Cayleigh Humphrey

Davidson High School

Mobile, AL, USA

Singapore, Climate Change

**Singapore: Well Developed, but Quickly Aging and Overheating**

Singapore is an immensely developed country and city-state. As a result of this, no natural forests can be found there. However, there is a small portion of the land that can be used for agricultural production. According to the CIA, the population as of this year is 6,028,459. Additionally, one hundred percent of the population is urban, meaning it contains no rural areas.

Although Singapore is so heavily urbanized and has a high population density, the country has been better than most regions in terms of population control. The country has the lowest birth and population growth rates in Southeast Asia. It also has a high average life expectancy rate due to its outstanding healthcare system and high standards of hygiene according to Britanicca. The population is notorious for longevity and health. This causes the country to have to be meticulous about nearly every aspect of life in order to maintain the comfortable circumstances of Singapore.

Singapore also runs on a unitary parliamentary republic, but it is also known as a sovereign republic. According to the Ministry of Foreign Affairs, it became independent in 1965, and this has been its ruling system ever since it gained independence. The government and cabinet are both led by the Prime Minister, while the president is known as the Head of State. The Application of English Law Act came to be in 1993. It states that the country is obligated to apply English law.

Since such a large amount of Singapore includes infrastructure and commercial buildings, there is only one percent left for the cultivation of the land. The items that are grown include eggs, seafood, and vegetables. These are mainly for local consumption. However, there are some crops and plants that are exported. These include orchids and ornamental fish. Other plants that are not eaten are grown too, such as ornamental and foliage plants. The average farm size is approximately two hectares, which is more than four football fields.

Due to its lack of agricultural assets, it relies very heavily on the use of imports for food. A considerable number of the country’s laws and regulations are based around the fact that the constant supply of safe foods from other countries is necessary. Similarly, considering that the non-food agricultural crops that are grown in Singapore can hardly support the lives of the residents of that country. This also plays a role in the population's sustenance and longevity that was previously mentioned. This is just another way that the country maintains a healthy population.

Singapore is notorious for its consistent monsoons. The climate there consists of high temperatures as well as constant rainfall. Moreover, every part of the country experiences some rainfall each day. This adds up to about 95 inches of rainfall per year. The temperature throughout the year can range from about 81 to 77 degrees Fahrenheit. This shows that it does not get very cold very often.

There are a few prevalent family structures that are present in Singapore. One of which is the nuclear family structure. This one in particular is popular in other countries, too. The reason for this is because it promotes generational wealth, emotional support, smoother communication, and more effective problem solving. The typical Singaporean family consists of a mother, a father, and their children, adopted or biological.

Families often reside in condominiums that are close to the workplaces of the parents. These may include amenities such as security, swimming pools, and gyms. A less expensive option stands, as well. About 90% of Singaporeans dwell in HDB flats. Although this alternative does not come with all of the amenities that the condos do, they are often located near the workplaces of the parents. Also, there is a considerable number of businesses and stores located nearby. These may include supermarkets, shopping malls, fast food restaurants, libraries, and recreational facilities like community centers.

The traditional Singaporean cuisine consists of three main ingredients. These are noodles, rice, and seafood. Noodles are cooked in a variety of ways. One of the most popular methods of cooking is stir frying. Most rice dishes are often of the “over rice” variety. This essentially means that there is another dish complimenting the rice by being served over top of it. In addition to these main ingredients, there is a variety of fruits and spices that are used in many dishes, too.

It is not uncommon for the average Singaporean to eat about five or six meals a day. It has been noted that some of the best meals are also the cheapest. They do not really buy into the concept of big name chefs. One thing that nearly all Singaporean foods and dishes share is that they are cooked with the intention of making humble ingredients taste like luxury. These dishes can be purchased from many types of settings. These places include Hawker Centers, which are like food courts, Kopitiams, which are like hybrids between coffee shops, bars, and neighborhood breakfast spots, Cze Chas, open air restaurants, and single serve restaurants.

Singapore has several job opportunities for anyone who’s searching. However, there are, of course, a few jobs that have more employment than others. The top job sectors are banking, information technology, and software engineering. The average salary for banking and finance is approximately $57,543. The average salary for a full-time worker in the country is $69,396. This is $5,783 monthly.

Singapore values the importance of accessibility for childcare necessities. The country is also very dedicated when it comes to education. Leaders seem to be very concerned about the success and sustainability of a good quality of life for all of their residents. Education is viewed as a very important building block for laying the foundation for the future of the children. This is also evident in the way that households are run there.

Singapore desires everyone to have an education due to its high standards. The main goal is to have every child enrolled in academically challenging courses and programs. This helps to ensure that they can maintain a steady source of income. This leads to students learning and having the ability to apply the skills they have learned to be able to keep up with their peers. Altogether, the goal of Singapore’s education system is to equip its students with the necessary skills to be able to be successful and allow generations after them to do just that.

The overall quality of life in Singapore is exceptionally high. There are several supermarkets specifically for access to nearly every item possible. There are also many convenience stores available to the public that are located near housing estates. These estates are always fully equipped with running water, toilets, and electricity. Singapore also offers a series of roads throughout the country.

The barriers that the future of Singaporean families all revolve around the fact that a substantial number of families are becoming the minority. Minority meaning that families are getting smaller and the likelihood of married couples having children is lower than it was before. It is traditional for a household to consist of a married couple and their many children. However, it is evident that married couples opt out of having children. Also, married couples are living without their children and one-person households are becoming more and more common. Data also shows that families consist of more elderly people than they previously did.

There are a few things that this can affect. One of these challenges is that the current population is aging. This is a problem because there are not enough children to build a new legacy for the generation that is to come. This ultimately means that there will not be as many adults to be in the work field and support the older generation. The ratio of working adults to elderly citizens is too far of a gap to sustain for a prolonged time period.

To dive deeper into this topic, the increase in age of the population has a negative effect on food security. The present status and severity of this problem is increasingly worsening. According to the ITE Library, as of 2020, more than 15 percent of Singapore’s population is above 65 years of age. Furthermore, the old-age ratio, which is the ratio of citizens between the ages of 20 and 24 to citizens the ages of 65 and older has gone down a significant amount from its previous 8 percent. All of this to say, there are less than five working adults per every elderly person. This is a serious issue, considering the fact that there were more than eight working adults only twenty years ago.

The main contributor to this is the simple fact that household sizes are decreasing. As previously stated, there are more and more couples deciding against having children. This means that the population will continue to age without having enough of the younger generation to pick up the pieces. This could be an issue for food security also due to the fact that Singapore has an inadequate amount of farmland. Climate change will only decrease the amount of space for agriculture. Singapore experiences droughts and flooding alike, as well as intense storms like monsoons. All of these factors are results of global warming and climate change.

The rise in temperature also negatively affects the urban and rural areas. Since urban areas were created by building over natural land, they are often warmer. And there were not many rural areas to begin with. This can affect everyone in different ways. This problem causes strain on public health because Singapore often suffers from vector-borne diseases that are worsened in the heat. As a result of this, the elderly become very ill and can die. Additionally, people in lower income communities suffer from these changes more than others due to the lack of access to alternative solutions.

Climate change also causes differences in the plant life of Singapore. The rising temperatures can make it difficult for certain native plants to grow and thrive like they should. It was previously stated that Singapore experiences tons of rain and monsoons. However, global warming can also cause droughts and the sea levels rising. Different plants have different needs. Due to climate change, it is nearly impossible for plants to easily obtain and maintain the conditions that are necessary for survival.

There are a few things that have been implemented to solve the problem. Singapore’s ultimate goal is to be able to produce 30 percent of their own food by the year 2030. This will be a mighty feat seeing as they now only produce less than one percent of their own food. One solution is to take the location that contains most of the country’s farmland and convert it into a “high-tech agri-food cluster”. After consulting with a panel of experts, this was the most proposed solution.

This idea will be effective for numerous reasons. One of which is that Singapore is known for its well developed, technology-based profile. This is also a sustainable option because it will not fall victim to all of the issues that climate change causes. And due to its technological component, it is easier to keep control of. On the contrary, technology can malfunction and will if it is not properly taken care of, or even if it is just faulty.

Different countries have taken different measures to fix the issue as well. For instance, Morocco has reduced the use of harmful gasses and makes it mandatory for everyone to use less harmful fuels. I think this could be an improvement. Due to the fact that Singapore is such an advanced country, they could be heavily contributing to a positive change. Also, this could change the fact that urbanization has caused warmer temperatures.

The high-tech solution can meet all of the needs of the population in Singapore. The Singapore Food Agency would lead this project. It is funded by the money that the Agri-food Cluster Transformation (ACT) Fund has raised. It might help to have all of the residents in the country pay a small, but mandatory fee to keep this thing afloat. This project will be sustainable because it will cover different types of food and technology.

In conclusion, Singapore is a very diverse and developed country. However, it has its challenges. Aging population and a small amount of farmland are some examples of these. These can affect different people in different ways. There have been some solutions in place to reduce the impact of climate change in Singapore. The most proven and effective way to do this is to implement the high-tech agri-food chamber.

Works Cited

*---*. www.cia.gov/the-world-factbook/countries/singapore.

“Singapore | Facts, Geography, History, and Points of Interest.” *Encyclopedia Britannica*, 10 June 2024, www.britannica.com/place/Singapore/The-people.

*About Singapore*. www.mfa.gov.sg/Overseas-Mission/Washington/About-Singapore#:~:text=Since%20its%20independence%20in%209,is%20the%20Head%20of%20State.

“Agriculture, Animal Production and Fisheries.” *Base*, www.singstat.gov.sg/publications/reference/ebook/industry/agriculture-animal-production-and-fisheries#:~:text=About%20one%20per%20cent%20of,and%20110%20sea%2Dbased%20farms.

“Singapore - Agriculture.” *International Trade Administration | Trade.gov*, 5 Jan. 2024, www.trade.gov/country-commercial-guides/singapore-agriculture#:~:text=As%20a%20highly%20urbanized%20country,safe%20food%20and%20agricultural%20products.

Katherine\_Chen. “The Government.” *Prime Minister’s Office Singapore*, www.pmo.gov.sg/The-Government.

Teacher, Maryam-Preschool. “What Are the Typical Family Structures in Singapore?” *Parents’ Best Friend- Guide for Parenting Babies, Kids and Preschoolers*, 3 Aug. 2023, mcaresforkids.com/family-structures-singapore.

“Quality of Life in Singapore.” *Hawksford*, www.guidemesingapore.com/business-guides/immigration/get-to-know-singapore/quality-of-life-in-singapore#:~:text=HDB%20flats%2C%20where%2090%25%20of,clinics%20and%20sports%2Frecreational%20facilities.

Falkowitz, Max. “An Introduction to Singaporean Food.” *Serious Eats*, 10 Aug. 2018, www.seriouseats.com/an-introduction-to-singaporean-food-cuisine.

Instarem. “Send Money Internationally | Fast, Secure, and Reliable | Instarem.” *Instarem | International Money Transfers*, www.instarem.com/blog/average-salary-in-singapore/#:~:text=Singapore%27s%20average%20income%20for%20a,per%20month%20%26%20S%2423%2C376%20annually.

*Meeting the Challenges: The Future of the Family in Singapore*. familiesforlife.sg/pages/Article/Meeting-the-Challenges-The-Future-of-the-Family-in-Singapore.

*LibGuides: Singapore’s Aging Population and Its Implications: Preparation to Aging Population*. ite-sg.libguides.com/c.php?g=965708&p=7015756#:~:text=As%20of%202020%2C%20about%2015.2,the%20Department%20of%20Statistics%20Singapore.

Singapore Goverment Singapore Food Agency. “A Sustainable Food System for Singapore and Beyond.” *Food for Thought*, www.sfa.gov.sg/food-for-thought/article/detail/a-sustainable-food-system-for-singapore-and-beyond.

*Impact of Climate Change in Singapore*. www.nccs.gov.sg/singapores-climate-action/impact-of-climate-change-in-singapore/#:~:text=Singapore%20is%20not%20insulated%20from,period%20from%201993%20to%202021.

Yazid, M. “SG Climate Rally 2023 Shines Important Emphasis on Inclusive Climate Justice.” *Disabled People’s Association*, 29 Sept. 2023, dpa.org.sg/sg-climate-rally-2023-shines-important-emphasis-on-inclusive-climate-justice/#:~:text=Simply%20put%2C%20climate%20change%20affects,points%20the%20conversation%20to%20that.

“What Are Some Countries Doing to Prevent Climate Change?” *Unifrog*, www.unifrog.org/know-how/what-are-some-countries-doing-to-prevent-climate-change#:~:text=Morocco%2C%20for%20example%2C%20has%20lifted,turned%20into%20eco%2Dfriendly%20homes.