



# Marubeni Nisshin Feed

Corporate profile



— Food links into the future —





# Food links into the future

We support safe and secure dietary habits through feed.

As a company responsible for a part of food culture, Marubeni Nisshin Feed thoroughly follows compliance with all laws and regulations and contributes to "guaranteeing the safety of food products" while conducting the manufacture and sale of feed and related products safely, securely, and with high quality.

We also have a persistent will to grow by prospering together with our customers through the pursuit of economic rationality and the provision of service and will "contribute to society" as a highly-trusted company.

Marubeni Nisshin Feed strives for comprehensive enterprise power.



President  
Yoshiaki Mizumoto

Demand for food and in particular livestock is projected to expand with future global population growth and rising incomes from economic advances in developing nations. Against this backdrop, feed materials are significantly impacted by global trends in agricultural production and aquaculture resources. Japan depends on imports for the majority of its feed materials, so we are focused on the international growth in demand for food and the supply balance for raw materials. In Japan, we are now confronted with a range of challenges, such as the abolition of tariffs in line with multinational economic partnership agreements, an accelerating decline in the population, and a shortage of labor. Furthermore, consumers remain keenly conscious of food safety and a high degree of food safety and reliability will continue to be a priority.

To respond flexibly to this changing environment, our employees will work as one in putting our heads together, working tirelessly, and maintaining a close dialog with our customers to proactively approach the challenges ahead. Embodied in our corporate slogan, "Food links into the future," is the wish to provide safe, reliable, and high-quality feed in its optimal form to customers and contribute to "ensuring the safety of food". Going forward, we aim to continue contributing to growth in the consumption of the safe, attractive, and wonderful livestock and fish produce that our customers so passionately create while at the same time supporting the advancement of Japan's food culture.





# Livestock feed operations

Our safe, secure, and competitive products have garnered high praise.



Not only do we supply compound feed covering all livestock species, we also provide programs which help with livestock administration responding to production systems and breeding trends through a diverse product line-up including full customer support and feed for young animals utilizing feed with unique functions.



## ► Livestock feed major products

No.1 performance in the industry to produce superior dairy cattle and beef cattle  
**Compound feed for cattle**



**For calves:** Milk replacer using a mixture of herbal materials and a new dry manufacturing method which can also be used with automatic nursing machines.

**For dairy cattle:** The formula design incorporating bypass amino acid technology has received high praise from top-class dairy farmers.

**For beef cattle:** We have a full mixture menu to fit breeds and producing areas. Regarding feed for high quality beef cattle, we became the secretariat of the National Shimofu-ri-gyu Research Society and will work hard toward the study of rearing techniques between all members and the improvement of feed quality.

Compound design considering the growth stage  
**Compound feed for swine**



Considering the nutrient levels required by pigs at each stage of development, we have prepared a wide-ranging brand which can handle the pork production needs of customers. "Herb Sodachi series/Sodate Jozu" milk formula for piglets with the concept of raising more healthy livestock through the effects of herbs and compound feed which doesn't use antibiotics and synthetic antibacterial agents are our company's proprietary products.



Produce "particular"eggs which please consumers  
**Compound feed for layers**



High-performance feed produced from large-scale intensive breeding methods and multifaceted trial research. It can maintain long-term high egg production with small amount of feed and increase economic results. We also provide salmonella prevention programs, feed for high-quality eggs (herb eggs/K2), etc., and feed which produces high quality eggs which can offer the consumer's safety.

Realize superior meat quality utilizing the characteristics of chicken breeds  
**Compound feed for broilers**



We have absolute faith in our compound feed for broilers, centered around the Marubeni group integration which covers everything from the import of grand parent stock (chunky breed) to the sale of chicken meat. We provide compound feed which we have concentrated efforts upon to squeeze the maximum potential out of the characteristics of each chicken breed.



"MNFIS" opening screen

## ► Customer support

Technical support



We consider the optimal feed and feed system for each customer, and we improve on products that can meet customers' needs. Our sales representatives are teamed with employees with specialized expertise in livestock nutrition and those with skills in development to propose carefully tailored solutions to customers' issues.

Livestock disease diagnostic service  
**System pack**



The "system pack" condenses the disease control management knowhow which our company has accumulated, and is a packaged periodic health diagnosis system for livestock. We protect the livestock which are our customers' valuable assets from disease.

Livestock production management software **MNFIS**



The "MNFIS (Marubeni Nisshin Farm Information System)" is a production/raising management software which guides farm results from a variety of viewpoints and helps improve the customer's results.





# Aqua feed operations

Top company which largely leads the industry with proprietary technology



Marubeni Nisshin Feed supports the fish production of our customers with a diverse product line-up from feed for larval fish to adult fish. This company's aqua compound feed has the No. 1 domestic share. Especially, we have achieved a share of 35% in eel feed and 22% in sea bream. Our highly unique products such as "Itomeito", feed for glass eel, and "Otohime", a larval feed which can support a wide range of fish species and stages have received high praise both domestically and overseas.

We also provide effective usage methods for feed and the fish cultivation and production traceability software "Gyoreki" as well as advice for measures against fish illness, etc., always basing our activities on the standpoint of fish farmers.



Otohime® Series Image Character

## ▶ Main aqua feed products

### Feed for larval fish Feed for sea water fish

yellow tail, sea bream, coho salmon, flounder, tiger puffer, amberjack, horse mackerel, bluefin tuna, etc.

### Feed for freshwater fish

Eel, sweetfish, rainbow trout, carp, etc.

### Coho salmon and trout operations with consistent management from egg to adult fish



We have created a system to accurately record production history for the safe and secure supply of coho salmon and trout. We not only provide compound feed but import eyed eggs from our affiliates, supply fries, and conduct technological guidance to production sites.



Feeding landscape



Sea bream raised with the Sakuradai series



Eyed eggs of coho salmon

### Japan's representative larval feed "Otohime", "New Artech"



"Otohime" "New Artech" are larval feed produced using granulation methods which do not harm the nutritional components and which can be supplied via automatic feeding machines. Expecting of maintain the health of larval fish and fries, it enables highly efficient cultivation.

Larval fish and fries: Offspring fish which have just hatched from eggs and have not developed their body structures such as fins are called larval fish, and fish which have the same body structure as adult fish but which are still small are called fries.

### Feed for glass eels "Itomeito"



Feed for glass eels "Itomeito"

Tubiflex worms have been used for the feeding of glass eels for many years, but water pollution and transfer of illness have concerned eel breeders for years. Our "Itomeito" is feed in the form of a paste which has the essential nutrients for the growth of glass eels with a taste that is as good as tubiflex worms.

### Promotion of compound feed for bluefin tuna cultivation "Magokoro", etc.



Marubeni Nisshin Feed has conducted R&D over many years with the aim of creating compound feed for bluefin tuna cultivation. As a result, we have successfully built a track record in selling "Magokoro", which is designed for cultured larval tuna, "Sea Dia" feed for natural yokowa (tuna fry), and "Giant Tuna" feed for adult fish. Currently, our line-up includes a large-diameter EP of up to 30 millimeters to provide products uniquely suited to the needs of the front lines of aqua culture.

### Realizes a beautiful body color in sea bream "Sakuradai series"



The most important standard for evaluating raised sea bream is their beautiful body color. The "Sakuradai" series is a feed which was developed to produce sea bream with beautiful body colors, long-lasting freshness, and good texture.

### Maintenance of health of marine fries "PIA Gold"



The "PIA Gold" series is a nutritional supplement including plant polysaccharides developed as a measure to promote health of such marine fries as sea bream and yellow tail from and counter stress when they are removed, during rain, etc., and is used in the production of larval fish of marine fries, release into the sea, etc.

A product which includes pumpkin seed coats, liquorice powder, plantain seeds, Japanese honeysuckle flowers, which contain abundant natural plant polysaccharides which play a vital role in maintaining the health of fish, as well as vitamin E and C which have the effect of maintaining resistance in aquaculture fish.



# Research and Development

Research and development to contribute to improved management for customers.

With the goal of contributing to our customers' management and profits, we promote research and development of products, programs while also conducting a wide range of technical support in aqua and livestock production technology, illness prevention, etc.

## The purpose of Marubeni Nisshin Feed's research and development

- Safety and security for consumers
- Consideration for the environment
- Improvement of health and quality of livestock and aquaculture fish
- Creation of high added-value livestock and aqua products
- Improvement of production efficiency

## 3 fundamental principles in Marubeni Nisshin Feed's research and development

- Develop high quality livestock and aqua products which can protect the safety and health of consumers and provide production technology.
- Adapt to livestock and fish breeds to provide feed and related technologies which can obtain the maximum production efficiency.
- Develop and provide goods, products, and technologies with competitive power.

## Multidiscipline laboratory

The multidiscipline laboratory is located in Nasushiobara City, Tochigi Prefecture, which is blessed with a good climate. It is composed of a development group to research and develop compound feed and livestock products and an examination group for pathology examination and physical and chemical analysis.



Multidiscipline laboratory

### Development group

Conducts basic research relating to the nutrition physiology of poultry, swine, and cattle as well as development and improvement of feed and supplements based on said research. Construction of reciprocal relationship between feed and the quality of livestock, development of livestock which can be differentiated more profitably, searching for new materials, and improvement of product quality management are also major themes of the research.



Technical support staff and sales staff to check the beef quality

### Examination group

Conducts pathology examinations and "system packs" on specimens received from farms, and physical and chemical analysis on the nutritional composition of compound feed and raw materials.

The accumulated data has been useful to the customers as vital information.



Pathology examination work

### Voice of researchers



At the multidiscipline laboratory, we place emphasis on research into young animal feed and herbal feed to work toward the research and development of highly unique, safe, secure, and high quality compound feed.

## Fisheries research laboratory

At the fisheries research laboratory, we conduct the development of aqua feed to improve the quality of aquaculture products as well as research into raising technologies for feed to demonstrate maximum efficiency on site. Located on the tip of the Atsumi Peninsula in Aichi Prefecture, in a place facing Mikawa Bay with abundant underground ocean water, we conduct research and development appropriate for locations while actually breeding and producing aquaculture fish.



Facilities inside the fisheries research laboratory

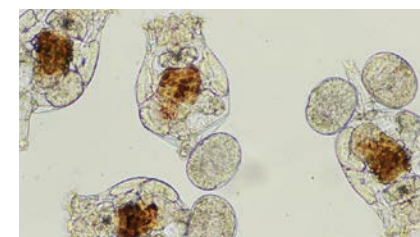
### Overview of the fisheries research laboratory

In the laboratory there is a larval fish production building and adult fish cultivation building. In the larval fish production building, the development of new feed leading to feed for larval fish such as "Otohime" and "New Artech" is conducted. In the adult fish cultivation building, trials to improve feed and the development of feed to produce high quality aquaculture fish. It has worked not only on fish feed, but also on the development of unique products such as "Aqua Plus ET", an agent which enhances the nutrients containing taurine in rotifers, which larval fish eat just after hatching.

The fisheries research laboratory always continues research and development from new points of view to create a new style in the industry.



Tiger puffer fries



Rotifers: The initial feed given to larval fish right after hatching

### Voice of researchers



Many products have been produced by the fisheries research laboratory up to now, and feed containing what kind of nutritional components is given to fish when in the growth process of each fish are the keys to the cultivation and quality of fish. The new product are developed through research on fish themselves including fries as well as the breeding environments, management technologies, feeding methods, etc.



# Production system with safety and security

We promote the maintenance and strengthening of production systems toward safety and security with acquisition of ISO 22000.

Possessing 12 production bases around the country including 5 of our own company's factories and subsidiaries and affiliates, we have constructed a production system to contribute to food safety and security as a member of the food chain.

■ **ISO 22000 acquisition:** In May 2013, we became the first compound feed manufacturer in Japan to acquire international standard ISO22000 of the management system regarding food safety. We conduct thorough product quality and manufacturing process management from the standpoint that feed is also a food product.

■ **Promotion of antimicrobial GMP acquisition** based upon Ministry of Agriculture, Forestry, and Fisheries guidelines: has already been acquired at our company's 5 key factories (Chita factory, Kagoshima factory, Hekinan factory, Kashima factory, and Otaru factory) and the JV factories (Yatsushiro feed, Tokachi feed, and Kamaishi feed).

■ **BSE countermeasures:** We conduct clear separation of production lines in feed for ruminant and monogastric animals.



Kagoshima factory: Received Kagoshima labor department chief public recognition award (July 2011)

## Livestock feed

### Acceptance of raw materials

- Implementation of inspection of nutritional composition and salmonella for each lot
- Removal of foreign substances (metal, pebbles) via a sieve and powerful magnets before storage of the raw materials in a tank in the factory



Acceptance of raw materials

### Pulverization Sieving of raw materials

- Pulverization/sorting to suitable grain size
- Thermal processing via steam kettles and expanders (some raw materials)



Cleaning of pulverization equipment

### Measurement Mixing Addition of liquid

- The measurement of the raw materials is conducted by automatic control via the latest FA system and the measurement results, etc., are also automatically recorded
- Medicated feed produced on specialized lines



Central operation room for the FA system in the factory

### Secondary processing

- Secondary processing to improve digestive absorption is conducted such as pellets, expanders, crumbles
- The thermal processing has the effect of improving digestive absorption as well as reducing the amount of excretion, and the feed is known for being easy on the environment
- Formula feed for piglets: Processing by unique granulating machines to improve taste and fluidity (Kashima factory, Kagoshima factory)
- Milk replacer for calves (powdered milk): Manufactured by a unique method so that it melts easily in hot water (Nihon Milk Replacer Co., Ltd.)

### Packaging Shipping

- Shipped in bulk, TB, or paper bags depending on the customers' needs
- Implementation of inspection before shipping
- Metal detection equipment installed to prevent the inclusion of foreign substances into the final product line (some places)
- Thorough first-in first-out, automatic introduction into storehouses



"Sodate Jozu Premium Koro Milk"

## Aqua feed

### Raw materials processing Raw materials receiving Careful selection

- Salmonella inspection is conducted for each lot of fish meal used as major raw materials



Nutritional composition inspection

### Mixture processing Measurement Mixing

- Measurement based upon mixture design and compounding in mixer



Factory operation room

### Pulverization processing Fine pulverization Pulverization and sieving before processing

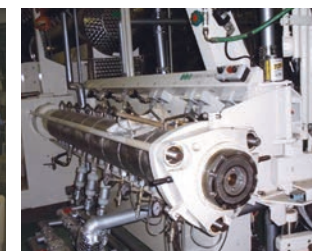
- After pulverization of raw materials, sieving to standardize the size of the grains
- Placement of strong magnet to remove foreign substances



Shredder

### Secondary processing, pelletization Drying and cooling Addition of oil

- Processing into a variety of forms via pellet mills and extruders depending on the breed of fish and form of feeding



Extruder pellet machine

### Product Product tank Packaging/shipping

- Metal detection equipment installed to prevent the inclusion of foreign substances into the final product line (some places)



Paper bag shipping

## Safety/security and efforts toward the environment



● Solar power equipment (Kagoshima factory)



● Installation of bird avoiding net to improve disease control



● Installation of equipment to disinfect vehicles coming in and out of the factory gate



● Adoption of odor prevention equipment adapted to Offensive Odor Control Law



# Other operations

We provide a range of products that are helpful to our customers in running their business and are also engaged in the sale of pigs for breeding and sales support for produce.

## Unique merchandise

### Blend products added in compound feed

We have prepared a diverse lineup of products designed to provide countermeasures against heat stress, supply nutrition to livestock, improve of the breeding results of sows, and differentiate stockbreeding production. We also provide custom blend products to address specific customer needs. Blend products we produce leverage the know-how we have accumulated throughout our long history and are made on dedicated production lines. They are the crystallization of our research and development and manufacturing technologies.

#### ● "New Ushi Health"

This is a vitamin and mineral supplement in pellet form that offers synergistic effects with vitamin C for a dramatic improvement in stress-reduction effects in cattle.



New Ushi Health

#### ● "Natsushirazu A"

It backs up the summer egg-laying results of layers that tend to be susceptible to heat stress.



Natsushirazu A

### "Buta Purin" mixed feed for pigs

When combined with water, "Buta Purin" ("pig pudding") forms a gel that is a mixed feed designed for piglets just before and after weaning. We have applied for a patent for the world's first pudding-type feed\*. By mixing the feed with water, the gelatinized "pudding" enables feeding with high water content and facilitates a smooth transition from milk to solid feed while effectively supplying nutrients to piglets whose intestinal tracts are still underdeveloped.

\*This is the first mixed feed gel for piglets with the ability to maintain a certain shape to be commercialized in the industry.

#### ● Feature 1: Palatability

It is highly palatable to piglets just before and after weaning and supports their start of ingestion of solid feed.

#### ● Feature 2: Hydration effect

This product helps hydrate piglets that need to ingest large amounts of water.



Buta Purin

## Breeding swine business

### High-performance pig breed operations "PIQUA"

As the general agent for PIQUA high-performance pigs, we contribute to the business of swine producers through our breeding swine operations. PIQUA pigs display superior breeding capacity, produce meat with good growth rates, and are expected to deliver meat on the bone of stable quality. These breeding pigs are robust with good continuous production and superior feed uptake, while being of mild temperament. Production is handled by our affiliated company Piqua Genetics Co., Ltd.



● Nisshin Marubeni Feed and Piqua Genetics have a technological alliance with JSR Genetics Ltd., the largest pig breeding company in the United Kingdom. We constantly work to improve breeding stock through importation and technological exchanges and the like.

## Herb livestock and aquaculture

### Herb Mura

Since antiquity, herbs have played a role in people's healthy lifestyles. Following the philosophy that food and medicine have the same origin, we have used the power of herbs, to create delicious food. We support those engaged in herb livestock and aquaculture by using our herb-blended feed through the brand Herb Mura ("herb village").

Herb pigs, the leading product of Herb Mura, are fed purely plant-based feed blended with four types of herbs (oregano, cinnamon, ginger, and nutmeg). This creates delicately flavored meat that gives expression to the intrinsic sweetness of pork while minimizing the meat's particular odor with the essence of herbs.

We have earned a strong reputation with top-tier restaurants and hotels since this product debuted in 1997.



# Company overview

## Company overview

Trade Name	: MARUBENI NISSHIN FEED CO.,LTD.
Established	: August 1, 1957
Capital	: 5.5 billion yen
President	: Yoshiaki Mizumoto
Number of employees	: 472 (as of April 2018)
Accounting period	: March
Major stockholders	: Marubeni Corporation Nisshin Seifun Group Inc.
Correspondent financial institution	: Mizuho Bank, Ltd., et al
Location of headquarters	: Sakura Muromachi Building 4F, 4-5-1 Nihombashi Muromachi, Chuo-ku, Tokyo, 103-0022 JAPAN Phone:+81(03) 5201-3230

## Description of business

- Production and sale of compound feed for livestock and aqua products
- High-performance pig breed projects
- Livestock and aqua products projects
- Livestock medical operations
- Other

## Efforts toward compliance with all laws and regulations

### 1 Our company's efforts toward compliance with all laws and regulations

Our company has established a compliance committee under the direct supervision of the president as a system to support and guide its Group's executives and employees to reliably practice compliance.

### 2 Marubeni Nisshin Feed Group's employee behavior guidelines

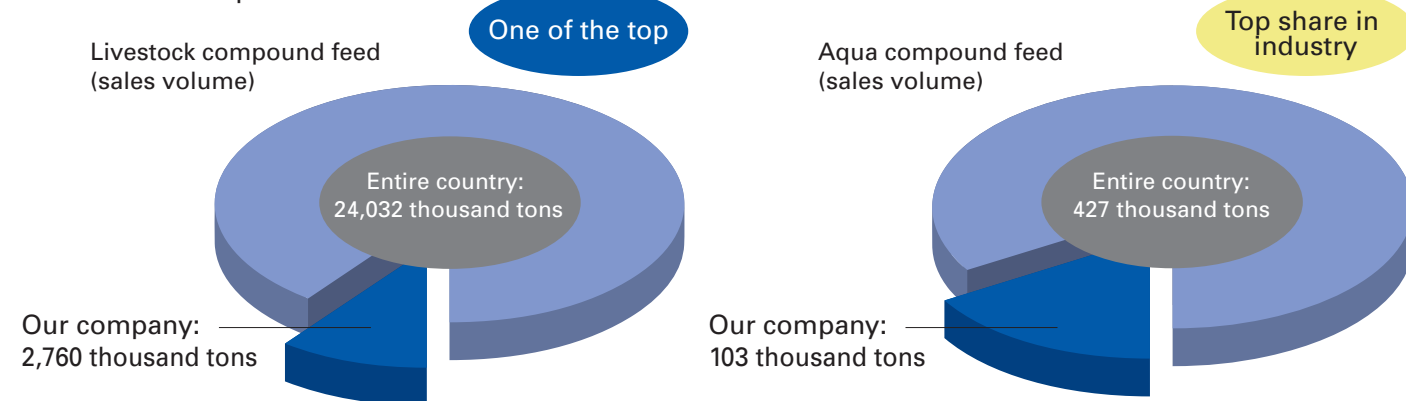
Behavior guidelines have been established to be followed by all of our company's employees will in the process of executing their daily duties.

1. We will act with the company's social responsibility in mind.
2. Being members of society as well as members of the company, we will act in a trustworthy way.
3. We will always provide quality products and services with safety and security.
4. We will promptly respond to all changes.
5. We will work to create a safe workplace that is easy to work in with respect for human rights and individuality.

### 3 Thorough adherence to compliance with all laws and regulations

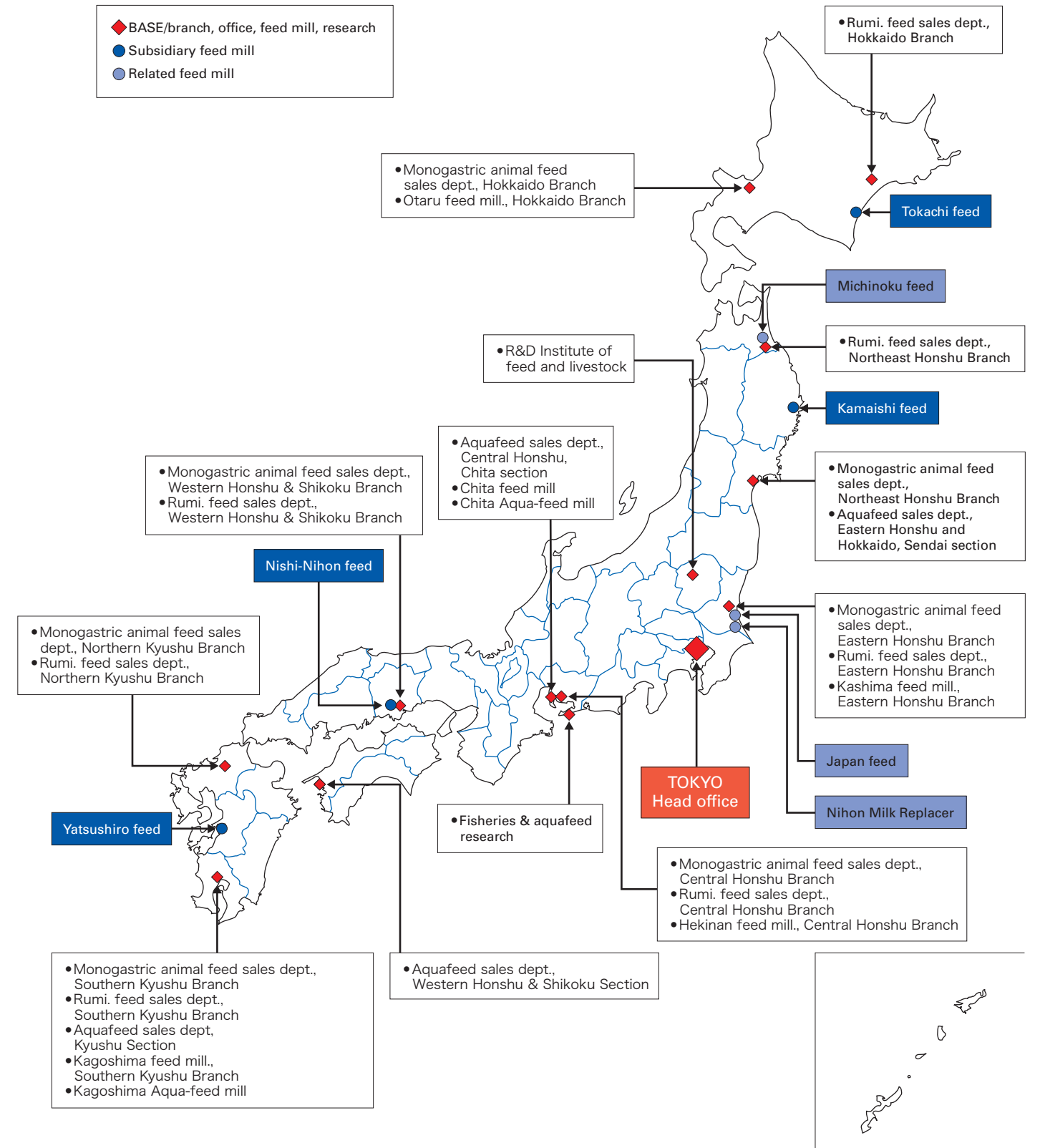
We hold compliance workshops for training and guidance while also distributing a "compliance manual" and portable "compliance cards" with the employee behavior guidelines written on them to all executives and employees and make thorough efforts to ensure they are adhered to.

## Marubeni Nisshin Feed's Share Volume of compound feed in 2017



※Note: Regarding the entire country volumes, livestock feed mixture is based upon Ministry of Agriculture, Forestry, and Fisheries data, and the marine feed mixture is based upon the statistics of the Japan Fish Breeding Association

## Domestic bases



## Overseas bases

- AMOY OFFICE  
2302B BANK CENTER, 189, XIA ROAD,  
SI MING DISTRICT, XIAMEN, 361000, CHINA



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