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Japan, Factor 13: Demographics

Japan: The Effects of Aging Farmers on Food Security

What do you think of when you think of food in Japan? Cultural dishes that are now famous throughout the world, adapted by numerous cultures and loved by many? Or do you think of the rice fields where the major staple of almost all Japanese meals starts? Whatever comes to mind, it is important to truly understand how at risk the Japanese are regarding food security. Aging farmers and ever-increasing urbanization have led to a long-term food crisis. However, in order to understand this, you must first comprehend the way of life in Japan. A typical Japanese farm family consists of a standard nuclear family, with two or three children. In cities, cramped quarters limit family size, a trend that carries out to the farmers as well. During meals, a variety of common dishes are served. A basic Japanese meal starts with a bowl of plain white rice, carefully steamed. The main course may include noodles, simmered fish served with broth, pan-fried beef, noodles, and other similar products. This depends heavily on seasonal products, so meals may vary greatly throughout the year. American, Indian, and Chinese style foods are often added to the meals as well, with curry, dumplings, and beef steak hamburgers being very popular. Add to this a side dish of cooked fish, sushi, or vegetables, and you are able to get a general idea of Japanese foods. Dishes are prepared with care, a trend that continues throughout the Japanese society. However, this style of preparation requires a considerable amount of work to provide for all the people of Japan, which has caused significant problems to occur. When you witness the wide variety of foods that the Japanese favor, it is easy to figure out why producing them has become harder and harder over time. Next, by looking at other contributing factors it is possible to understand the Japanese more thoroughly.

Education in Japan is highly valued and considered to be very important. Students walk into school each day prepared for hours of studious effort, and walk back out with up to six hours of study work. In addition to some of the longest standard school days in the world, the Japanese have created an environment that produces flourishing students. The effects on their country have been very significant. Illiteracy rates are negligible, citizenship is strong, and an adaptable, intelligent workforce powers their economy to compete throughout the globe (*Tripod*). However, agricultural jobs are undesirable due to traditional farming techniques and are left to the children of farmers, of which a small percentage actually end up farming. Therefore, Japanese farms have struggled to stay alive through the years.

Healthcare in Japan has been sculpted to be an efficient, fair, and intelligent system. It is universal and designed to be affordable for anyone in any position. With insurance, all procedures and exams are paid for by both the government and patients. They are allowed to choose any doctor and cannot be denied. Depending on the age and income levels of the recipient, the government will pay for 70-90% of the full cost. Maximum billing thresholds have been put in place as well, to protect patients from overly high costs of care. Once the threshold is exceeded, the government will pay for the rest. Uninsured patients do not have the same benefits. They are expected to pay for any costs they accumulate, unless they fall below a certain income where the government will provide coverage. Even the homeless are cared for: as long as their condition warrants an ambulance to be called, they receive free care (*New York University*). Hospitals in Japan are unique, as they are required by law to run as a non-profit organization and are managed by registered physicians. Aging farmers find this opportunity of affordable healthcare to be appealing which has caused a significant portion to move closer to the city and stop farming.

Employment in Japan is mostly at risk due to its very unique employment system. Although unemployment is relatively low, it is still potentially unstable. In a normal country, job hunting is based

on what job you can do and how well you are able to do it. When you get the job, you work for a specific amount of time each day for an undetermined period of time be it days, months, or years, until you are not needed anymore. In the Japanese economic system, potential employees ask to become a member of a company (*Nippon*). This is because when they become part of the workforce, the location, number of hours, and even the entire job can change at the will of the employer. In interviews, they are rated based on enthusiasm and aptitude. When hired, they are now part of a lifetime employment system. If their job disappears, they are moved to another position and often are slowly making their way up into higher positions. Unfortunately, this greatly limits available jobs to people attempting to become a part of a company. Their individual skill set does not matter as much as their enthusiasm for the job and apparent aptitude, an educated guess at best for their interviewer. This can create an imbalance in the workforce. Those who could truly make a difference are left out of the positions they need, increasing the number of people being supported by non-regular employment. Being as this kind of employment can be sporadic, the minimum wage in Japan is as much of an issue as it is here. Citizens have been asking for a more livable wage, and now the government has acted. An increase in the minimum wage by around two percent has politicians hoping they can somewhat improve the economy (*OECD Observer*). Unfortunately, with the increasingly high tariffs on imported food, the minimum wage may not even compensate for the ever-rising costs of living in Japan. Furthermore, wages vary from the cities to more rural areas, thus individual regions must decide how much to raise it. The Japanese are aware that their rising food costs represent the border between making ends meet or not, and by collectively urging the government to make changes they could reduce costs considerably. The Japanese government is open to petitions and other forms of mass communication by citizens, which may help it to realize the support it could have.

Japanese farms are limited by their number and the size of the country they are in. With ever-expanding cities, farm ground is becoming more and more scarce. The average farm is around 4.7 acres. About 1.7 million farms of this size exist. These areas are populated by 8 million people, either living as owners, or merely on the farm property. Of those 8 million, 2.2 million farm a majority of the time more than any other activity. This is where food security becomes an issue. Over 1/3 of those people are over 70 years of age, and 2/3 are older than 60. The remaining 1/3, which represents around 730,000 people, is not filled with the next generation, either. The vast majority are over 50 years old. The average age of all farmers is 65. Truly the next generation of farmers almost doesn't exist. Farmers in Japan are aging quickly, much older on average than their American counterparts. They do not have the energy to care for crops sufficiently, which has lowered the land value and quality of the product they can sell. Rice is the dominant crop grown in Japan. Rice paddies take up 55% of the total farm ground available to Japan. However, due to its relatively low production per acre, it only makes up about 1/5 of the agricultural output in Japan. Poor productivity coupled with tiny farms and a high average age has only worsened the situation. This has led to rice paddies being replaced with more efficient crops that Japan can use to feed its burgeoning population. These include: wheat, barley, potatoes, beans, peas, and a variety of vegetables. Due to the fact that farms in Japan are very small, most of the work tending crops is done by hand with little aid from machinery, as farmers simply cannot afford them. For this reason, crops have the potential for higher quality when cared for individually. An increase in the popularity of labor-intensive organic foods has increased throughout Japan, which helps the farmers to be as productive as possible. Unfortunately, their advanced age and years of hard labor forces some farmers to work shorter hours, which can lead to cracked rice and poor yields. Overall the agricultural problems in Japan are severe and difficult to improve on. A lack of arable land and a growing population are decreasing Japan's ability to feed itself. Elderly farmers are selling their land for development while others are unable to care for the crop as needed, resulting in poor quality. However, by implementing new techniques and adding more mechanical assistance along with plants that produce higher yields, it may be possible for Japan to become a much larger producer. As of now Japan is producing 39% of the necessary caloric intake for all its citizens. Even a 6% gain in self-sufficiency to 45% would greatly help Japan, a number that has proven to be attainable from recent studies (Center for American Progress). While self-sufficiency for rice, eggs,

whale meat, and mandarin oranges tops 90%, it lacks the ability to produce more than 5% for soybeans. For other basic necessities like cooking oil, a mere 13% of what is consumed is produced each year.

Demographics are the simple issue that Japan faces today. Farmers are getting too old to manually care for their crops, but low yields and relatively tiny fields cannot afford the assistance of machinery. This has created a situation where only a small portion of the people in Japan can be fed with food grown there. Therefore the highly taxed imported foods that are now part of the lifeblood of the country take up a larger portion of their personal income than ever before. Japan simply cannot feed its people with small family farms and a burgeoning population. It must come up with a solution. The current status of this problem doesn't seem to be as imminent as it really is. Without correction or change the situation is only going to get worse. It may first start out as a lack of reasonably priced foods at grocery stores, then progress to overall economy struggles as food costs increase at a rate far beyond the average employee's pay. The land must be protected from overuse by the old methods of the farmers and nurtured to produce yields on par with American staples like corn, soybeans, and wheat. A massive investment must be made by the government to improve yields and the situations that new farmers are thrust into, to encourage participation in the industry (*Farm Weekly*). Now we can begin to look at how they can invest in their future.

Japan simply cannot produce enough to feed its people, even with the implementation of higher-yielding crops other than rice. Farmers are retiring, and few young people want to continue to farm in such a time. Agriculture represents less than 1% of the economy in Japan, a number that should be significantly higher, even in relation to its physical and environmental shortcomings. In America where food sufficiency is 145%, and in other similar countries, farming only provides more for the people through continual innovation and development of new techniques and plant varieties. By improving crops and increasing agriculture to a sustainable level while lowering tariffs for staple foods, Japan would see a significant improvement. Farmers would increase in numbers and have higher incomes than before, allowing them to care for crops more effectively. The quality of food would go up, while the costs decrease for both imported and home-grown foods. Farmland would see an improvement in value from advanced farming techniques and be able to produce crops of a much higher caliber. Past this, more reasonable food costs could leave the Japanese people with extra money to spend potentially improving the economy and stimulating job growth within major industries. The government must invest here, to bring American and Eastern Asian farming techniques and solutions to Japan. While the upfront cost may be staggering, the large economic benefit that these things provide could soon have Japan seeing it as a financial success. Increased yields, lower food costs, higher profitability in farms, and a growing agricultural sector are all possible from the adoption of foreign agricultural practices (*Farm Weekly*). Japan must make the difficult decision to spend the money now while it can or face these problems as the people age and its budget grows tighter. Simple solutions implemented with precision could truly benefit Japan, and lead to a unity among farmers of different generations.

While the Japanese may not be a self-sufficient nation for food production, they import enough to easily keep their country fed (*The Japan Times*). Nutritious food is valued by the Japanese, marked by the success of organic food stores and related markets. The biggest problem is associated with how the Japanese choose to tax imported food. Imported rice is taxed by the largest margin, over 750% as of this year. Butter and sugar are both around 325%, with barley, wheat, and nonfat dry milk all at an unreasonable 250%. Beef, a food that has been catching on in Japan, has been raised to 39%, even though production of beef in Japan is essentially nonexistent. How are tariffs protecting Japanese farmers if they do not produce beef? A recent market survey in Japan showed that American-grown high quality rice is in high demand, but cannot be imported at a reasonable price, a deal breaker for both parties. If tariffs were lower, markets could be developed in each country to produce and consume the product, with the government still receiving a reasonable tariff rate. However, government bureaucracy and the fierce independence of the Japanese people have gotten in the way of their own benefit. Farmers dedicated to the old ways force the government to be very careful when suggesting new trade agreements that could

put Japan into a perfect position to catch the massive Chinese rice market. Certainly the resistance of reducing tariffs makes sense to farmers. Where will they be if cheap American rice ruins their livelihood? Surprisingly, they may benefit from it. Rice is a crop that requires a significant amount of labor for a small return. This means that each year, rice becomes a worse option for farmers. The options for farmers apart from rice can be placed in two basic groups. One is to sell their land or enter into a contract farming agreement with a larger farmer. Farmers can receive a considerable rent payment each year for their land, while devoting their time to a part-time job or retirement. The other option is to plant new crops, such as organic varieties or efficient crops like wheat, barley, and vegetables. These are all crops which are suited to Japan's soil and climate, and require less work than rice while offering higher profitability. Japan is able to compete on a global scale in the production of vegetables and organic foods, and possesses a population with a high demand for it. Higher profits allow for mechanization and the adoption of farming practices from other nations, which can make work lighter and crops more efficient. While both options represent significant change for farmers, they can pay off in the long term. These adaptations can place Japanese farmers in a secure and lucrative position for the long term. Overall, a more reasonable tariff rate could do a great deal for the future of Japan as well as its aging farmers.

As population growth and urbanization begin to become problems, limiting farm ground decades into the future, efficiencies in farming will have to improve along with careful maintenance of the food system. The loss of this ground will force farmers to look at more lucrative options such as organic farming, or band together in larger land agreements. This suits Japan well. Organic foods have some of the highest demand in Japan and could potentially help to counterbalance its lack of sufficiency. Large land agreements could purchase machinery to increase yields and allow farmers to potentially use fields multiple times a year. Efficiency is key, something unlocked when collaboration is achieved in this case. Even through this, farmers are likely to be able to maintain a livable income by owning parts of larger farming operations individually. In all, it is a point where farmers must change but afterwards will prosper.

As a whole, the solution to the issue of sustainability is relatively simple and straightforward. First, Japan must fund its agricultural sector to increase yields and promote farming techniques that help both the land and the farmers' income. When self-sufficiency increases, the government will be able to see a return on the investment from reduced costs of importing foods. Next, tariffs must be lowered to provide the people of Japan with reasonably priced food, leaving them with a surplus to spend in the agricultural sector (*International Monetary Fund*). The people of Japan should be educated on this issue, to help them urge the government to take a step that will help the country as a whole. Finally, agreements should be made with larger markets such as the United States, India, and China to secure food imports and get the best possible price for exports. This can be obtained by reducing tariff rates to reasonable levels, repealing laws which bar foreign imports of food, and arranging strategic agreements to feed Japan and offload its excess crops to foreign markets. All four countries will have relatively low trade barriers without Japanese tariffs, and be able to produce then export commodities economically (*International Monetary Fund*). Finally, by working with farmers who are sympathetic to old-fashioned farming and showing them the benefits of new methods, it may be possible to gain their support in the long run and encourage prospective farmers in the future (*The New York Times*). By doing these things, Japan could get a head start on a better future, not necessarily one that holds perfect self-sufficiency, but a healthy market that maintains their status as a leader on the world stage. Striving towards Millennium Development Goals could help considerably as well. 8.A suggests that reducing trade restrictions between countries could vastly improve their long-term prospects, something that holds true for Japan. 7.A could also be implemented. By applying agricultural sustainability into Japan, they can help to guarantee healthy farms into the future, preventing them from losing valuable farm ground. Another local project proved to be very promising. As a personal initiative by Shigeaki Okamoto, he moved out of his family's business in chrysanthemums and instead began to grow strawberries, which keeps him away from Japanese agricultural cooperatives slowing down his progress in farming. The company has led multiple initiatives

for farming which encourages old techniques of farming that do not lead to economic success for farmers. Shigeaki Okamoto instead decided to go outside of the system, a move that has gained him support from the government to revamp the agricultural sector of Japan (*Economist*). If this was scaled up, Japan could see improved farming techniques and reasonable tariffs, a massive improvement for self-sufficiency.

I feel that there should be a cooperative effort to get Japan back on track in an agricultural sense. The government of Japan should spearhead the movement. Shigeaki Okamoto proved that his methods could work, and if followed by the government, lower prices could be seen in the market. Lowering tariffs begins this process. Low food prices increase the amount spent by consumers elsewhere in the economy, bolstering it and creating additional revenue for the government to be put towards farming. This is the main support the government could provide, other than negotiating trade agreements. Organizations both large and small could reach out to farmers and consumers in order to encourage support for the changes. Any citizen wanting to make a difference can help by purchasing goods produced by local farmers. Next, foreign markets should help Japan to update its farms, bringing with it 21st century care at a price reasonable to the farmers, who should be the true test of the system. If they can respond and bring Japan to the forefront of agriculture, it proves the system works. Securing trade deals with other countries would help Japan to get a place on the world market, growing crops that specifically suit its climate and market demand (*World Savvy*). At that point I feel Japan would have gained a great deal and could be sure of its position for the future.

In conclusion, how can we help a nation that strives to keep its population flourishing among difficult demographic problems? By putting a collaborative effort into solving the problem, much can be done for it. As we have seen, Shigeaki Okamoto has proven the benefits of his work to the whole of Japan, and gained the backing of his government for it. With leaders like him in the agricultural community informing their peers of the problem, a public awareness campaign could spread. People would learn to support their hard-working farmers, and make their job once more desirable to young students going into college and determining what direction they want their life to go. Japan is in the position to make a move in the agricultural industry, one that could supply their nutritional needs for years to come, as long as they can work together to reach it. By relying on foreign markets and reducing tariffs, food would flow in and out of borders more freely, allowing Japan to get the reasonably priced foods that it both desires and requires in the long run. Agriculture today is the Achilles' heel of Japan. However, with careful planning, it may prove to be an economic advantage in disguise.

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