent for that. However, I made detailed explanations about the producers' economic merit to be achieved by the



Tazawa, Senior Manager,  
Food & Agri Banking Business,  
Norinchukin

Farmnote Holdings Inc.  
[Hokkaido]



Inputting information using a dedicated smartphone app makes cattle management easy. Using collar-shaped sensors, the farmer can detect changes in health condition to improve the accuracy in capturing each cow's estrus.

Farmnote technology, which, I believe, have helped obtain internal understanding. As investment projects in technology companies continued following our investment in Farmnote, I believe that it was a breakthrough.”

The capital investment in Farmnote also has helped expand the solutions offered by Norinchukin because it created an additional flow of services that Norinchukin can provide—not only financial services for producers but also proposals for solutions to managerial issues utilizing Agtech. A case emerged in Kyushu where a Norinchukin staff person, with the enhanced proposal quality gained through the investment in Farmnote, offered to provide livestock farms with solutions using the Farmnote services and even covered their funding need to adopt the Farmnote system.

Tazawa says, “While continuing to accumulate knowledge on customers’ products and services, we would like to be a financial institution with the characteristics of an information *shosha*—a company that covers financial needs while connecting agricultural producers with corporations or intermediating between corporations to help solve their issues.”

### To Become a Reliable Bank to Which a Firm That Newly Enters the Agricultural Industry Reaches Out First

Although the aforementioned activities of Norinchukin help young enterprises, small companies and foods- and agriculture-centered companies, our Food and Agriculture Business is more expansive.

Agricultural farmers and fishermen nationwide with a long relationship with the JA Group, companies with a long history, large-scale companies, and companies with their main business other than food and agriculture are also indispensable business partners for Norinchukin’s Food and Agriculture Business.

HOKKAIDO SALADPAPRIKA Co., LTD. (hereafter “SALADPAPRIKA”), which operates a large-scale greenhouse for the horticulture of paprika in Kushiro-shi, Hokkaido, is an affiliate of **Fuji Electric Co., Ltd.** (hereafter “Fuji Electric”), a major producer of heavy electric machinery.

Fuji Electric has participated in capital investments in SALADPAPRIKA to verify the know-how of building and managing a “plant factory” to cultivate vegetables, fruits and flowering plants in an environment with temperatures, humidity and lighting controlled by a sophisticated method and accumulate related data.

Ninety percent of the paprika in Japan’s domestic markets is imported mainly from South Korea, the Netherlands and New Zealand. Although domestic consumption of paprika is growing as its popularity rises, the necessary know-how for greenhouse horticulture has yet to be disseminated in Japan. Lots of paprika is produced in South Korea because South Korea has been quick to adopt related technologies from the Netherlands, an advanced country in the horticulture of paprika.

Fuji Electric invited Yutaka Kobayashi, President of Salad Garden Co., Ltd., which has also been successful in growing paprika in Nagano Prefecture by adopting technologies from the Nether-

lands, to become president of a new company, thereby establishing SALADPAPRIKA in 2015. The paprika produced by SALADPAPRIKA is shipped not only throughout Hokkaido but also to the Tokyo metropolitan area. If you see paprika labeled “Produce made in Hokkaido” at a supermarket, it is most likely produce from SALADPAPRIKA.

At SALADPAPRIKA, in 2017 after the start of operation, changes in the production equipment were required. When Fuji Electric sought funding for that purpose, Norinchukin covered that funding need. Although Fuji Electric and Norinchukin already had a long business relationship, this was their first agriculture-related transaction. Nevertheless, because Fuji Electric had a notion “to ask Norinchukin for agriculture-related finances,” Fuji Electric reached out first to Norinchukin for help.

“Within a limited period of about one month, Norinchukin covered our funding need efficiently and smoothly. At a hearing regarding our business, to learn about our paprika production capability, Norinchukin staff simply glanced at our data—for example, yields per square meter—and quickly understood our level of



Mr. Mochizuki, Manager, Finance Dept., Corporate Finance Office, Corporate Management Planning Headquarters, Fuji Electric



HOKKAIDO SALADPAPRIKA in Kushiro-shi, Hokkaido, has integrated equipment/system technology for a "plant factory" and paprika horticulture technology. Paprika produced in a highly controlled environment has been shipped not only throughout Hokkaido but also to the Tokyo metropolitan area.

horticulture, which I realized was possible only with Norinchukin." (Yasuhiro Mochizuki, Manager, Finance Dept., Corporate Finance Office, Corporate Management Planning Headquarters of Fuji Electric)

Takeshi Munemasa, Manager of the Corporate Business Division III of the Food & Agri Banking Business of Norinchukin, who covers Fuji Electric and SALADPAPRIKA, says, "Ordinarily, I cover customers mainly in the electric machine and information communications sectors. Though I did not have experience financing a plant factory, we worked as a team including persons with related knowledge from various sections to cover their need." He also said that internal study meetings were held to learn about differences in productivity between paprika horticulture in the Netherlands and in Japan and to evaluate domestic case studies before determining whether to make a loan.

"Who would take care of this opportunity unless Norinchukin does?" That was our spirit then. In the due diligence process before making loans, although we tend to focus on the track record (past performance) for major companies, regarding SALADPAPRIKA, we focused on the forward-looking performance evaluation (projection of future profitability), in a



Munemasa, Manager,  
Food & Agri Banking Business,  
Norinchukin

similar way as we review agricultural corporations and ventures." (Munemasa)

Having received the funding, Fuji Electric is now expecting Norinchukin to provide solutions other than financial services. We have issues in sales of paprika due to its small distribution volume and lack of shipping criteria, meaning there is no price index. While Norinchukin has already introduced us some sales channels, it would be helpful if we could receive support regarding sales strategies as well," said Hiroyuki Mizobuchi, Chief Expert, Business Management Division, Business Management Dept., Power Electronics Systems Business Group of Fuji Electric (and the Auditor of SALADPAPRIKA).

Munemasa responded, "I would like to continue efforts to make Norinchukin a bank to which customers reach out first for both financial and nonfinancial services. Although we handled business matching and other projects even before the launch of our Food and Agriculture Business, we now aim to become an entity to disseminate and share know-how among different industries—primary, secondary and tertiary—within the food and agriculture value chain to fully utilize such know-how, which I believe will contribute to turn the primary industry into a growth industry."

### Food and Agriculture Business Beyond Its Own Field

The Food and Agriculture Business is still a new initiative not only for Norinchukin but also for Japan's agriculture. However, an organization that takes on a comprehensive financial business based on the field of food and agriculture is not extraordinary from a global perspective.



Mr. Mizobuchi, Chief Expert, Business Management Division, Business Management Dept., Power Electronics Systems Business Group, Fuji Electric

For instance, such organizations include Crédit Agricole S.A. in France and Coöperatieve Rabobank U.A. in the Netherlands, a strategic partner of Norinchukin. Their businesses are not limited to traditional financing services but rather have expanded to cover investment banking, trading and consulting.

Although these successful overseas examples are not readily applicable as a business model for Norinchukin, as exemplified in the several cases introduced so far in this report, the Food and Agriculture Business will continue to function to support and connect the whole food and agriculture value chain beyond individual work as Norinchukin, JA Bank and the JA Group.

Norinchukin has long addressed important themes such as ensuring food safety and a consistent food supply as well as the preservation and revitalization of local communities. Today, tackling the challenge of turning agriculture into a growth industry on a business basis through the Food and Agriculture Business also leads to addressing these themes. As the growth of the agriculture, fishery and forestry industries and that of the food and agriculture value chain take shape, the growth of Norinchukin and even Japan will also become visible.





Agriculture

**Japan Institute of  
Agricultural Management**

- Turning the agriculture, fishery and forestry industries into sustainable growth industries
- Stable supply of safe and secure food

**“Agricultural Business School”  
nurtures the future leaders of local communities**

The Japan Institute of Agricultural Management (Principal: Kenji Horiguchi; former Executive Vice President of Waseda University) opened in Minato-ku, Tokyo, in April 2013, aiming to nurture next-generation managers in agriculture and leaders in local communities to explore the future of agriculture in Japan.

With agricultural technologies being the core of the curriculum at many domestic agricultural schools, the two-year program at the Institute is centered on agricultural management, which is a key characteristic of the school. It is sometimes called as “agricultural business school” because the students learn agriculture as a business and agricultural experience (including training) is emphasized to be eligible to take the school’s entrance exam.

During the four years from establishment until fiscal 2017, a total of 61 students graduated (first- to fourth-year graduates) and started farming throughout Japan. In fiscal 2018, a total of 30 freshmen and sophomore students are attending the school. All students live in the school’s dormitory in Kawasaki-shi, Kanagawa Prefecture, learning together and living in the same dorm.

AgriFuture Japan (AFJ) (President: Yutaka Suzuki, also President of Yamashiro Management R&D Institute LTD. and former President of Kewpie Corporation) operates the Institute. AFJ was established in fiscal 2011 by a nationwide alliance

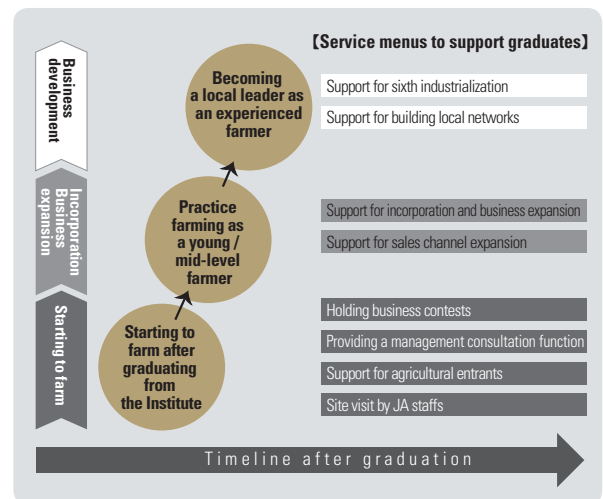
among food and agriculture-related Japanese organizations, corporations and educational and research institutes, etc. Norinchukin has been fully cooperative since AFJ’s inception and has been a major sponsor of it to date.

Approximately 260 major corporations and organizations are members or supporting members of AFJ. Networking with these members is a feature of the Institute. AFJ member companies’ staffs—practicing businesspersons—sometimes offer special classes as lecturers. Meetings and seminars are held where students can interact with such businesspersons. These are rare opportunities, available only to the students and graduates of the Institute, to acquire knowledge and make human connections that are hard to get elsewhere. For AFJ members too, these are precious opportunities to connect with young agricultural producers whom they can work with for many years into the future.

Norinchukin also gains much from the Institute. Tomoo Ueno, Manager, Food & Agri Business Planning Division of Food & Agri Banking Business, states the following:

“We are sure that nurturing the future leaders of local agriculture is an essential long-term initiative to improve the sustainability of Japan’s agriculture. In addition to supporting the initiative, we provide solutions to the managerial issues of the graduates such as helping build their local community network.”

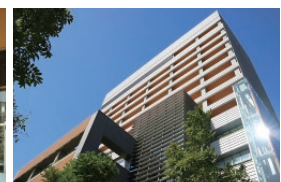
According to Ueno, Norinchukin is focused on promoting the Institute. By advertising not only the school’s educational competence, but also the low tuition cost by taking advantage of the scholarship or the “Investment in Next-Generation Human Resources in Agriculture” grants from the Ministry of Agriculture, Forestry and Fisheries (MAFF) of Japan, Norinchukin would like to increase the number of young managers in agriculture who study at the Institute.



At class, an AFJ member company’s staff person sometimes teaches as a lecturer.



A student (right) works as an apprentice store clerk at a Japanese confectionery manufacturer.



Classrooms are within a Norinchukin’s facility in Tokyo.



Ueno, Manager, Norinchukin



Forestry

**JForest Fukuoka  
Forest Association**

- Turning the agriculture, fishery and forestry industries into sustainable growth industries
- Protecting the land and marine environment
- Preserving local diversity

## Regain vibrant community-based forestry in Munakata, a commuter town with world heritage sites

**M**unakata-shi, Fukuoka Prefecture, a historic town that has world heritage sites—Okinoshima island and Munakata Taisha (Grand Shrine)—is also a commuter town located midway between Fukuoka-shi and Kitakyushu-shi. A community-based forest spreads in the southern part of Munakata-shi where many Japanese cedars have been planted.

However, in recent years, several forests in a condition being ready to cut has left unutilized. In addition, the dysfunction of community-based forests which have a wide range of roles such as preserving the local community, the environment and national land has become problematic.

In 2015, Junko Sasaki was assigned as an engineer at Munakata Substation, Fukuoka-kita Branch, JForest Fukuoka Forest Association when she changed her career from a high school science teacher. Ms. Sasaki learned forestry when she was a student. Facing the reality of *Obu-no-mori* forest, about which even its owner lamented its poor condition, Ms. Sasaki sought to acquire assistance from the Norinchukin Forest Rejuvenation Fund.

A serious hurdle for the revitalization of *Obu-no-mori* forest was “roads.” According to Tomiko Kajiwara, who served as Chief of the Munakata Substation until fiscal 2017, “*Obu-no-mori* forest has a river and narrow roads. There is no place

for a foothold inside the forest, and it is hard to use machines for thinning and shipping out lumber.”

Facing this challenge, Ms. Sasaki worked hard to prepare a business plan focused on roads. With that plan, she applied for assistance from the Norinchukin Forest Rejuvenation Fund in June 2016. Her plan, titled “Aiming for a Community-Based Forest with the Symbiosis of Nature and Humans — A Small Challenge in Munakata —,” passed the first and second reviews, and in March 2017, the plan was selected as a target project for assistance. The plan’s pursuit of revitalization of the various functions of a community-based forest in the long term by introducing machinery and low cost operation was highly evaluated.

The project began in April 2017. It took all fiscal 2017 to build the 3.5-kilometer

forest work road and pave the existing forest roads with slag cement, which resulted in realizing the thinning of more than 30 hectares of Japanese cedars and the reforestation of a more than 1-hectare area. The project also conducted clear-cutting and thinning of 1.8-hectare area of bamboo trees for which their invasion into the forest was seen as problematic.

With the completion of the subsidized project, Ms. Sasaki states, “In the forestry industry, a project does not generate instant results. Years of work will produce fruit over many decades. This one-year subsidized project has made huge achievements. We hear many requests from surrounding areas, such as ‘My forest needs a similar project too.’ We would like to further expand the fruits of our project.”

### The Norinchukin Forest Rejuvenation Fund supports sustainable development of the forestry industry and local communities

Seventy percent of Japan’s national land is covered by forests. Forests are indispensable to the sustainable development of the agriculture, fishery and forestry industries, and the multifaceted functions of forests such as controlling global warming and nurturing water sources are highly appreciated. Nevertheless, 40% of Japan’s forests are man-made and were planted in the postwar era. Many of these man-made forests have been neglected due to sluggish lumber prices and the decreased number of forestry workers. To address this situation, Norinchukin established the Forest Rejuvenation Fund (FRONT80) in 2005 and it has continued to assist the forestry industry. Through subsidies and providing advice from experts, Norinchukin works to restore privately owned forests that have been almost ruined, aiming to recover the various roles of forests and the public benefits they can bring.



Cedar and bamboo forests improved by the subsidized project



Ms. Sasaki



Ms. Kajiwara



Fishery

JF Yuikou

- Turning the agriculture, fishery and forestry industries into sustainable growth industries
- Developing the economy through the agriculture, fishery and forestry industries
- Revitalizing the infrastructure in rural areas
- Protecting the land and marine environment

## “Resource-managed” fisheries of Sakura shrimp toward the sustainable development of fisheries and the revitalization of local communities

Sakura shrimp, now prized nationwide as a precious foodstuff, is a specialty produce of Suruga Bay. The representative fishery station for Sakura shrimp is Yui fishing port, located in Yui, Shimizu-ku, in central Shizuoka Prefecture. The catch at the Yui fishing port and Oigawa River one in the same prefecture accounts for 100% of the Sakura shrimp catch nationwide.

JF Yuikou, which accounts for 90% of the total value of landings of the Sakura shrimp catch, has taken many ingenious measures to sustain the utilization of marine resources. Especially epoch making was introducing the total pool distribution system. Around 1975, it introduced a system to distribute the total value of landings from the entire Sakura shrimp fishing area equally to each fisherman based on certain rules (“pool distribution”) to prevent a decline in natural resources caused by excessive competition among fishermen. This scheme to prevent excessive fishing has helped to preserve marine resources and revitalize sustainable fisheries. As a result, fishermen achieved a stable income, making the business popular among young people, and there is no shortage of successors.

Furthermore, for about 20 years, JF Yuikou has promoted the building of the “Yui Sakura Shrimp” brand. Previously, young fishermen conducted promotional activities on their own such as bringing

fresh sashimi Sakura shrimp from Yui to the Tsukiji market, to help make “Yui Sakura Shrimp” a national brand.

In addition, JF Yuikou has contributed to revitalizing the port itself. A significant revenue source for JF Yuikou is *Hamana-Kakiageya*, a seaside restaurant at Yui fishing port that is hugely popular and offers Sakura shrimp dishes (including *kakiage* tempura). Although the opening of this restaurant met with opposition from a local mall, which feared the fierce competition over tourists, Takehiro Unno, Councilor of JF Yuikou, says with a smile, “People gathering at this restaurant have drawn more people to Yui town and helped increase sales at our local stores.” In addition, other events held by JF Yuikou such as “Yui Sakuraebi Matsuri (Yui Sakura Shrimp Festival)” have contributed to revitalizing local communities. These activities have drawn attention from fishery cooperatives in other regions, creating horizontal human connections among fishery workers.

“I heard that the JF Shin-Minato in

Toyama Prefecture, in collaboration with JF Yuikou, is striving to improve fish prices by adopting a total pool distribution system for the Japanese glass shrimp fishery,” said Mr. Unno. Despite such aggressive engagement of JF Yuikou in resource-managed fisheries, the declining trend of the overall catch has been an issue in recent years. To address this issue, the fishery cooperative is making further efforts including continuing investigation regarding the volumes of eggs laid and its own initiative to acquire a Marine Eco-Label\* certification for further branding of the “Yui Sakura Shrimp” brand to ensure stable income for fishery workers despite the decline in the overall catch. Receiving the attention of fishery workers nationwide, JF Yuikou continues to tackle challenges toward developing resource-managed fisheries.

\*The Marine Eco-Label is a certification scheme to protect marine resources and support sea-friendly fishery businesses. Certified products can be distributed with the Marine Eco-Label logo.

### Fishery Entrants Support Program

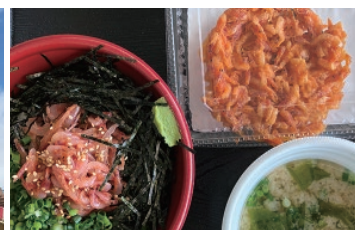
Norinchukin is conducting the “Fishery Entrants Support Program,” which contributes subsidies up to 500 million yen for three years from fiscal 2016. This program provides monetary assistance for young relatives who inherit their family business operating in the fishery industry so that they can be accepted as trainees, aiming to help increase the number of new fishery entrants, maintain the production infrastructure and turn the fishery industry into a growth industry.



Statue of Sakura shrimp at Yui fishing port



Hamano-Kakiageya restaurant with a long line of customers at lunchtime



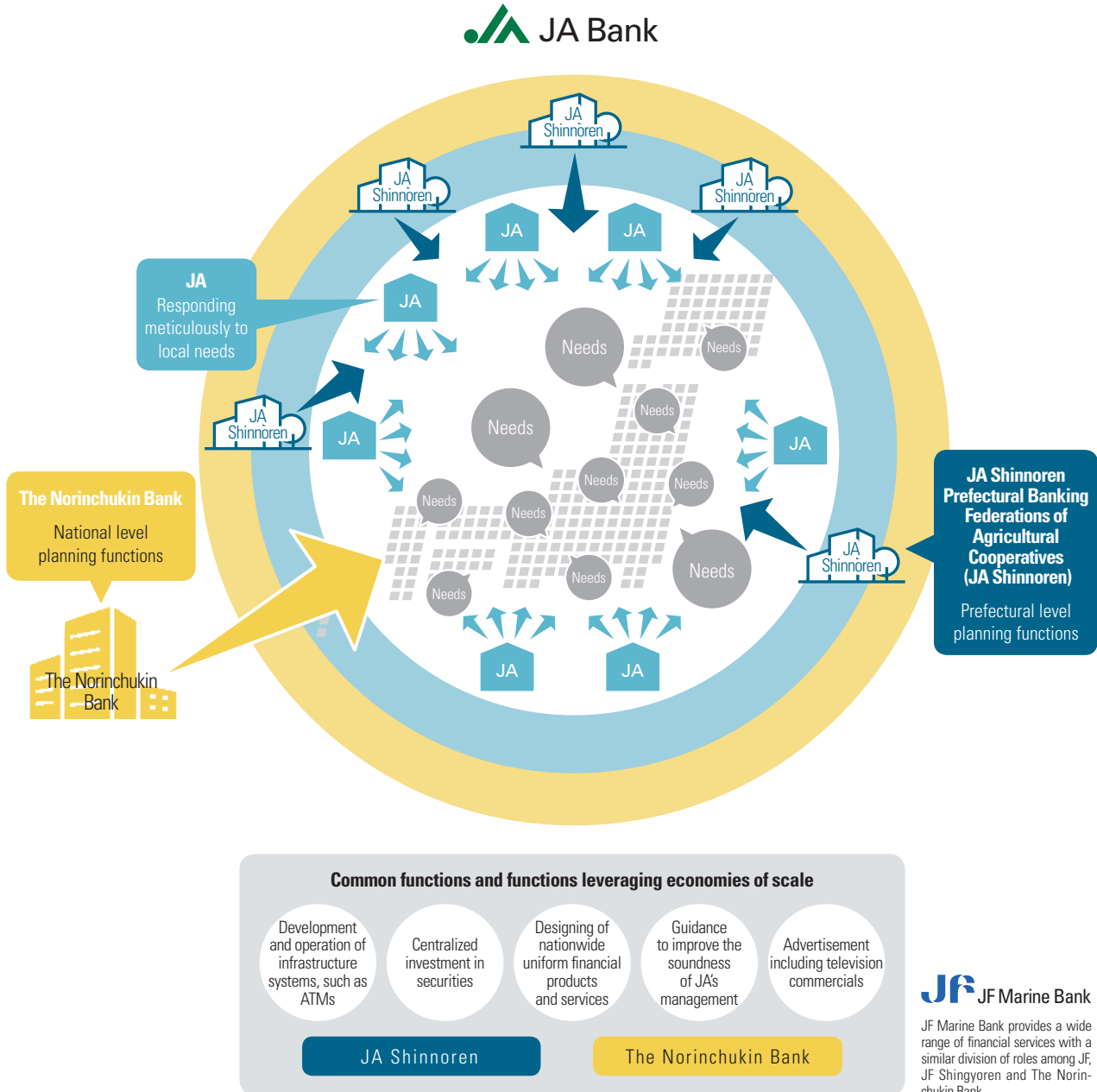
Sakura shrimp *kakiage* tempura and *Okizuke-don* (rice covered with pickled seafood)



Fishing boat anchored during the daytime. Fishing occurs at night.

## Retail Business

Providing a range of financial functions as a member of JA Bank and JF Marine Bank



### Meeting needs in each region while achieving efficient management

JA and JF in regions all around the country, as well as JA Shinnoren and JF Shingyoren, provide meticulous financial services meeting diverse financial needs varying in each region as independent financial institutions.

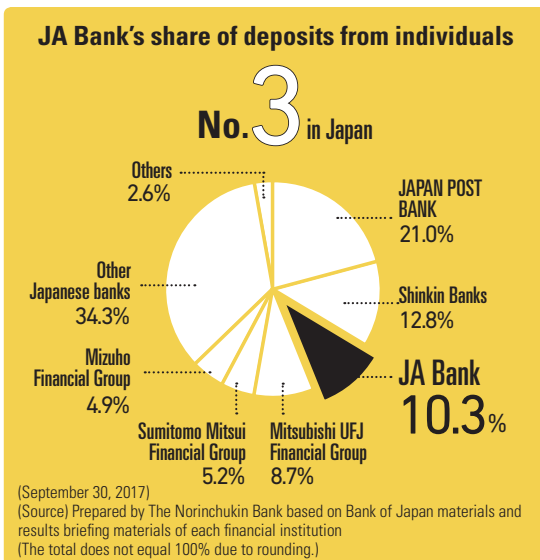
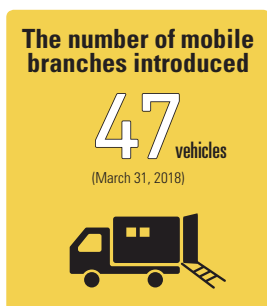
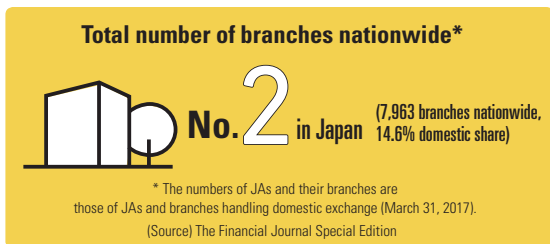
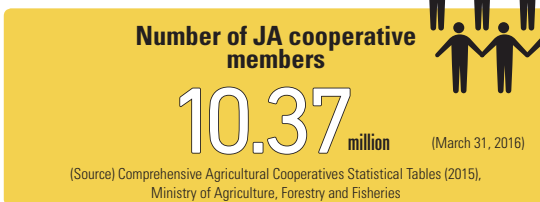
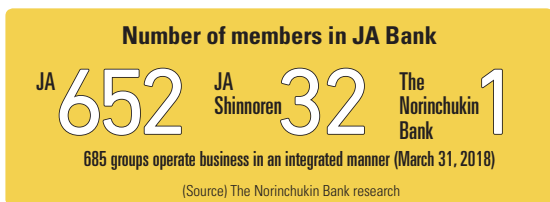
To provide these services more efficiently, JA Shinnoren and JF Shingyoren are responsible for common functions

and functions leveraging economies of scale such as the design of financial products, system development, centralized investment in securities and advertisement including television commercials at the prefectural level, whereas The Norinchukin Bank is responsible for these functions at the national level.

Main bank for livelihoods of members and everyone in the community

## JA Bank by numbers

Introducing the performance and initiatives of JA Bank (JA, JA Shinnoren, The Norinchukin Bank)



### C O L U M N

## Mutual funds to meet the asset building and management needs of JA Bank customers

Given the ongoing ultra-low interest rates, we aim to diversify our service menus for the medium- to long-term asset building and management of JA Bank customers. In fiscal 2017, we newly established the JA Bank System Asset Building Division within the Retail Banking Business to start offering JA Bank customers mutual funds in addition to existing savings products. In April 2018, some JA branches started to sell the "Norinchukin (Partners) Japan-US 6 Asset Allocation Fund" mutual fund.

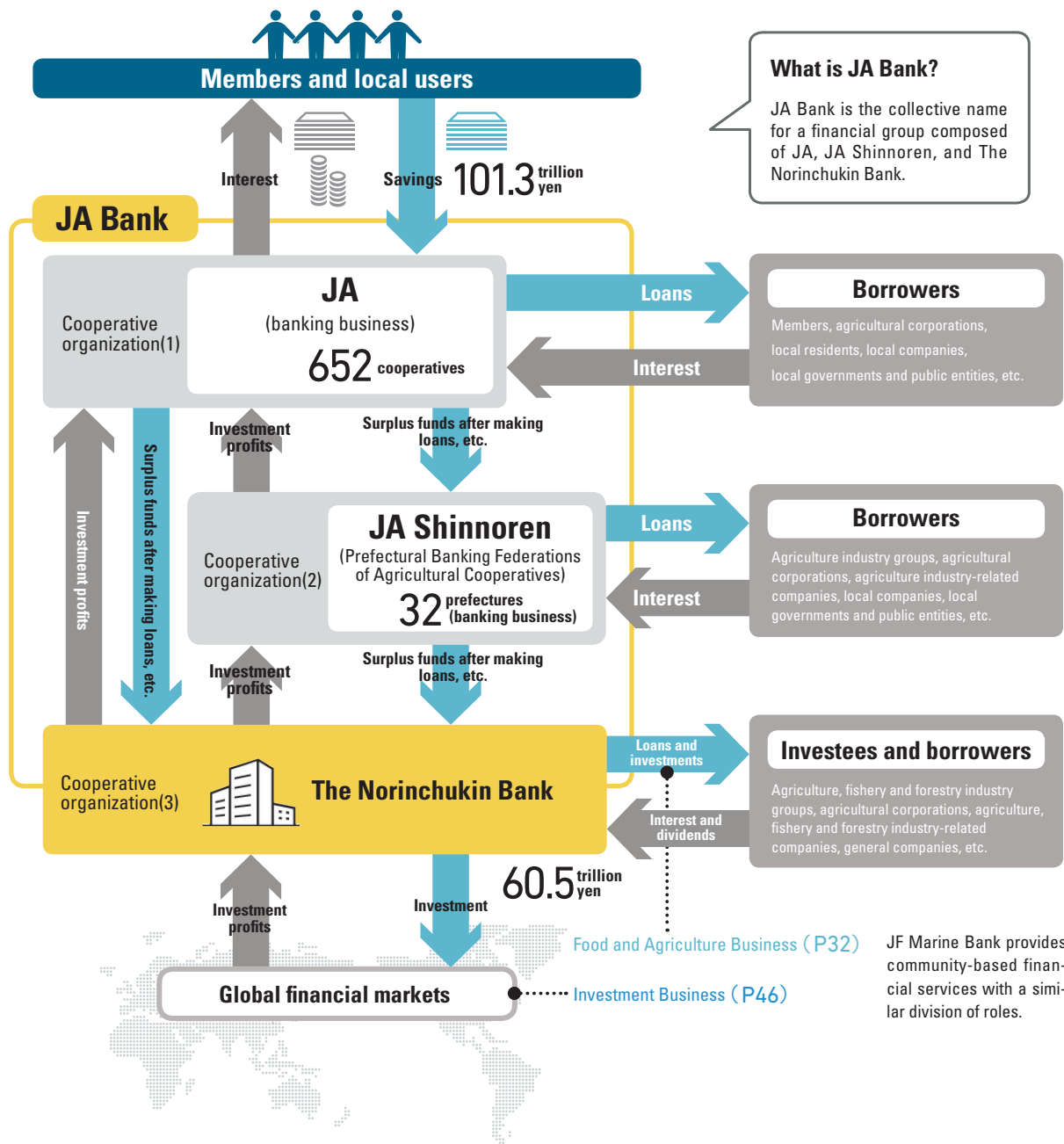
This fund is managed by Norinchukin Zenkyoren Asset Management Co., Ltd., our group company, and is sold exclusively at JA branches.

This fund consists of two products: "Core 6 Seed" to meet the need to build assets and "Core 6 Ever," which aims for stable asset management; both include six asset types—stocks, bonds and REITs (Real Estate Investment Trusts) in Japanese and U.S. markets. Providing two different asset allocations to these assets, these products can meet the need to build assets by focusing more on return and the need for stable asset management by controlling risks.

Tepei Sumitomo, Senior Manager, who heads the mutual fund business in the General Affairs and Asset Building Strategy Group under the JA Bank System Asset Building Division, says, "Against the backdrop of ongoing ultra-low interest rates, customers are seeking some places to put their savings. While mutual funds have been sold at some JA branches, they were not so customer friendly to purchase. To better address customers' needs, we are optimizing the product line of mutual funds handled by JA Bank and this move has started with the Core 6 products."

The Norinchukin Bank will reinforce the product lineup incorporating its know-how of globally diversified investments accumulated over many years. From a sales perspective, an initiative was started to hire experienced salespersons from securities companies and dispatch them to JA branches, which handle sales of mutual funds. We will promote consulting sales to provide appropriate solutions for asset building and management based on an accurate understanding of asset situations and the financial needs of customers, while working to expand the number of JA branches handling such products.

## Flow of funds at JA Bank



## Managing funds effectively as JA Bank and JF Marine Bank, while meticulously addressing the funding needs of each region

In the Retail Business, The Norinchukin Bank, together with each region's JA and JA Shinnoren, forms a financial group, "JA Bank."

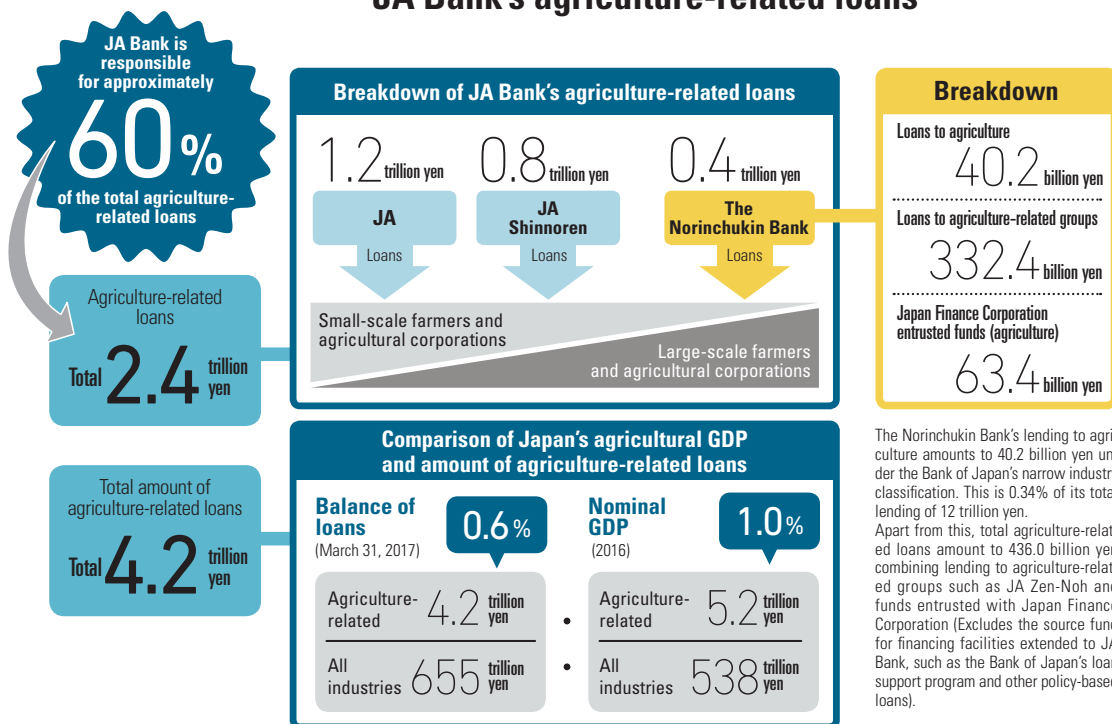
At JA Bank, JA, JA Shinnoren and The Norinchukin Bank share responsibilities for implementing the efficient management of funds. The savings deposited by members and local users are first used by JA itself to meet local funding needs. Specifically, JA provides loans for local farmers, agricultural corporations and users. Surplus funds after making loans at JA are deposited with JA Shinnoren at the prefectural level and used to make loans to large scale farmers and agricultur-

al corporations and companies within the prefecture. Surplus funds after that are deposited with us.

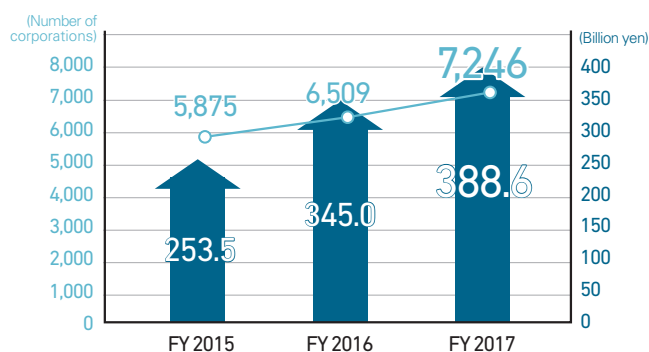
As the ultimate manager of these deposited funds, we make loans to and investments in agriculture, fishery and forestry industry groups, agricultural corporations, and agriculture, fishery and forestry industry-related companies in addition to investing in global financial markets to return profit to JA and JA Shinnoren.

Also, in the fishery field, JF, JF Shingyoren and The Norinchukin Bank share roles as "JF Marine Bank" in a similar way to JA Bank to ensure efficient fund management.

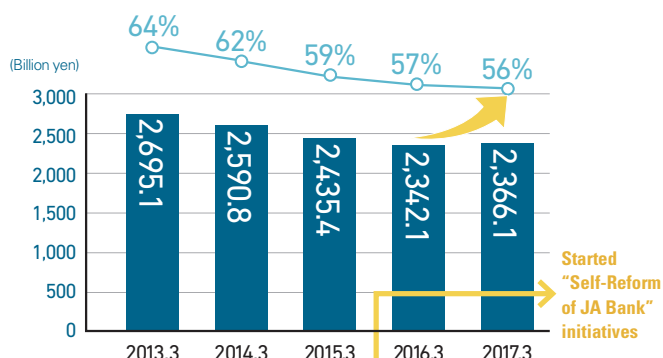
## JA Bank's agriculture-related loans



**Trends in the amount of new agricultural loans executed and the number of agricultural corporations as business partners**



**Trends in the balance of agriculture-related loans and market share**



## Japan's biggest lender in the "Agriculture" field JA Bank continues to be the main bank for the agriculture industry

JA, JA Shinnoren and The Norinchukin Bank are responsible for different responsibilities at JA Bank with regard to agricultural loans. JA meets the funding needs of small-scale family farmers and agricultural corporations in each region while JA Shinnoren and The Norinchukin Bank play a central role in meeting funding needs for farmers and agricultural corporations running large-scale operations.

As a result, JA Bank's agriculture-related loans total 2.4 trillion yen (including loans facilitated by JA Bank on commission for Japan Finance Corporation) with 1.2 trillion yen at JA, 0.8 trillion yen at JA Shinnoren and 0.4 trillion yen at The Norinchukin Bank, making JA Bank the largest lender accounting for approximately 60% of the total amount of agriculture-related loans (4.2 trillion yen).

Although a slight decline occurred in the balance of agriculture-related loans of JA Bank for some time past, the balance shifted to an increase on a year-on-year basis as of March 31,

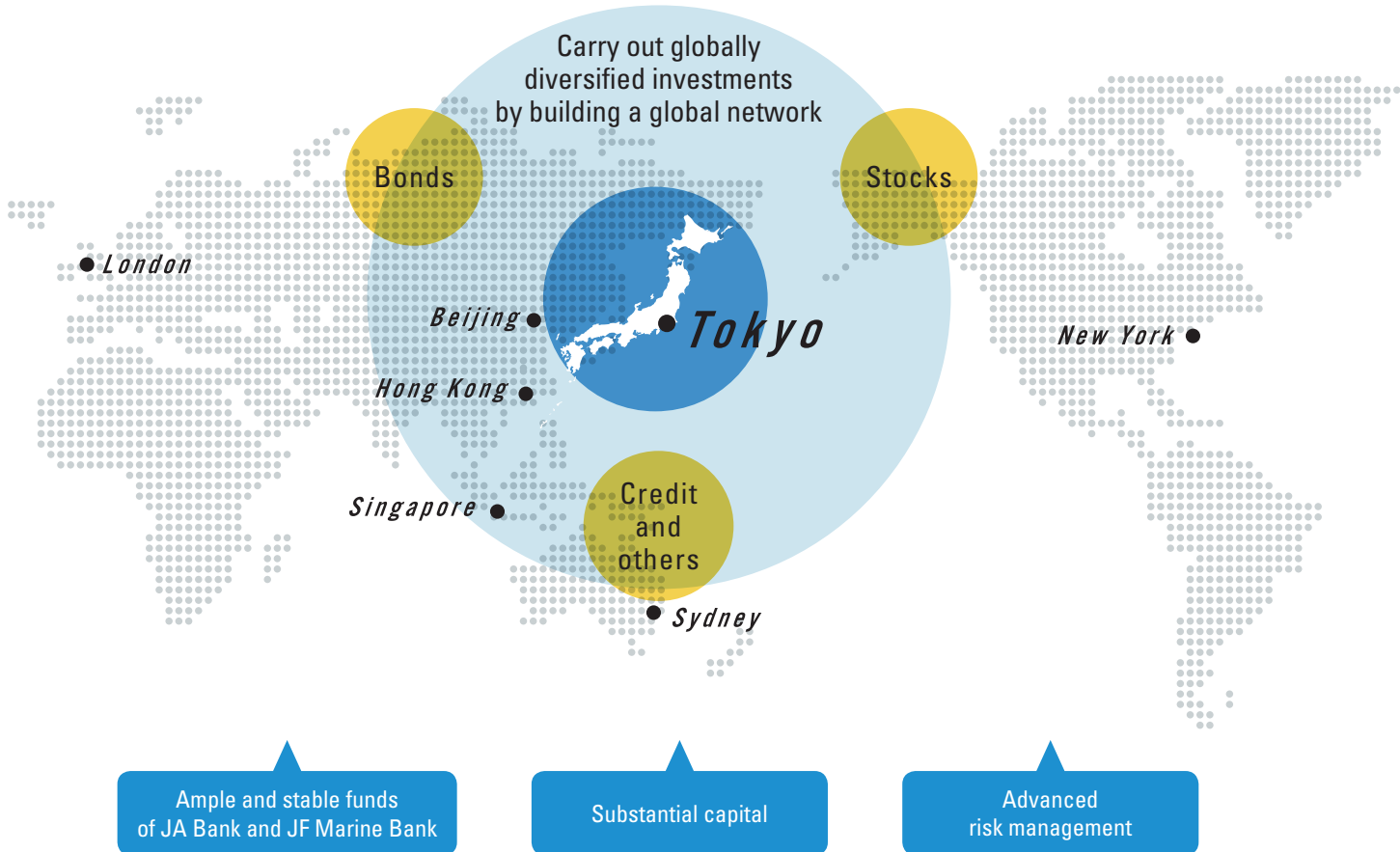
2017, due to an aggressive approach to agricultural corporations. In addition, the amounts of newly made agricultural loans for fiscal 2016 surged 36% from the previous fiscal year, and this increasing trend continued in fiscal 2017.

The growth in JA Bank's agricultural loans comes from efforts by JA, JA Shinnoren and The Norinchukin Bank separately or in alliance to commit to provide funds to agriculture-related fields. A good example is a loan to A-and-S Co., Ltd., an agricultural corporation in Kasaoka-shi, Okayama Prefecture. That story is outlined in "Food and Agriculture Business Supports and Connects the Entire Food and Agriculture Value Chain" on pages 34-38 of this report. JA Kurashiki Kasaya and The Norinchukin Bank, together as JA Bank, provide various financial services to address the needs of the company.

JA Bank will continue to be "the main bank for agriculture" to fully meet the funding needs associated with the expansion of the agriculture industry.

## Investment Business

Pursuing stable profit as the ultimate manager of funds  
for JA Bank and JF Marine Bank



### Ensuring stable profit over the medium to long term through globally diversified investments based on advanced risk management

We play a role as the ultimate manager of funds entrusted with JA Bank and JF Marine Bank. To fulfill this role, the Investment Business engages in efficient management taking advantage of economies of scale while continuing to ensure stable profit over the medium to long term and return it to our members as the ultimate objective.

Aiming to achieve this objective, given the era of low-interest rates that began some 20 years ago in Japan, the Investment Business has worked on “globally diversified investments” at an early stage in the global financial markets. We have built a global network using overseas sites including New York, London, Singapore, Hong Kong, Beijing and Syd-

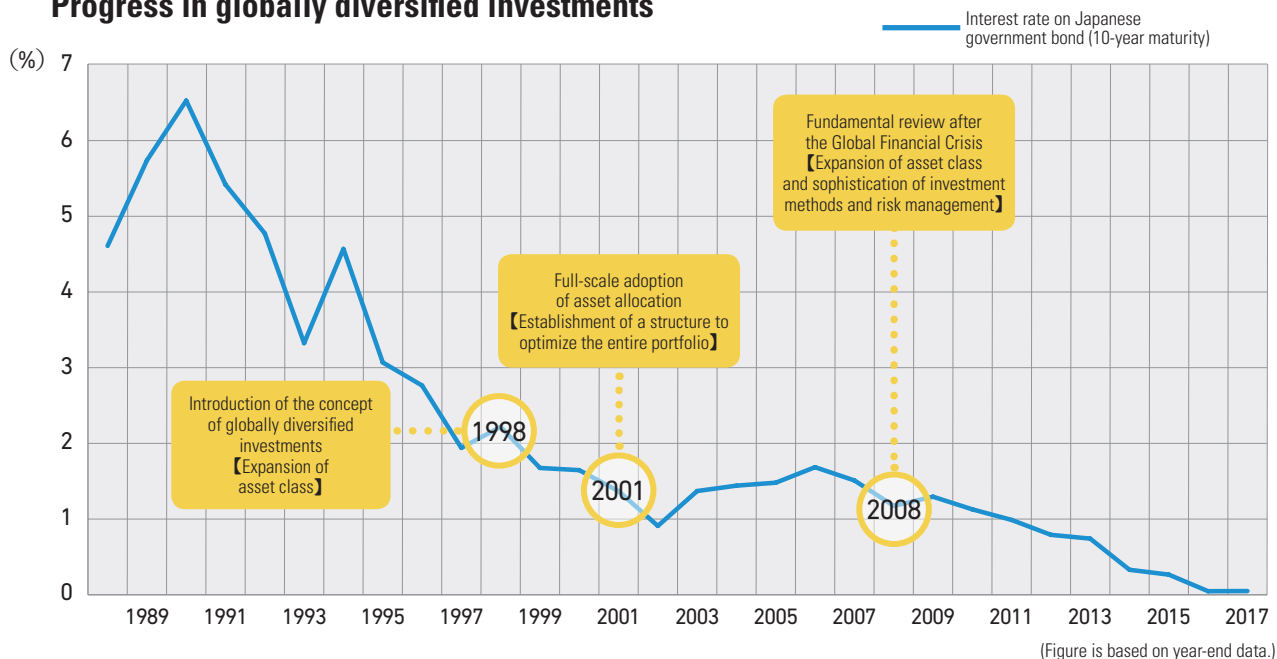
ney. We control the risks of our overall portfolio by conducting due diligence with ample information and diversifying our investments in assets with different risk-return characteristics rather than concentrating investments in limited asset classes.

In particular, we utilize hedging for the risk of exchange rates, which fluctuate considerably, as much as possible for investment in foreign currency denominated assets.

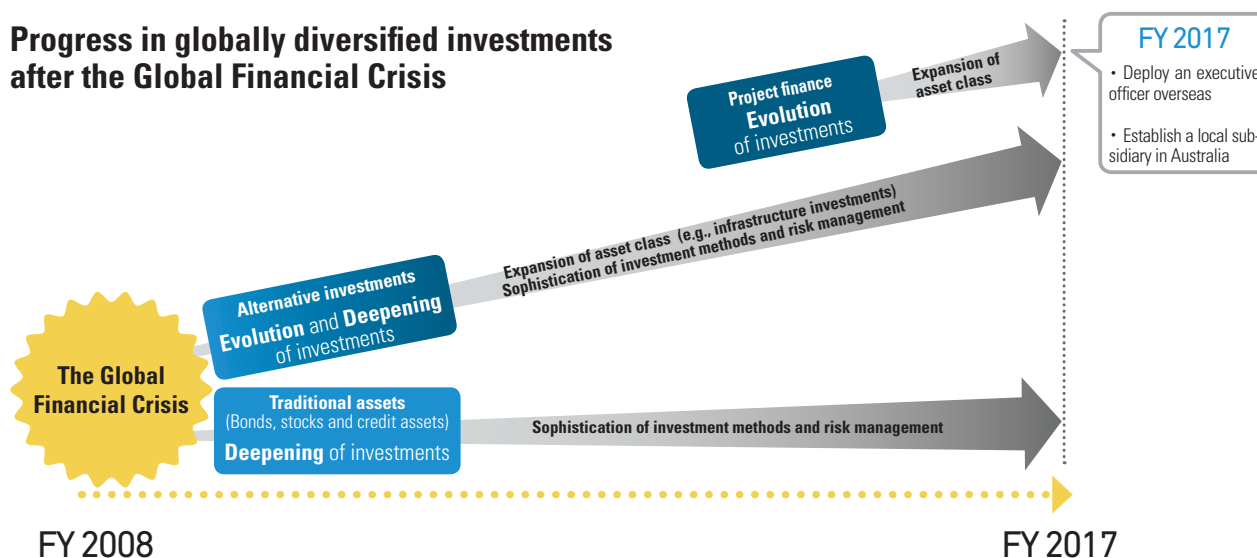
To pursue the utmost stability of profits, we constantly review our investment methods and risk management and will continue taking on the challenge of upgrading our globally diversified investments.



## Progress in globally diversified investments



## Progress in globally diversified investments after the Global Financial Crisis



## Evolution and deepening of globally diversified investments to deal with changes in market environments quickly and appropriately

It was 20 years ago—fiscal 1998—when we introduced the concept of “globally diversified investments” amid the prolonged recession after the bubble burst with low interest rates and intensified competition in investments and loans domestically. Given such a harsh environment, we expanded asset class to enhance our asset management capability.

Subsequently, in fiscal 2001, we introduced the concept of asset allocation on a full scale and established an asset management structure to optimize our entire portfolio.

In fiscal 2008, Lehman Brothers collapsed, and we were hit by the impact of the incident. To get through this difficult time, while maintaining the basic concept of globally diversified investments, we made a fundamental review of the asset classes, aiming to ensure the stable return of profits from

asset management to our members such as JA, JF and JForest. We strove to establish a sturdy portfolio with low volatility (changes in prices) and resistant to the impact of a plunge in asset prices.

Afterward, we aggressively engaged in the evolution of investments (expansion of asset class) and the deepening of investments (sophistication of investment methods and risk management) as well as structural improvement. Not limited to traditional investments, we entered project finance business and other investments. For global-scale information collection and management, in fiscal 2017, we started to deploy an executive officer overseas and established a local corporation in Australia, striving to reinforce its asset management structure.

## Today's globally diversified investments by Norinchukin

It has been 20 years since the introduction of the concept of globally diversified investments and 10 years since the collapse of Lehman Brothers. During that time, our globally diversified investments have continued to evolve and deepen, which is reflected in our current portfolio.

The portfolio is consisted of roughly four kinds of asset classes—bonds, stocks, credit assets and alternative invest-

ments—each with different investment targets, which are described below.

In line with the expansion of asset class, the exploration for investment opportunities is also expanding. Our directors and staff in charge of Global Investments have visited as many as 59 countries/regions worldwide for investigation and the number of such locations is expected to increase going forward.

### ● Bonds

Investment in high-rating bonds such as the government bonds of Japan, the United States and Europe, aiming at stable interest income

### ● Stocks

Investment in listed stocks to acquire capital gains

### ● Credit Assets

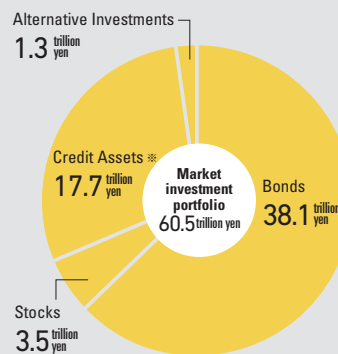
Investment in securitized products backed by U.S. or European corporate bonds or corporate or retail loans, and conduct project finance to turn credit risks into profits

### ● Alternative Investments

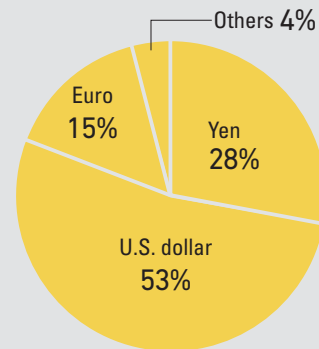
Investment in real estate, infrastructure, private equities and hedge funds, etc., which are different from traditional assets, aiming to expand the profit base by diversifying investment assets

### Establishment of a portfolio based on the characteristics of assets

Market investment portfolio by asset class



Market investment portfolio by currency

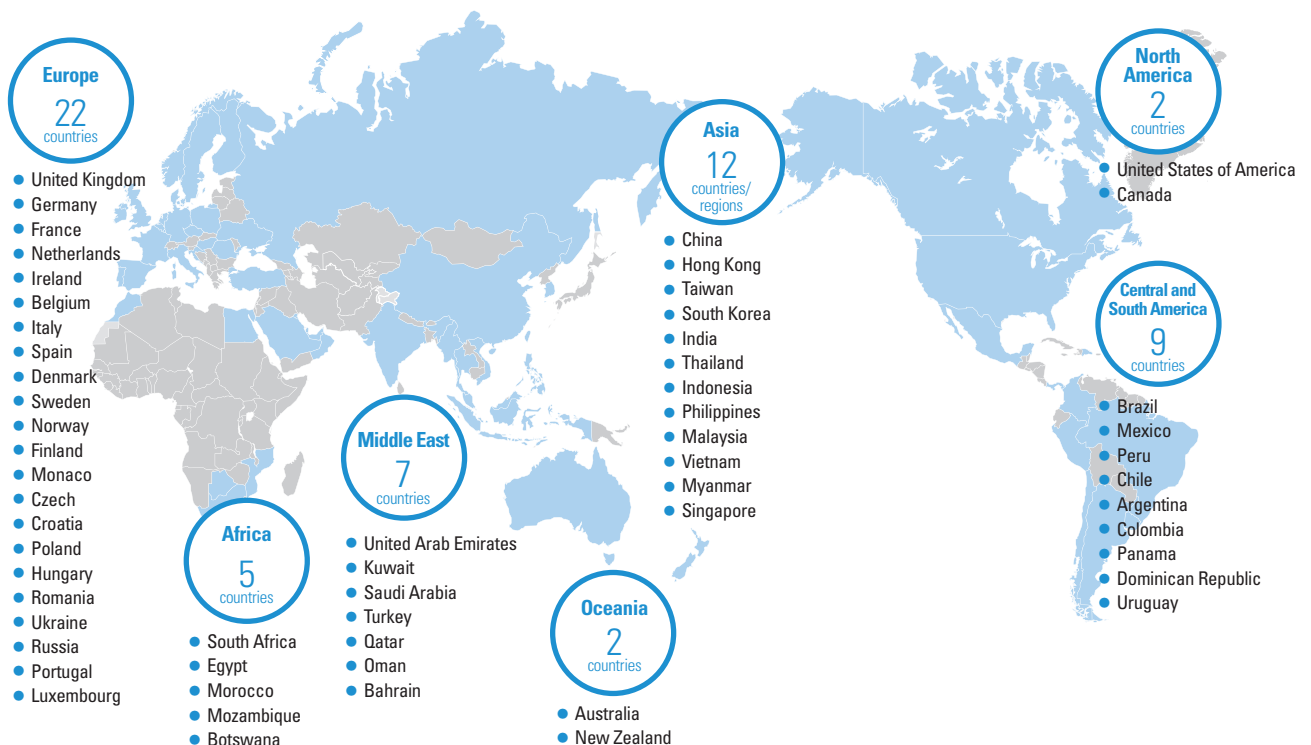


Note: Credit Assets and Alternative Investments are sometimes combined and indicated as "Credit and others." (The total might not equal the sum of each value due to rounding.)

(March 31, 2018)

## Search for investment opportunities

Countries and regions visited by Global Investments staff for investigation and/or negotiations for investment projects



(This map is a simplified one.)

C O L U M N

## Making globally diversified investments even broader and deeper via project finance

In the Investment Business, we have engaged in project finance on a full scale since fiscal 2014. In fiscal 2015, we newly established the Project and Asset Finance Division.

Unlike corporate finance providing loans according to the creditworthiness of a corporation as a borrower, project finance is a loan to be made after evaluating the profitability of a specific project. If you finance a project with high profitability, you can expect a good profit.

Our project finance portfolio has grown with the number of deals increased to 120 and the outstanding balance advancing to 1 trillion yen. Among them, overseas projects account for 950 billion yen (as of March 31, 2018).

The key to project finance is to see the project. It is indispensable to visit the sites. The staffs in charge have traveled to the United States, Europe, the Middle East, Africa and elsewhere. Because there is also a progress check on the project after financing, the number of overseas business trips is 30-40 annually although there are only around 30 staff members in the Project and Asset Finance Division.

The "Sweihan PV Power Project," which has been progressing in Abu Dhabi Emirate of the United Arab Emirates (UAE), is a project in which we decided to make loans at the end of FY 2016. Marubeni Corporation, Jinko Solar Holding Co., Ltd., a solar panel giant in China, and Abu Dhabi Water and Electricity Authority have been building a world-class solar power

plant over two years with 3 million solar panels, generating maximum output of 1,170 megawatts in a desert site of 8 square kilometers to be sold for 25 years. Of the total US \$ 670 million in loans necessary for this project, we finance US \$ 150 million.

Even in the project finance for this Sweihan project, our investment continues to deepen. Hidetoshi Hasegawa, Deputy Head of the Project and Asset Finance Division of Global Investments who has taken charge, says,

"For us, it was our first investment as one of the main players in a project with high importance in the Middle East, so we focused on gathering information in the local area and neighboring countries. We have been visiting the Middle East again and again for a year. In addition, to understand the panel production, we visited the factory of Jinko Solar Holding Co., Ltd. in China. The financial analysis such as the cash flow analysis is the same as the conventional investment analysis, but the evaluation of the technology is hard. There have been many discussions with business operators since the buildup stage of the project. It is a long and repetitive "seeing is believing" process that involves meeting the business operators, meeting the experts, and visiting the sites."

Such project financing will extend further and evolve our globally diversified investments. We aim to further strengthen such investment from now on.

## Project finance deals worldwide in which Norinchukin is involved

