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Japan, Populations

## **Japan's Shrinking Population**

Many people around the world have heard of Japan. It is a relatively small country compared to others in total land area, but in terms of population it is the eleventh largest country in the world, boasting a population of 125.8 million in 2020 [1]. Seventy-eight percent of the population is gathered in large cities, including Tokyo, the largest city in the world. The other twenty-two percent lives in rural areas and farming villages [2].

Japan is a constitutional monarchy. Although the emperor of Japan has some governmental power, his powers are mainly ceremonial. The executive branch is really run by the Prime Minister and the Cabinet of Ministers. The legislative branch elects the Prime Minister every four years, who in turn appoints the Cabinet of Ministers, his main assistants. There can be no more than 14 Ministers, 19 during a crisis. The legislative branch is the National Diet, consisting of the House of Representatives and the House of Councilors. The judiciary powers belong to the Supreme Court, high courts, district courts, family courts, and summary courts. The Chief Justice of the Supreme Court is chosen by the emperor, and the others are appointed by the House of Representatives [3].

About twelve percent of the total land area in Japan is agricultural [4], with the average farm size being about three hectares (one hectare is ten-thousand square meters, so about thirty-thousand square meters), much smaller than the average farm in the United States, which is about one-hundred-eighty hectares (one-million, eight-hundred-thousand square meters) [5].

Japan is an archipelago off the coast of Eastern Asia. It was formed by volcanoes, and is part of the Pacific Ring of Fire, a long chain of volcanoes formed where the Pacific Tectonic Plate meets the other tectonic plates. Because of the volcanoes, there is plenty of seismic activity in Japan. The Japanese Archipelago consists of five main islands, named Hokkaido, Honshu, Kyushu, Shikoku, and Okinawa. There are about six-thousand, eight-hundred-fifty smaller islands surrounding the 5 main ones. There are two main clusters of the smaller islands; the Ryukyu islands to the south, and the Nanpō islands to the east. Japan has many mountains, including the famous Mount Fuji, and sixty-six percent of the total land is forested. Most people live in tremendous cities, which are built on the coast, on plains, and in valleys [6]. The climate in Japan has a wide range, with subarctic temperatures on northern islands such as Hokkaido, temperate forests in the central regions, and subtropical temperatures in southern areas such as the Ryukyu islands. Rain falls often, and during late summer and early autumn, the islands are struck by tropical cyclones. Japan is also affected by the monsoon cycle, receiving cold winds from the northwest during winter and humid winds from the south in summer [7].

The average household size in Japan is about three people [8], and the average area of a house is about one-hundred-twenty-two square meters [9]. Most family houses are made entirely of wood. About fifty-nine percent of the houses are wooden, and for good reason; Japan's frequent earthquakes can make stone, brick, and concrete buildings crumble due to stress in certain areas, but the wooden walls and support beams distribute the stress throughout the entire house, making the support beams hold each other up. This lets the wooden houses resist the vibrations easier [10].

The traditional Japanese diet consists of a bowl of rice called gohan, a bowl of miso soup called miso shiru, pickled vegetables called tsukemono, and meat or fish. Japan, being an archipelago, takes great

pride in its seafood, often using fish, squid, octopus, eel, or shellfish. Besides rice, noodles are also commonly eaten, including udon, soba, and ramen [11]. Most foods cannot be grown or raised on the islands, so Japan imports much of their food from the United States, which accounts for twenty-five percent of Japan's agricultural trade. The main imports are pork, beef, poultry, processed vegetables, and corn. [12]

There are four main kinds of traditional Japanese cooking. The first is *niru*, which is simmering in a soup stock called *dashi*. The low temperature helps mix flavors without the food losing its shape. The second is *yaku*, which is cooking in direct or indirect heat. *Yaku* can be grilled over an open fire, fried in a pan, or roasted in an oven. It is the simplest and oldest form of cooking. The third is *musu*, which is steaming. To cook *musu*, food is placed in a pot, which is tightly closed. Traditionally, this would be done with a wooden pot, but metal works too. The steamer must be hot before steaming, and the process goes quickly. The fourth is *ageru*, or deep frying. This technique was introduced to Japan by Europeans and the Chinese in the fourteenth century. The *ageru* technique is a very precise form of deep frying, requiring the perfect oil, temperature, and batter, and needing absolute control over all three [13].

The main industries in Japan are agriculture; consumer products, particularly electronics; manufacturing, particularly mining; information technology; pharmaceuticals; banking, retail, and telecommunications services; tourism; and transportation industries, that is, aerospace, automobiles, and shipbuilding [14]. The average wage is about two-hundred-sixty-two-thousand Japanese Yen per month, about two-thousand, two-hundred-seventy-three U.S. Dollars [15].

Japan, rather than determining quality of education based on the student's economic background, provides both rich and poor kids with equal opportunities. Only about nine percent of students' success is based on economic background, in comparison to seventeen percent in the United States. This could be an important factor in the graduation rate, which is about ninety-seven percent, in comparison to the United States, which is only eighty-three percent [16].

Japanese healthcare is paid for by tax money and is available to citizens, undocumented immigrants, and foreigners [17]. Ninety-five percent of the population has access to clean water [18], and nearly every public or private area has toilets [19]. Nearly the entire population has electricity [20], and public phones are found in nearly every important building such as train stations, airports, hospitals, government buildings, and large streets. The phones are very cheap, costing only ten yen, about nine cents, per minute [21].

Japan has in total one-million, two-hundred-fifteen-thousand kilometers of roads, consisting of one-million, twenty-two-thousand kilometers of municipal roads, one-hundred-twenty-nine-thousand kilometers of prefectural roads (much like state highways), fifty-five-thousand kilometers of national highways, and eight-thousand fifty kilometers of toll roads [22]. There are also many local markets all over Japan, varying in size based on their location. Urban markets are often crowded with thousands of shoppers, while village markets are a lot quieter [23].

Japan is currently going through a major crisis: the population is shrinking fast. Japan currently has the world's oldest population, the world's most people over one-hundred, and the world's longest average lifespan. By 2040, over a third of the total population will be elderly. Also, people are not having enough children in order to sustain the population, with only an average one birth per woman, when countries need two births per woman in order to sustain the population. Both of these factors add up to a rapidly decreasing population. Japan's population peaked in 2017 at one-hundred-twenty-eight-million people, but at the current rate, it is expected to shrink down until it reaches only fifty-three million people by the end of the century, declining by more than half. This population shrinkage is creating a labor shortage, putting strain on the country's economy, which could eventually make it lose a lot of its power on the world stage [24].

Rural areas of Japan are being affected by the population shrinking the most. Young people are moving out of the agricultural villages and into urban areas, while the elderly and middle-aged people are staying behind. This means that a lot of people in these agricultural areas are unable to work on the farms that these villages get most of their income from [25]. Urban areas are also feeling the stress, with less people being able to work making a labor shortage, putting pressure on job markets [26].

This drop in population could actually benefit the environment. Historically, a recorded one percent rise of population in any area also meant a one percent increase of carbon emissions in that area. Theoretically, the opposite would also be true, so the decline in the population could also cause a decline in Japan's carbon emissions [27].

The current question is how are we to make sure that the population does not decrease so far as to cause Japan an economic crisis. Now obviously the Japanese government can't force people to have more children, so we have to go with the next idea: immigration. By having the government support immigration into the country, more people will be able to come in, adding more people to the labor force, filling the labor shortage. This will also bring other cultures into Japan, making it a more diverse place, which is always important in any country.

Unfortunately, there are some drawbacks to the immigration plan. The first is that people might not want to move to Japan. In 2020, there were only two-million, eight-hundred-eighty foreign residents in Japan, consisting for only about two percent of the population [28]. The second is that the Japanese people might not give a warm welcome to the immigrants, an issue we have in the U.S. a lot. There has been reports of immigrants being abused [24] and there will probably be more. We can try to help people understand that the immigrants benefit the economy, but there still might be people who will not support the immigration no matter what we do. The third drawback is that the Japanese government currently does not want to support this immigration plan at the moment.

There is a second option that people have considered. A key part of the population decline is that people are not having enough children to sustain the population, and to understand this option we need to look at why. Typically, one person in a household goes out to work while the other stays at home and takes care of household chores. Recently though, the people going out to work have been feeling stressed due to longer work hours. The ones who are not in a relationship are refusing to be in one thinking they won't be able to handle it with their hours, and the ones who are don't have enough time to help their partners with the household chores. The stay-at-home people, due to their partners out working the long hours, have to spend most of their time doing the household chores, and don't feel that they have the ability to look after children as well [29]. So, what we need to do is make it easier for them to raise children.

The idea that has come to mind to many people is a technological advancement: household robots. Household robots will be able to help people with household chores, such as Roombas. By automating many chores, the stay-at-home partner will be able to spend less time doing these chores, freeing up time to get a job for themselves or raise children. If they choose the former, they will be helping fill the labor shortage themselves, which will benefit in the short-run. If they choose the latter, their children will be able to raise the population, which will eventually fill up the labor shortage, benefiting in the long-run.

However, this plan means that we will need to distribute household robots to many people in Japan, which could be very expensive. If we can find a supplier that is willing to distribute the robots at a low cost, great. But if not, we can try to get the help of the Japanese government could supply funds to help distribute the robots, or maybe even get the United Nations to assist.

Really, the easiest way to fix the issue is to shorten work hours. That's pretty much it. Shorten work hours, and people will be less stressed about their work, and spend more time doing other things such as helping their partner with the household chores, which will free up time for both to raise children, increasing the population. There doesn't seem to be any repercussions to this plan, and I think that it is the ideal way to go.

So yeah, that's pretty much it. Shorten work hours, and populations will go up. This is my ideal way to fix this issue, and honestly, I think that it's the best way to go. Thank you for reading this.

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