Chapter 4

The U.S.-Japan partnership in grains over half a century

From the boom in grain demand to biotech food

Increasing demand for grain and meat

Japanese trading companies have been doing their best to respond to the ever increasing grain demand in Japan. As Japanese living standards have been rising, so has the demand for meat. Corporate Japan has been making every effort not only to secure procurement, but also to promote the domestic livestock industry. This was outlined in chapter 3.

There are many episodes of the U.S.-Japan partnership to tell along the way as Japan's demand increased for grain and meat. I myself took part in this development as a member of Zen-Noh, so I would like to look back over the history of the U.S. and Japan's business partnership, including my own experiences.

In this chapter, I have used a few technical terms from the trading business, but I have written this book so it is not too difficult for readers to follow.

Risk control for a stable supply of feed grain

Everyone knows that there are some risks that cannot be prevented even with the best prepared prevention measures, not only in grain trading but also in every area of trade in the world. In the case of agricultural produce, the typical risks come from the climate. What matters is how to sort out calculated risks that can be anticipated and to deal with them through preparatory measures. We must distinguish predictable risks from those that are totally unpredictable. In actual business negotiations, the most crucial point is to agree on whom, whether a seller or a buyer, will carry the responsibility for such unpredictable risks.

Risks are inevitable when importing agricultural produce from foreign countries, so it is very important for buyers to agree on the contract terms specifying who will take responsibility for the risks, not leaving the matter to the sellers. It is very important for buyers to manage their risks by taking control of the arrangements in a deal that would otherwise be controlled by the seller. This makes the negotiation favorable to the buyer, although this is an eternal issue for Japan in negotiating with foreign trade partners.

However, when importing grains, management of uncontrollable risk is necessary, not only because the risks are easier to anticipate, but also because there are uncontrollable risks where buyers have no other choice than to accept the offered prices, due to the urgent need to secure raw materials for consumers back in Japan. That could be one reason why Japan is particularly sensitive about agricultural imports.

On the one hand, a trader's basic stance for dealing with volatile commodities such as grains is to balance the risk on both ends of the supply chain, sharing the risk as much as possible between producers in the U.S. and end users in Japan. It may sound very cold-hearted, but that's the reality in the trading business.

Nonetheless, traders will seek profits as middlemen, but they never take on risk. Middlemen are always immune to the ups and downs of prices. The function of a middleman is to connect buyers and sellers, so whenever selling and buying are conducted, the middleman will be paid a service charge.

But whoever tries to manufacture formula feed and supply it themselves in Japan will inevitably be involved in grain trading and be pushed into a

position of taking on risk.¹ In addition, it is no longer their choice to buy grain in the global markets and resell it freely.

The reality is far from ideal because buyers, who directly need the commodity, can hardly take control of their risk, and because the established trading rules have quite a few flaws even though they have long been used as international standards.

Trading between co-ops and decentralization of grain centers

From the late 1950s through the 1960s, aside from regular international trading, co-ops such as agricultural cooperative organizations in various countries embarked on trading and became very active players. Japanese agricultural cooperatives were no exception in this trend and have been interacting with their counterparts around the world. The "Hog Lift" mentioned in chapter 2 played a certain role in the modernization of the Japanese livestock industry and caused a rapid increase in grain demand that brought about opportunities for Japan's co-ops to reach out to cooperative organizations in various grain producing countries and form alliances with them.

During this period, grain prices rose steeply due to increased demand in Japan as well as European countries, but grain production actually decreased due to abnormal weather in the main producing areas. The higher prices of imported grain meant expensive formula feed in Japan, and Zen-Noh and trading conglomerates, Japan's feed manufacturers and grain importers, had to desperately gear up to procure imported grains, the main materials of formula feed.

From the international perspective of grain demand, this was finally the time for Japan's livestock and formula feed industries to embark on international grain trading as full-fledged trading players. Until then, they could have accessed the accumulated surplus of the U.S. grain, as they had since the end of World War II.

¹Zen-Noh is a hedger, not a speculator, in the futures market.

Various measures had been taken to facilitate grain imports, such as assigning multiple producers, developing alternative sources of grain, directly purchasing from producers via trading among co-ops, if annual or long-term contracts could suit the conditions of the parties involved.

As for assigning multiple producers, they sought not just the agricultural cooperative associations for grain marketers in the U.S., but also producers in other countries. It is surely easy to buy commodities from one source, but there has always been a risk of disruption of procurement in case of an unexpected contingency.

Also, it is not easy to take swift action if you have a sole trading partner, when a better deal is offered from another trader or producer. It is safest to purchase grain directly from producers or organizations of producers. To achieve that goal, buyers must make a significant effort to find trustworthy producers.

As a consequence, Zen-Noh, for example, made a long-term agreement with the agricultural cooperative association for grain marketers mainly located in Texas, as well as with similar organizations in the Mid-West. Other than in the U.S., Zen-Noh has also been trading with agricultural co-ops in Thailand and has launched trading agreements with agricultural co-ops and joint market organizations of producers in Argentina² and Australia³, not only for corn but also sorghum and oats.

The trading conglomerates, for their part, have accumulated know-how about agricultural produce trading during their very long career of international trading in a very wide range of other commodities. Such actions both from Zen-Noh and trading companies contributed to diversify their source of grain.

²Association de Cooperatives Argentina (ACA) and Federcion Argentina de Cooperativas Argentinas (FACA). Currently only the ACA, however.

³Australian trade partners include the Queensland Grain Growers Association (QGGA), Victorian Oat Growers Pool and Marketing Co., Ltd. (VOP) and the Grain Pool of Western Australia (GPWA).

From CIF to FOB

From the 1960s through 1970s, the common method for grain trading was mediated by trading conglomerates, and imported grain was delivered to Japanese buyers at Japanese ports. This trading method was conducted by "franco terms." Even when using the less common trading method of "loco terms," in which the commodity is delivered just to the shipping port, the price included not only the grain cost, but also insurance and freight (CIF). During this period, however, grain trading started to shift to loco terms with the free on board system (FOB). This shipping method specifies that ownership of goods passes to the buyer when the goods are loaded on the ship, even though the ship is hired by the buyer at the shipping port.

Simply put, the difference between CIF and FOB is that when using CIF, every expense including the cost for goods, insurance and freight is covered by the seller, whereas a buyer takes care of insurance and freight in the case of FOB.

Actually the shift from CIF to FOB means a lot in terms of risk control. These two contract terms are explained in the trading business textbooks as making a great difference in the rights and duties for sellers and buyers in their business operations.

What does it mean specifically? There are many uncertain factors in importing feed grains from foreign countries. First of all, there is a question of who will be responsible for risks such as bad weather in producing countries that are far away from Japan, or the growth of grain, transport to shipping ports, loading at the shipping ports, ocean transport and possible risks in the entire process including payment, as well as how much responsibility should be carried by whom. In addition to these risks, agricultural and trading policies of both exporting and importing countries cannot be overlooked.

Given all these uncertain risks, in order to supply necessary feed to livestock farmers, it is vital to minimize such risks that may happen before the imported feed grain arrives at the ports and the end-users in Japan. Perhaps the easiest way is to purchase the grain from grain carriers that have just arrived in harbor in Japan.

Today, this method is common not just for grains but also for many different commodities. Trading companies transport goods from around the world and deliver them to buyers at the point where the carrier lands at port. This is the trading method by franco terms and is called ex-ship at port of arrival. The payment to be made by a buyer for this form of trade includes all the costs mentioned previously. In other words, it includes every risk that occurs on the way⁴.

Franco terms and loco terms

Other than franco terms, there is also a trading method called loco terms. The CIF and FOB are conditions for loco terms. The total payment in a grain deal includes the cost of the grain, insurance premiums and the cost of transportation. In the case of CIF, a seller and buyer negotiate the price including all these factors, whereas in the case of FOB, a seller receives the cost of grain and a buyer has to arrange insurance and transportation at his own cost⁵.

Suppose you buy 50,000 tons of corn at a certain price per ton in August. In the case of franco terms, the corn will be delivered in August, and that means the seller is required to deliver the corn between Aug. 1 and Aug. 31 to the buyer. On the other hand, in the case of loco terms with CIF, the loading of corn onto the carrier should be completed between Aug. 1 and Aug. 31 at the shipping port.

If a buyer made a contract to buy grain that will be shipped in August, the loading will be completed within August. Therefore, a buyer must adjust the

⁴Strictly speaking, in the contract of franco terms, there are ex ship terms and landed terms.

⁵The regulations for CIF and FOB are, "Rules for C.I.F.

Contracts-Warsaw-Oxford Rules, 1932," "Revised American Foreign Trade Definitions, 1941," "Intercoms 1953" and The Uniform Customs and Practice for Documentary Credits. But only a few important aspects about CIF and FOB are explained in this book.

stock of grain in Japan in accordance with the calculated delivery date, based on the transportation period from the shipping port to the landing port in Japan. It takes 30-35 days on average from New Orleans, the major grain shipping port in the U.S., to Japan or about two weeks from the U.S. west coast to Japan.

There is a problem in the case of a CIF contract. If a buyer needs 50,000 tons monthly and if the shipment is sure to be loaded on the first day of the month every time, then a buyer only needs to consider the transportation period. But a seller bound by CIF terms only needs to complete loading the shipment within an agreed period of time, which is between Aug. 1 and Aug. 31. And the seller is not obligated to consider the buyer's grains stock at all.

Suppose a buyer buys two shipments of 50,000 tons with a contract that states one of the shipments will be loaded in August and the other in September. In this case, there is a possibility that loading of the first shipment will be completed on Aug. 1 and the second on Sept. 30. Alternatively, the first might even be loaded on Aug. 31 and the second on Sept. 1. In addition, the seller is not obligated to inform the buyer of the detailed information about the shipment until the loading is accomplished.

The buyer will be informed of the progress now and then, especially about the estimated time for loading to be completed, but the seller's duty is just to complete loading of the shipment by the agreed time. This is the basis of the CIF contract terms.

European countries as well as the U.S. are said to be contract societies, and the business world in particular functions strictly through complying with contracts. Since ships were always the main carriers many years ago when airplanes were not available, various rules have become long established for the international transportation by ship. The rules for grain transport are no exception.

Given that the storage fee is 300 yen per ton of goods for 10 days, the buyer has to pay 15 million yen extra if the 50,000 tons of goods arrive 10 days earlier than expected, or even 30 million yen extra when the goods arrive 20

days early.

In the case where a seller possesses multiple ships, he can use the ship that is most convenient for loading by the end of the month in the most financially efficient manner. The date of shipment loading, whether Aug. 1 or Aug. 31, will only be subject to market conditions. Buyers, for their part, will be constantly worried about the date of loading every month. When I was a neophyte buyer in the grain trade business, I was continually troubled by the terms of CIF contracts.

Therefore, the conditions of the contract not only affect stock management, but they also greatly affect the procurement costs. If a buyer ends up paying large additional costs for the grain purchased at a low price, the end-user livestock farmers will still have to pay a lot for the product.

From FOB to building grain elevators for exports

In the previous section, I explained about the shift from CIF to FOB in trading contracts. However, the shift to FOB posed a new challenge for grain traders of how to handle further risks. Under an FOB contract, a buyer has to make a charter party with a ship owner or a maritime company to deploy a ship to transport the grain.

A typical contract for shipping grains produced in the U.S. stipulates the detailed duties of the cargo's owner (buyer) under the FOB terms. It states that a cargo's owner has to arrange a carrier at a port designated by the seller by a fixed date. Please remember the example of a CIF contract for August loading. Under CIF terms, a seller is bound to complete loading the vessel between Aug. 1 and Aug. 31.

Meanwhile, under FOB terms, the owner of the cargo (buyer) is bound to arrange the carrier at a designated port some time between Aug. 1 and Aug. 31, and the seller must get the commodity ready by the time the ship is ready at the port. A seller of grains is given a choice of which grain elevator to use for loading a shipment, and that is stated in the contract, which is one aspect of long established grain trading tradition.



A grain elevator may sound unfamiliar for Japanese, but it is a facility for loading grain onto a ship and depositing grain into a large storage facility called grain bin. A grain elevator has a function to store grain and manage storage conditions for grain, and such elevators have silos.

A grain elevator may be called something different depending on its location or function. Those in the places of production are called country elevators, and those at railroad terminals are called terminal elevators. A river elevator is located along a river to load grain onto barges, and there are also export elevators for loading grain onto a ship for export to foreign countries. From the logistical point of view, the corn produced in the U.S. Mid-West travels from the producing areas to a country elevator, then to a river elevator, to an exporting elevator and onto a ship bound for Japan.

You may notice that there is a problem with the FOB terms, too, because a seller must arrange for a ship at port by the designated date, but there is no fixed date for the seller to complete loading the grain onto the ship, and there is no knowing when the ship will be able to set sail. This usually doesn't cause trouble, but in the case of a transport emergency due to bad weather conditions, for example, it could become a huge problem.

A ship waiting for a load of grain at the port will never be filled until the grain arrives at the port. If the Mississippi River gets frozen and causes barges to get stranded up-river, then the ship at the port has to wait for the barges to arrive.

Corn is gathered and stored in country elevators and then sent to river elevators on the Mississippi River, where it is loaded onto barges for transport to New Orleans, at the mouth of the Mississippi.



The capacity of export facilities may vary, so if a designated export elevator does not have enough capability for loading, then it would take longer to finish loading. This could be yet another risk.

The total payment is the focus of negotiations in the case of just receiving the commodity at the port in Japan. But in the case of receiving the commodity right at the port of export and using a chartered ship to carry it all the way to Japan, it is of course the buyer's duty to manage the risk.

The overseas production regions are foreign territories to the Japanese but home turf for the Americans. When we Japanese embark on international trade or go to the U.S. seeking business opportunities, we must deal with foreign rules that have been established by our foreign partners.

Japanese trading conglomerates and Zen-Noh have been accumulating experience purchasing grain from foreign producers and building an understanding of international rules and ways of negotiating with foreign business partners, and this has gradually cleared away the barriers. The U.S., for its part, has respected Japan as its long-term trading partner and has abided by its contracts, so the U.S. and Japan have built a long-lasting relationship. This is what we should not forget, because a contract only works if two parties trust each other.

However, it is well known that the 1970s were a time of upheaval in grain trading. In 1972, the former Soviet Union bought a gigantic amount of grain from the U.S. Also, in 1973, President Nixon issued a ban on soybean exports and demanded restrictions on other grains due to a poor soybean harvest in the U.S. These measures taken by the U.S. shook up many Japanese and forced us to become aware of a potential crisis of food and feed grains. In the late 1970s, the former Soviet Union continued to import huge quantities of grain, and river transport was also disturbed when the Mississippi River froze. That caused large-scale backups of ships at the port of New Orleans, the major grain exporting port in the U.S.

Along with these disturbing mishaps, it was true that the quantity of grain exported to the Soviet Union and European countries simply exceeded the loading capabilities of the export facilities. In 1977, river transport was disturbed due to the frozen Mississippi River, and several explosions occurred at export grain elevators, which forced Continental Grain Co. to halt operations temporarily. The grain that was supposed to be handled by Continental Grain and Farmers Export Company (FEC) organized by local co-ops from 7 states such as Iowa and Illinois were sent to other already overloaded grain elevators. That slowed their loading and consequently made the backups even worse. At that time, Japan realized the need to seek a better way of securing a stable supply in order to avoid the future risk of transport jams. Zen-Noh, for its part, decided to build its own grain elevator after exploring the possibility of purchasing an existing one.

Agricultural recession in the 1980s drove agricultural co-ops out of distribution business

The U.S. export grains drew lots of attention around the world from the late 1970s through the early 1980s. This period coincided with the launch of the

Zen-Noh Grain Project⁶ which saw Zen-Noh build its own grain elevator in the U.S. Through this project, Zen-Noh gradually acquired land for building its grain elevator at 163 miles upstream of the mouth of Mississippi River from 1979 through 1981. Zen-Noh visited the local administrative offices and agencies and exchanged opinions in order to gain approval and support from the local people as well as municipal bodies. After holding a number of public hearings, Zen-Noh was granted construction authorization and then held the ground-breaking ceremony in the fall of 1979 at the construction site, which is called the Rapidan Plantation⁷.

Let us take a look at the grain situation in the U.S. throughout the 1980s. In January 1980, the U.S. stopped the export of grain to the Soviet Union in response to its invasion to Afghanistan. Grain prices soared, however, due to the searing heat wave that same year. These factors contributed to a new trend of talking about "food as a weapon." However, in the fall of 1980, grain prices suddenly dropped due to a stronger dollar versus other currencies, as well as high interest rates and the effects of the U.S. presidential election. In the midst of this price crash of agricultural produce, most of the local agricultural co-ops that Zen-Noh had relied on for grain suffered significant damage and ended up going bankrupt or quitting the grain distribution business, selling their stocks and facilities to such agribusiness giants as ADM or Cargil.

⁶Zen-Noh Grain Project is one of the four major Zen-Noh projects including "Florida Phosphorite Development," "Market Milk and Dairy Business," and "LP-Gas Import Base Building Project."

¹⁷The site of the grain elevator was developed by French immigrants and called Rapidan Plantation that the former land owner wanted to keep, so the grain elevator has been called Rapidan Elevator.

Trading conglomerates eye the west coast route

Meanwhile, Japanese trading conglomerates actively embarked on international grain trading from the 1970s to the 1980s. Mitsui & Co., Ltd, a veteran in the field of grain trading, invested in export grain elevators, bought elevators in West Coast areas such as Tacoma, Washington and Vancouver in 1969, and has been engaged in exporting wheat.

In 1978, Mitsui bought facilities owned by Cook Industries Limited, one of the major agribusiness giants, after that company went bankrupt, launched the Gulf Coast Grain Co. and actively engaged in the grain business as a big Japanese grain dealer. But in 1984, Mitsui sold part of its facilities to Louis Dreyfus, another major agribusiness giant, and downsized its operations due to the agricultural recession of the 1980s.

Mitsubishi Corporation also bought an export elevator on the West Coast along with a terminal elevator in Kansas in 1975, and it built a grain gathering facility in Nebraska in 1979. Mitsubishi has been focused on the West Coast route and has been active in the region with its base in the Mid-West. Marubeni Corporation, for its part, bought a grain elevator that was once leased to Cook Industries and established Columbia Grain, Inc. in 1978. The company has also kept an eye on the West Coast route and has been active to date.

There are several reasons why major Japanese trading conglomerates invested in the West Coast route rather than in Louisiana on the Gulf of Mexico like Zen-Noh.

For one thing, Louisiana was the stronghold of the major agribusiness giants. Thus, entering that area meant all-out confrontation with them. Therefore, it was more realistic for Japanese trading companies as well as Japan as a whole to maintain good and long-term relationships with the major agribusiness firms as their clients, rather than challenging them directly.

Second, a different grain transportation route was emerging apart from the traditional Midwest-Mississippi River-New Orleans shipping route. The

special unit trains and the soaring prices of oil and ocean freight made the grain transport via a route from the Mid-West to the West Coast and from the West Coast to Japan relatively cheaper than before. Therefore, the total cost of grain transport from the Mid-West through the West Coast to Japan had become much more competitive and often cheaper than the conventional route.

Third and the biggest reason of all was that the demand for both food and feed grain had been increasing, not only from Japan but also from Taiwan, Korea, China and Southeast Asia, which made grain export from the West Coast expand rapidly.

Noticing these trends, Japanese trading conglomerates began approaching the West Coast route with the aim at establishing a base for trilateral trading, and this started drawing attention at that time. Due to the agricultural recession in the 1980s, however, such moves had to be cut back all of a sudden.

As previously mentioned, Japan's trading conglomerates and Zen-Noh had different perspectives and strategies toward the grain business in the U.S. The trading conglomerates put priority on establishing their bases on the West Coast in order to respond to the growing demand from Japan as well as other Asian countries and to avoid confrontation with the agribusiness giants that had long settled in the Mississippi River basin and Louisiana. Zen-Noh put top priority on a stable grain supply to Japanese livestock farmers and picked the best location for that.

Luckily, construction on the Zen-Noh grain elevator was completed, and that facility started grain export operations. The first shipment completed loading at the Zen-Noh Grain Elevator in October 1982. Once the grain elevator was built, the next step was, of course, to secure stable grain supplies with effective grain gathering measures. However, the agricultural recession in the 1980s had made grain gathering operations extremely difficult.

Further inland – acquisition of CGB and the grain pipeline

Due to the agricultural recession of the mid 1980s, local members of the agricultural co-ops federation had quit or downsized their operations in the U.S. Mid-West, and the agribusiness giants bought and took over their assets. As a result, Japanese grain traders had to buy grain from such big names, even though they had their own export elevators. In the midst of this major realignment of grain gathering organizations in the Mid-West, some independent companies, aside from the major agribusiness giants, could be alternative grain sources, but they were mostly located inland and didn't have their own export facilities.

In December 1987, one such independent firm, the Consolidated Grain & Barge Company (CGB) in St. Louis, contacted Zen-Noh and informed it of CGB's intention to sell their company. At the height of this consolidation trend, CGB also had to face up to incredibly difficult management conditions, but fortunately it managed to turn things around, and the company owner started to seek a way of selling the company while it was still afloat.

Teaming up with ITOCHU Corporation., Zen-Noh embarked on acquisition of CGB. There are many impressive episodes along the way of the acquisition of CGB, but let me introduce the most impressive one here. Under the U.S. contingency laws⁸, the barges serving companies along the rivers within the U.S. territory must be the U.S. firms in principle. Since CGB was a barge company, the acquisition had to meet various conditions set forth for such an exceptional procedure.

The regulations for exceptional procedure included:

- More than half of the members of the board and executive officers must be the U.S. citizens.
- More than 90 percent of employees must be the U.S. citizens.
- The said company must belong to the U.S. manufacturing or mining

⁸41 stat. 999. Section 27 of the Merchant Marine Act, 1920: No merchandise shall be transported by water ... between points in the United States ... in any other vessel than a vessel built in and documented under the laws of the United States and owned by persons who are citizens of the United States.

industries.

- The book value of the fleet must be less than 10 percent of the total assets of the said company.
- More than 75 percent of the raw materials the said company uses or sells in their business must be bought or produced within the U.S.

Zen-Noh jacked up its existing Zen-Noh Grain firm to meet the above regulatory requirements and proceeded to the actual acquisition of CGB. This purchase was completed in 1988. But later, a fellow barge service company, Ingram Barge Company, filed a lawsuit against Zen-Noh Grain contesting its eligibility under the above regulations. The trials of this lawsuit concluded in 1989, since Zen-Noh Grain had sold its barge service department, which used to be one of the main pillars of CGB. Before this selling of the barge service department, CGB in 1986 had a transport capacity of 4.7 million tons of grain per year, and it possessed 17 country elevators, 13 river elevators, and 700 barges, with nearly 500 employees. By the mid 1990s, the total quantity of grain that the company handled had increased to 7.5 million tons. Now the number of distribution centers for grain and fertilizer increased to a little over 70 in the Midwest and along the Mississippi River, and the number of employees had increased to about 1,200.

Addressing biotech crop issues

In the U.S., commercial cultivation of biotech crops was officially launched in 1996. Cultivation of biotech soybeans, corn and cotton spread faster than other crops. But the U.S. had treated soybeans and corn a little differently from the standpoint of securing the crops that Japan particularly required.

In Japan, soybeans are regarded as crops for extracting oil as well as an important ingredient for fermented soybean paste (miso), soy sauce (shoyu) and soybean curd (tofu). In Japan, corn is mainly used for manufacturing livestock feed as well as industrial material, and the percentage of corn used as food ingredients is very small. For quite a long time, Japan has imported approximately 16 million tons of corn every year, of which 12 million tons goes for feed. The remainder of 4 million tons of corn is for other industrial use, as mentioned in chapter 1.

Again, today Japan's livestock industry has been sustained only because it can import 1 million tons of corn every month. Japan imports more than 30 million tons of grains including wheat, rice, coarse grains and oil seed every year. Among these commodities, corn, soybeans and canola are likely to be biotech crops at present.

The total amount of imported biotech crops including corn, soybeans and canola in Japan amounts 17 million tons⁹, and this figure is calculated based on the most recent data of imported quantities of these crops, along with the ratios of seeded acreage of biotech corn, soybeans and cotton in the producing areas.

In the U.S. in 2011, biotech corn made up 88 percent of the total crop. For soybeans, the figure was 94 percent, and 90 percent of cotton was biotech¹⁰, so it is undeniable that most feed grains that Japan has imported from the U.S. are biotech crops. This is the reality that we have to face up to if we want to plan and execute viable measures for the future.

The U.S. government takes the position that biotech soybeans and corn are substantially equivalent to conventionally cultivated soybeans and corn. Thus, the U.S. regulations do not require biotech crops to be handled separately in grain trading. However, the wide use of biotech crops has caused various problems for importers. The outcry among Japanese consumer groups and co-ops demanding non-biotech crops has been surging.

¹⁰Source: USDA "Acreage," June 30, 2011, pp 25-26,

⁹"Science Technologies and Society: Reviewing Biotech Crops as Materials," written by Seiji Mitsuishi, pp 24-32 in the monthly magazine "Gakujutsu no Doko," published by Japan Science Support Foundation in February 2011

http://usda.mannlib.cornell.edu/usda/current/Acre/Acre-06-30-2011.pdf



The safety of biotech crops is approved both by the U.S. and the Japanese governments based on extended scientific analysis and strict examinations. But I think few Japanese consumers know this fact, let alone the quantity of corn imported and consumed in Japan. Now, let us take a look at the figures.

The total quantity of corn imported in 2010 was 16 million tons, and 14.4 million tons of corn (89%) was imported from the U.S. The remainder was from South America. The ratio of the biotech crop cultivation in the U.S. was 86 percent that year, so at least 12 million tons of imported corn was likely the biotech corn. Most of that was feed material, but some 4 million tons of corn was used for industrial products and as food ingredients. About 3 million tons of corns were used for manufacturing cornstarch, which is an ingredient of soft drinks, and half of that is believed to be from biotech corn, although it may vary depending on the way of calculating. After all, combined with corn for feed, we consume some 13 million tons of biotech corn in Japan every year. Again, it is important to understand that such biotech corn is in the market in Japan with the official sanction and safety checks by both the U.S. and Japanese governments.

One reason why it is difficult to tell from food labels whether biotech crops are used in a product is due to the complicated labeling method in Japan. It is regulated by the Japanese Agricultural Standards (JAS), whereby some processed food such as soybean curd (tofu) and fermented soybeans (natto) must have labels informing customers if biotech crops were used. It is mandatory because some protein produced during the making process of the biotech crops, is supposed to remain in those processed foods.

On the other hand, when biotech crops are used as an ingredient for soft drinks, vegetable oils and soy sauce, it is not mandatory for such products to be labeled as biotech. That is because the protein produced by the biotechnology in the plants is supposed to be dissolved or removed through the processes of enzymatic degradation, heating or refining.

As far as labeling is concerned, a consumer would not know if the pork that he or she bought was fed with biotech feed, or whether the soft drink, vegetable oil and soy sauce he or she bought were produced with biotech crops as ingredients.

We often see tofu and natto with such labeling that reads, "This product is not made of biotech materials." It is mandatory for foods made of biotech crops to state the fact on the label. But the common phrase "not made of biotech crops" on the labeling (this is voluntary, not mandatory) may give consumers the wrong impression that non-biotech ingredients are good while biotech ingredients are bad. This could mislead consumers.

Most consumers think biotech crops are not used in Japan

According to regulations, snacks such as corn chips made of biotech ingredients should have labels acknowledging the usage of biotech grain. It seems that many consumers are wrongly convinced that Japan doesn't import biotech crops, so we don't eat biotech crops. In addition, most Japanese consumers don't understand that biotech crops have been proven safe, and consequently they may suspect that foods made of biotech crops are somewhat dangerous.

Whether it is a lack of correct information or due to our problematic labeling methods, it is important for importers and those in the food industry to address consumers' need for clarity to alleviate uneasiness toward biotech crops.

Labeling regulations for biotech crops and processed foods made from such crops **(See the accompanying sheet)**

It is true that there are livestock farmers who desire to feed their livestock with non-biotech corn feed, and there are consumers who desire to eat meat from such livestock fed with non-biotech feed. In order to meet such requests, Japanese companies have been making extra efforts through trial and error and have adopted for corn the Identity Preserved Handling (IP Handling) procedures that were once used only for soybeans intended for human consumption as well as for sorghum.

Dedication to deliver non-biotech crops to Japan

IP Handling procedures are common in the distribution of grain, but it gets inevitably more and more costly if the amount of grain increases more and more. In the case of corn, each procedure from production, storage, gathering and transport must be taken care of separately from ordinary biotech crops and with a certificate issued at each step in the procedure. It is costly, but it is an essential measure in order to fulfill the consumers' need for non-biotech crops. This is challenging, but manufacturers and distributors need to update the system constantly in order to respond to the latest market needs.



Japanese trading conglomerates and Zen-Noh have both been following IP Handling procedures for non-biotech crops to respond to their customers' requests. In the case of trading grains, a number of different channels have developed for trading, but the distribution channels for each crop remain mostly the same.

It is common that in the course of trading, for example, the corn produced by farm A is sold to company B and from this company to company C, and from company C to company D, which finally sells the product to consumers. The commodity trade can be done just by exchanging documents between the parties involved, if the business procedure meets the grain trading standards in the U.S., and the actual trading can be practiced smoothly, which will allow new players to join the market and bring about more vitality and flexibility to the practice.

In the past 15 years, however, the regions cultivating biotech crops have rapidly expanded, and now 88 percent of the U.S. farmland grows biotech corn. Since Japan imports a huge quantity of corn, we need a new system that can complement the current trading style that simply requires documents stating the status of the corn based on the grain standard, in order to respond to users' need for non-biotech corn. In other words, we need complete traceability and control over the extended supply chain, from the corn producers in the Mid-West through the plants producing formula feed to the livestock farms. Everyone involved in the grain trading business, both in the U.S. and Japan, must work to establish a system to secure the traceability that is one of the basics for the appropriate supply chain management.

U.S. corn producers fulfill Japan's demand

The CGB acquisition by Zen-Noh coupled with Itochu Corp. is an example of an effective business model that has secured not only IP Handling procedures, but also their own distribution network. Now CGB has organized the Premium Grain Growers group with nearly 2,000 farmers in the Mid-West. Those participants are learning which rules to apply for growing, harvesting, storage and transport of crops, especially for growing non-biotech crops, through study group sessions with the latest information. Thus, they are clearly aware of the destinations of their produce.

In Japan, the voluntarily labeling of non-biotech crops is allowed among agricultural produce that was processed with IP Handling procedures, whereas it is mandatory labeling of such as "Soybeans (without separation of genetically modified)" without an IP Handling certificate as being handled together with biotech crops. However, non-biotech crop labeling is allowed for the crops unless the contamination ratio exceeds 5 percent, because grains are transported in bulk carriers, and there is always a certain chance of contamination with left-over biotech crops during the transport process, even with thorough cleaning of the containers and vessels.

Grain transport is the typical case of bulk transportation, but IP Handling procedures are a special measure designed to be incorporated into the bulk transport system to fulfill individual requests. This system can only be realized by requesting individual crop producers to do what the individual end-user wants, and it takes enormous resources. It can be said that IP Handling procedures can be successfully dispersed because the U.S. farmers accept biotechnology and biotech crops very positively.

On the other hand, it is very doubtful in every stage of the food distribution system whether Japanese people accept biotech crops positively. There is a complex and nebulous system of labeling for biotech crops. For example, some products made of biotech ingredients are exempted from the explicit biotech labeling, and in another case, if the contamination by biotech crops is less than 5 percent and the contamination is not intended, then explicit biotech labeling is not mandatory. Such an easy-to-misunderstand labeling system needs to be addressed swiftly as we look into the future of Japan's food and agriculture industries.

Emergent Strategies

In closing this chapter, I would like to trace how Japan has dealt with grain trading from a strategic point of view, including different approaches and strategies.

When we make a business plan or a management strategy for our company, the length of the plan may vary from one year, three years or even to five years. In reality, a five-year plan may often get out of date in today's turbulent circumstances, and most companies consider that plans need flexibility to conform with reality. Nonetheless, it is very important to look ahead to the future. Zen-Noh, for example, has not changed its strategy for grain trading in principle for more than 30 years. It continues to secure a stable supply of formula feed for Japan, and Zen-Noh has established other strategies just to support this basic principle. In order to secure a stable supply of formula feed, Zen-Noh has to secure stable procurement of feed grains. For that, Zen-Noh has done everything it can, from grain trading under franco terms, under loco terms, by CIF, by FOB and then building its own export grain elevators and finally establishing its own gathering centers in inland areas of the U.S.

Still, Zen-Noh has gone the extra mile to fulfill users' requests that have been changing very widely as time goes by. Zen-Noh utilizes its infrastructure network as well as facilities to their full extent. That is easy to say but extremely difficult to do, as it took five to 10 years just to take one step forward. It is not a speedy progress, but it has surely been a steady one.

On the other hand, Japanese trading conglomerates are not specialized in the agriculture business, but they cover every possible field of business. Therefore, their responses have been more global, considering a future vision in both Asia and the world as a whole.

This is the allegory that I often use in my classes: "There is not just one way of mountain climbing or of enjoying mountains. It is not a matter of good or bad, whether climbing the mountain on foot, by car or even by a helicopter. It is one way to enjoy the mountain by reaching the summit, but it is also a pleasure to walk around the foot of the mountain." What matters here is to specify which goal we should reach.

It is clear that over the course of time both trading conglomerates and Zen-Noh have done whatever they needed to do in order to procure the grain demanded and provide a stable supply of feed to livestock farmers. We need to understand the history of how Japanese trading conglomerates and Zen-Noh have built long-term relationships with the U.S. by employing the best ways that best served their purposes.

Next, I will focus on strategies and their types. Henry Mintzberg divided strategies into two types in his book "Strategy Safari¹¹."

According to Mintzberg, one is a deliberate strategy intended to be realized to its fullest, and the other type is an emergent strategy that is not expressly intended, but actions taken spontaneously will converge over time into some sort of consistency or pattern.

The strategies I mentioned in this chapter were all basically the latter type, emergent strategies. I am not sure about individual corporate decision-making procedures, but I suppose most strategies made in Japanese companies are more or less the emergent type of strategy.

Looking back on my own experiences in making decisions, I think it was very important that collective opinions and actions naturally have converged into a form of action, not having one superior decision-maker in an organization to make all decisions. Neither the decisions for the acquisition of CGB, nor for dealing with IP Handling procedures were as sophisticated as the strategies that are likely offered by business consultants, but they worked fine, I think.

Mr. Mintzberg also mentioned in his book "Strategy Safari," that strategies ... have to form as well as be formulated.

I understand his point that it is best to have both deliberate strategy and emergent strategy in a good balance when making decisions. When I was part of decision-making management, I often said, "No matter what you say or how profitable it may be, I cannot approve your plan because it is against my policy." I was sure I could express my opinions openly and squarely because I had my sound basic policy and considered my subordinates'

¹¹Henry Mintzberg, "Strategy Safari," pp 12-13, published in 1999

judgments and decisions that were made shortsightedly just to seek short-term profits.

Over 30 years ago when I was a college student, I first came to know about the overseas investments by Zen-Noh, and I was very impressed by the fact that there were people with such a broad vision in the organization. I looked through my archive and checked an article in the Nihon Keizai Shimbun newspaper that read, "Zen-Noh Builds Storage Facility at U.S. Port to Beef up Procurement of Feed Grain," on April 4, 1979. It was a small article, but it shook me up immensely.

This is my little personal episode, but it is very interesting that just a random event I encountered in my college days could have such a huge impact on my life, and it made me directly involved in the very same business of importing grain for quite a long time.

In this chapter I mentioned the industrious efforts that Japan has been making over the past 30 years for grain procurement, especially in the 1970s and 1980s, as epoch-making periods. It is very difficult to anticipate the future now, but I would like to review individual topics based on what should be done in the coming 30 years.