Focus Area 1

# Create a Positive Impact on the AFF Industries, Food and Local Communities

In this focus area, The Norinchukin Bank aims to utilize accumulated knowledge in food and agriculture, conduct investment and lending, build business partnerships, collaborate with stakeholders, and generate new innovation to promote initiatives to contribute to the preservation and development of local communities and the natural environment. Here, we will turn the AFF industries into sustainable growth industries.

Topics		Direction of Our Initiatives	
Topic 1-1	Contribute to sustainable AFF industries	Through initiatives in the Food and Agriculture Business and collaboration with stakeholders, we contribute to the realization of sustainable AFF industries.	
Topic 1-2	Contribute to a safe and secure food supply	We leverage our organizational knowledge in food and agriculture to contribute to people's rich dietary lifestyles.	
Topic 1-3	Contribute to sustainable local communities	We contribute to providing solutions for and supporting sustainable development of local communities across all Japan, the foundation of the AFF industries.	
Topic 1-4	Conserve the natural environment as a foundation of the AFF industries	We contribute to conserving the natural environment, such as soil, forests, rivers and oceans, which are fundamental for the sustainable development of the AFF industries.	
Topic 1-5	Create business innovation	We contribute to the sustainable development of the AFF industries through investments and business alliances that create new technologies and business models.	

### Major Initiatives

- Provide financial support and solutions to management issues for farmers, fishermen and foresters
- Promote food loss reduction
- Support the AFF industries and help revitalize industries and help revitalize local communities via the AFF Future Funds Institute
- Conduct food and farming education activities
- Collaborate with the Japan Institute of Agricultural Management, which trains next-generation farmers
- Promote tree-planting activities in cooperation with companies

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Create business innovation by supporting start-up companies



# Contribute to Sustainable AFF Industries

## Contributing toward Solving Issues with Sustainability Through the "F&A Growth Industrialization Investment Framework"

Contents

The Norinchukin Bank has established the "F&A Growth Industrialization Investment Framework" with the aim of collaborating with industry members and businesses both within Japan and overseas and providing them with risk money to support them, in order to increase the added value and productivity of the AFF industries. By investing in this framework, we are contributing toward solving sustainability issues surrounding the AFF industries.

#### Spread of Biomass-Based Chemicals

As eliminating dependence on fossil fuels and reducing GHG emissions have become a global issue to combat global warming, the move has been intensifying to use biomassbased materials to produce chemicals instead of conventional petroleum-based ones. Given this, the Bank invested in Green Earth Institute Co., Ltd. (the "company"), which provides the technology to produce green chemicals using biomass-based materials under the F&A Growth Industrialization Investment Framework.

The company strives to disseminate biomass-based products and promote a circular economy by developing the technology of producing ethanol and amino acids to be used as food/feedstuff additives from biomass materials, such as plant stems and leaves, and agricultural and food residue, which do not compete with food and feedstuff. Through this initiative, the anticipated spread of biomass-based products would promote decarbonization and waste reduction and prevent marine contamination. In addition, taking this opportunity, the Bank will leverage its network to strengthen collaboration with the company, contributing to solving the issue of waste disposal for farmers, fishermen and foresters and food product manufacturers, etc., by utilizing and adding high value to agricultural and food residue.

## Promoting the Spread of Soy-Based Meat

Given the "protein crisis" caused by global population growth, deepening environmental problems and the increase in ethical consumption, plant-based meats are gaining increasing attention as alternative proteins. In March 2021, we invested in Kumamoto company DAIZ Inc., which is developing, producing and selling plant-based meats.

DAIZ uses its proprietary technology utilizing raw materials made from sprouted soybeans instead of conventional pressed soybeans to make "Miracle Meat," a plant-based meat that is highly nutritious and with a flavor, texture and aroma similar to that of traditional meat. The Norinchukin Bank is providing investment to not only support their efforts to promote the spread of plant-based meats using domestically produced soybeans but also to introduce sales channels, thereby not only solving food and environmental problems but also increasing consumption of domestic soybeans and increasing the incomes of agricultural producers.



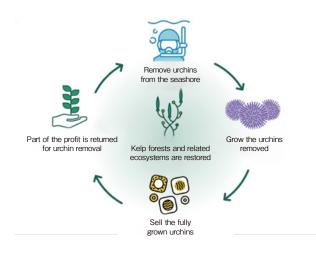


Products made from soybean-derived plant-based meat

# Support for Sea Urchin Ranching, Restoring Kelp Forests

Kelp forests, which are home to sea creatures, are recently attracting attention due to their function of absorbing CO<sub>2</sub> (Blue Carbon). Meanwhile, it is said that barren urchins left on the seashore could cause shore burning. The shore burning phenomenon is visible throughout the coastlines of Japan, posing an environmental problem. To address that, the Bank began cooperating with Urchinomics (the "company"). The company established the business model of catching barren sea urchins and turning them into commercially viable products by growing them with its own feeding system and other technologies.

To help gain public recognition of these problems and the company's business model to address them, the Bank gave lectures at seminars jointly with the company. In addition, the Bank provided loans to a fishery company that deploys this business model under the company's support, thereby contributing to achieving sustainable fisheries by restoring kelp forests and solving the environmental issue.



# Contribute to a Safe and Secure Food Supply

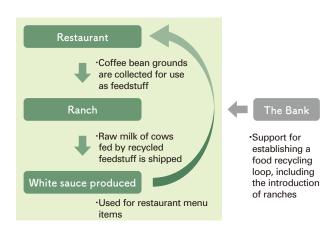
I Sustainability Management at The Norinchukin Bank

## Promoting Food Loss Reduction

To construct a sustainable food system, food loss\* is one of the key challenges to address.

To address this issue, the Bank, in collaboration with Seven & i Food Systems Co., Ltd. (the "company"), provided support to an initiative to recycle the coffee bean grounds from the Denny's restaurant chain as feedstuff to be used by dairy farmers. The raw milk produced by the farmers is processed into a white sauce, which is used for menu items at Denny's restaurants, establishing a recycling loop.

\*Amount of food loss from the entire food industry (in fiscal 2019): 17,556,000 tons (Source: Ministry of Agriculture, Forestry and Fisheries "2019 Annual Amount of Food Loss and Rate of Utilization of Recyclable Food Waste (Estimated)"

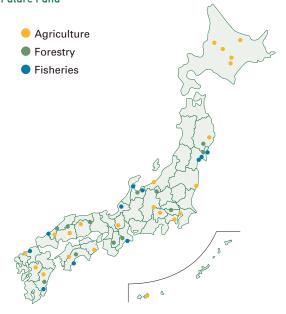


## Contribute to Sustainable Local Communities

## Agricultural, Forestry and Fisheries Future Fund Supports Local AFF Organizations

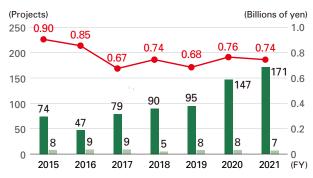
The Agricultural, Forestry and Fisheries Future Fund was established in 2014 by The Norinchukin Bank, a member of JA Group, JF Group and JForest Group, with a ¥20 billion contribution. This fund seeks to support initiatives to nurture leaders who drive the sustainable development of the AFF industries, strengthen the revenue base of these industries and revitalize local communities based on the AFF industries.

# Projects Targeted by the Agricultural, Forestry and Fisheries Future Fund



# Number of Projects Targeted and Amount of Subsidy from the Agricultural, Forestry and Fisheries Future Fund

- Number of applications
- Number of projects approved for subsidy (left axis)
- Approved subsidy amount (right axis)



## Food and Farming Education Activities

Each year, we distribute booklets to children in the fifth year of elementary school across Japan covering a variety of topics, from food and farming education to environmental education to financial and economic education. We also distribute a universal edition for special education schools. In fiscal 2021, approximately 1.30 million copies were distributed free of charge to 20,000 elementary schools nationwide.



Senior Elementary School Edition: Our Lives with Agriculture (Left), Universal Design Edition (Right)

## Alliance with the Japan Institute of Agricultural Management, which Trains Next-Generation Farm Operators

The Japan Institute of Agricultural Management (JAIAM) opened in 2013 with the Bank as its main sponsor and has produced 115 graduates in cooperation with member companies. The institute seeks to train next-generation farm operators and agricultural leaders in local communities.

Greeting the approaching milestone of its 10th anniversary in April 2023, the JAIAM will address the challenge of offering new value in the decade ahead, with ideas such as the realization of digital transformation (DX) in education including online education and the evolution of fostering innovators who can play active roles in agribusiness.



#### Post-Graduation Agricultural Employment Status

	No. of	No. of nor
il ites	farmer's	farmer's
Les		

As of March 31, 2022

	Total graduates (115)	No. of farmer's children (79)	No. of non- farmer's children (36)
At family farms*	62	58	4
At farming companies	28	13	15
Independent farmers	20	6	14
Other	5	2	3

<sup>\*</sup>Family farms include those owned by grandparents or relatives.



First Generation of Graduates: Employed in Nakano City, Nagano

#### ABE Hiroaki

After graduating, I began working in plum management in Nakano City, Nagano, which is where my family lives. When I took my farming job, new plum varieties cultivated by the Nagano Prefectural Agricultural

Experiment Station were a big topic of discussion. We secured a farming field in the hope that this would lead to development in plum management. On the sales side, we have been striving to diversify our sales routes, with core sales from shipping to JA Nakano City, plus direct sales to customers, gifts for hometown tax payments and so on. We also worked on creating shipping boxes, pamphlets and office documents, such as invoices. Looking ahead, we will keep coming up with initiatives that help us appeal to consumers about our self-produced Nakano City sourced products. There are many young farmers in Nakano City who enjoy a life of fulfillment each day, exchanging information about cultivation, having personal relationships and so on. In the future, I plan to integrate grape cultivation, a business run by my parents, and create a cultivation plan that looks at both plum and grape work. I still have much to learn, but I will deal with each issue as it comes.

## Local Revitalization Support Utilizing Farmstays

We are promoting a farmstay venture meant to generate profit in the sense that it creates hiring and income in rural areas. In March 2020, we signed a four-way partnership agreement with JA Zen-Noh, Nokyo Tourist Corporation and the Japan Countryside Stay Association. Through this agreement, we are working to realize regional revitalization through the establishment and promotion of the farmstay business. In addition to providing JA Bank's financial functions (such as farmstay loans), the bank offers partnership coordination via a broad trading infrastructure.

#### Regional Revitalization Through Farmstays, Promotion of Farming Areas and Agriculture

From September 2021 to January 2022, as an effort to contribute to the revitalization of rural districts, the four organizations at left held farmstay-themed courses at Marunouchi Platinum University, which offers career courses for businesspeople. This initiative was supported by the Association for Creating Sustainability in Urban Development of the Otemachi, Marunouchi and Yurakucho Districts (commonly known as the Ecozzeria Association). The association cooperates and/or collaborates with entities in or nearby the Dai Maru Yu Area and promotes the environmental symbiosis of city planning in the area.

This course aimed to create sustainable local communities through exchanges between rural and urban areas to solve problems and create fans. In addition to six classroom lectures, fieldwork studies were conducted in the farmstay area to deepen exchanges between urban and rural residents.









(creating fans of regions)

Interaction with the regions



## Resolving Sustainability Issues by Supporting the Employment of People with Disabilities in Agriculture

Contents

The labor shortage in domestic agriculture has become increasingly severe. Meanwhile, supporting the employment and self-reliance of people with disabilities is a social issue. To resolve these issues, the Maebashi Branch of the Bank introduced a disability welfare service office for relevant farmers who require staffing, in collaboration with the Gunma Agricultural Corporations Association. The Bank thus is working in the agriculture-welfare sectors to ensure staffing in agriculture and support the self-reliance of people with disabilities.

Furthermore, in collaboration with JA, the Bank is supporting sales channels for agricultural products to expand employment options for people with disabilities.



President MATSUMURA, Gunma Agricultural Corporations Association, and Branch Manager HATA, Maebashi Branch of the Bank (from the left), entered into a comprehensive partnership agreement to enhance the employment of people with disabilities in agriculture and other industries.

# Conserve the Natural Environment as a Foundation of the AFF Industries

II Initiatives for Medium/Long-Term Goals FY2030

### Tree Planting in Collaboration with Companies

In December 2021, in collaboration with the Kunigamison Forest Owners' Cooperative, the Bank conducted a forest preservation activity for the "Yambaru-no-Mori," a forest that was registered in July 2021 as a UNESCO World Natural Heritage site.

The Bank coordinated such activities as tree planting, the expelling of exotic species and wood-use education, together with children from the Kunigami village. Also participating were companies affiliated with the OKINAWA SDGs Project, in which local companies in Okinawa Prefecture make efforts to fulfill the SDGs.

The participants in the activity deepened their understanding about the importance of preserving the natural environment to realize a sustainable world. In the future, we intend to address the preservation of a sustainable natural environment in collaboration with forest owners' cooperatives, the industrial world, local communities and so forth.







### Reduction in Food Loss via Donations to Food Banks

In April 2022, Nochu Information System Co., Ltd., of The Norinchukin Bank Group donated to a food bank activity group. The role of food banks is increasingly important not only to reduce food loss but also to support people in need. The Norinchukin Bank Group intends to continue the reduction in food loss by utilizing food banks and other related organizations to resolve both environmental and social issues.



Donation to a food bank

III Examples of Major Initiatives

# Create Business Innovation

# AgVenture Lab: A Hub for Open Innovation

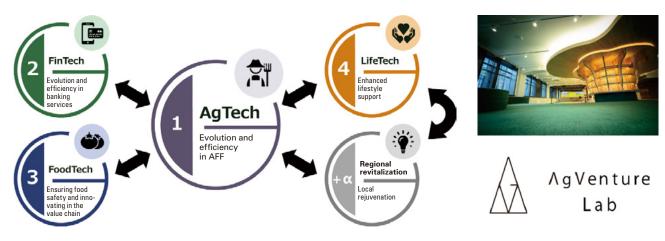
In 2019, JA Group established AgVenture Lab, an innovation laboratory, in Otemachi, Tokyo. AgVenture Lab is based on the concept of cultivating the next generation of agriculture, closely supporting daily lives of local communities, and connecting places and people.

I Sustainability Management at The Norinchukin Bank

At this lab, the various businesses of JA Group connect with start-ups, partner companies, universities, government actors and others who possess technology, ideas and other assets. These players utilize a variety of knowledge and technologies to create new businesses, develop services and resolve social issues. On the hard side, we have set up coworking spaces for start-ups. On the soft side, we work to accelerate innovation based on the JA Accelerator Program, which seeks to generate new business models, soliciting business plans from start-ups and other companies and leveraging the JA Group's strengths.

In 2020, we held a business plan contest to select companies that would participate in the 2nd JA Accelerator Program; in this contest, eight companies passed the selection process. The program adopts the key phrase of "innovation of food, agriculture and life", and covers the wide range of businesses operated by JA Group. It solicits business plans not only in FinTech but also AgTech, FoodTech, LifeTech and others leveraging JA Group's strengths (e.g., physical storefronts and other infrastructure, customer networks) in an attempt to generate new business models.

#### AgVenture Lab Initiative Areas



<business award="" contest="" merit="" plan=""> 3rd JA Accelerator Program Participating Companies</business>				
EF Polymer Pvt. Ltd.	Invented an organic polymer made from garbage that could help resolve such issues as drought and soil degradation			
Aeronext Inc.	Enabled a new smart logistics utilizing space			
Engate, Inc.	Created the "world's first" sports-specific SNS gifting			
Ciamo INC.	Realized sustainable agriculture and fish culture using waste-based photosynthetic bacteria			
Business Innovation Partners Co., Ltd.	Collaborated with the AFF industries regarding its vegetable-derived bioplastic "HEMIX"			
JIMOTO COMPANY inc.	Operates a catalog gift platform "JIMOTO-no-Gift" to deliver regional specialty goods, together with product stories about their creation			
Tokyo Robotics Inc.	Helps resolve labor shortages in fruit-sorting areas with its autonomous, collaborative robots			
MISOVATION Inc.	Intends to provide an innovative application of soybean paste (Miso) soup in preventive medical care globally			
KAERU Inc.	Offers a standard settlement for customers in an ultra-aging society by operating a shopping assistant application "KAERU"			
<innovation award=""> Apart from this program, companies subject to consideration for alliance or support:</innovation>				
IB inc., Excelsior Inc., AUDER, LTD., Kisui Tech, forent, inc., and Momo co., ltd				

# The Initiatives of the JA Group

# JA Group SDG Initiatives

Contents

In addition to the world's governments, private-sector organizations and businesses are expected to play a role in achieving the SDGs. Cooperative organizations also have a role to play. Based on these circumstances and high expectations for cooperative associations, the JA Group summarized and published the JA Group SDGs Declaration, reflecting the group's basic philosophy, in May 2020. As a member of JA Group. The Norinchukin Bank will continue to promote initiatives to achieve the SDGs.

#### SDGs and JA Group

https://org.ja-group.jp/challenge/sdgs/

# Initiatives to Revitalize Various Regions

Regions throughout Japan are confronted by shrinking workforces, aging populations and COVID-19. At the 29th JA National Convention, it was resolved that two points would be confronted nationwide: "Creating a future that features a symbiosis of sustainable agriculture and communities" and "JA will try to revitalize various regions by increasing the related populations in local communities and strengthening health promotion activities toward the realization of an inclusive regional society."

In view of this policy, JA Bank will promote initiatives to play a more in-depth role in revitalizing local communities being the origin from which JA Bank started. We will continue to provide powerful support for JA's creative and original initiatives tailored to the actual conditions and requirements of local communities in an effort to demonstrate the role of broadly defined financial intermediary functions.

III Examples of Major Initiatives

#### **Topics**

#### "JA Smartphone Class" Aimed at Eliminating the Digital Divide Throughout the Country

Triggered by the spread of COVID-19, the very concept of "connectedness" is undergoing dramatic changes, and the importance and presence of digital services in our daily lives is rapidly increasing. Smartphones are already an important link in individual's lives.

The importance of the countermeasure to "digital divide" is of increasing importance in today's society—this includes ensuring the same levels of convenience anywhere in the country and communicating with friends and family who live in remote locations.

JA Group has offered the JA Smartphone Class nationwide since July 2021 to meet the needs of local

residents. As of March 31, 2022, the Class had been held approximately 1,100 times with approximately 14,000 participants. JA Group will continue its efforts to eliminate this digital divide by helping people experience the new opportunities provided by digital services.





### JA Bank Efforts Toward Renewable Energy Demand

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The ratio of renewable energy in Japan's power supply compositions is roughly 20% (as of fiscal 2020), lower than that of other developed economies.

At the same time. Japan's Sixth Basic Energy Plan calls for a renewable energy mix of 36%-38% by fiscal 2030. Therefore, we can expect future government policies and public-private initiatives to support the spread of renewable energy. JA Bank handles products compatible with solar power generation facilities to encourage members of JA to adopt renewable energy.

Furthermore, we launched a partnership with four renewable energy power construction and sales companies.

Our goal here is to adopt agricultural solar sharing and encourage the effective use of idle land, contributing to higher incomes among members of JA and greater regional revitalization.



#### Topics

# Support for the Introduction of Agricultural Solar Sharing

By partnering with renewable energy power generation equipment manufacturers and distributors, we are encouraging members of JA to introduce solar sharing. Our Utsunomiya Branch, together with our partner West Energy Solution Inc. (West), held an explanatory meeting for JA in Tochigi Prefecture about solar sharing.

JA Shimotsuke, also in Tochigi Prefecture, held a promotion session for its members conducted by an agricultural economics liaison officer and a sales representative from West, and JA Ashikaga promoted the spread of solar sharing through explanatory meetings for its local community members.

While leveraging the strengths of JA Bank such as providing loan products that can support the introduction of solar sharing, we will contribute to the spread of renewable energy.

#### From the Front Lines



Utsunomiya Branch

#### MISEKI Jun

I am in charge of supporting planning for the agricultural loans and promotional activities implemented by JA staff. Agriculture is the foundation of JA Group and is the key sector that has proven a high degree of contribution to regional and global environments. We can contribute not only to improving farmers' income but also to maintaining farmland and protecting the natural environment by providing members of JA, who are mainly farmers, with investments, financing and solutions. I believe this proven fact is a distinct feature of the Bank.

Although solar sharing requires an initial capital investment, it has the possibility of helping farmland provide agricultural income and helping space above farmland become a revenue source from sales of electric power, thereby becoming a stable income source for farmers. Consequently, implementing solar sharing could lead to the continuation of future agricultural activities and help revitalize/utilize unused farmland. In this sense, I believe solar sharing is a useful initiative that could contribute to sustainable AFF industries. In the future, I would like to introduce a branding policy for crops grown under solar sharing facilities as "products taking into consideration the global environment" in the pursuit of higher income for farmers.

Looking forward, we would like to take on the challenges of "revitalizing devastated farmland" and "local production for local consumption of energy" based on the exchange of opinions with public administration.