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93401



Draw a cross through the box (X) if you have NOT written in this booklet

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SCHOLARSHIP EXEMPLAR



Mana Tohu Mātauranga o Aotearoa
New Zealand Qualifications Authority

Scholarship 2024 Geography

Time allowed: Three hours
Total score: 24

Check that the National Student Number (NSN) on your admission slip is the same as the number at the top of this page.

You should answer ALL the questions in this booklet.

Pull out Resource Booklet 93401R from the centre of this booklet.

If you need more room for any answer, use the extra space provided at the back of this booklet.

Check that this booklet has pages 2–24 in the correct order and that none of these pages is blank.

Do not write in the margins (XXXX). This area will be cut off when the booklet is marked.

YOU MUST HAND THIS BOOKLET TO THE SUPERVISOR AT THE END OF THE EXAMINATION.

QUESTION ONE

Critically analyse and justify the most significant factor(s) creating variations in demographics across the globe.

Information to answer any question can be taken from any resource.

Your answers to ALL three questions must include:

- specific information from the resource booklet
- knowledge and insight you have gained from your studies in geography
- relevant original and/or effective visuals, such as maps, graphs, and diagrams.

↙ spatial / geographical
Variations → megacities
→ labour
→ Migration

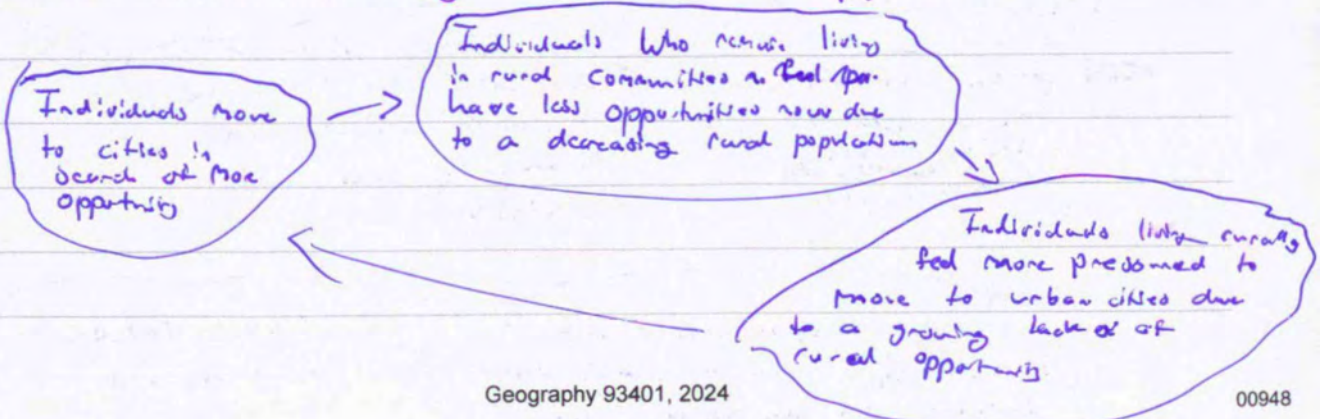
PLANNING

Begin your answer to **Question One** here:

In an increasingly globalised world, there are two main factors creating variations in demographics across the globe: migration and varying total fertility rates (TFRs). However, such factors are not exclusive and, rather, they are interconnected, resulting in significant variations in demographics globally.

As an increasing number of people have been able to immigrate from their country in search of a better life, megacities and more urbanised environments have arose. Such cities present opportunities in terms of education and work; however, ~~they also present risks to the future total fertility rates~~ they do result in the world's population being more centralised. This is fuelled by greater educational expectations for individuals living rurally to seek education. As a result, individuals migrate to these cities, resulting in a greater urbanised population as compared to the rural population. However, as a result of these variations, rural people living rurally is deemed as less prosperous and that an urban life is essential for success. Such doctrine has perpetuated a feedback loop seen in Figure 1.

Figure 1: ~~The~~ Increasingly centralised urban populations



As seen in Figure 1, as a result of more individuals moving to cities, there becomes less opportunities in these rural communities due to a less skilled workforce, ~~there~~ leading to a further reduction in rural populations. Moreover, technological advancements ~~seen~~ in terms of agriculture and a greater societal focus being placed on job creation has resulted in a ~~greater~~ less more pressure for individuals to move to cities and megacities, leaving rural communities with stagnating and falling populations, which

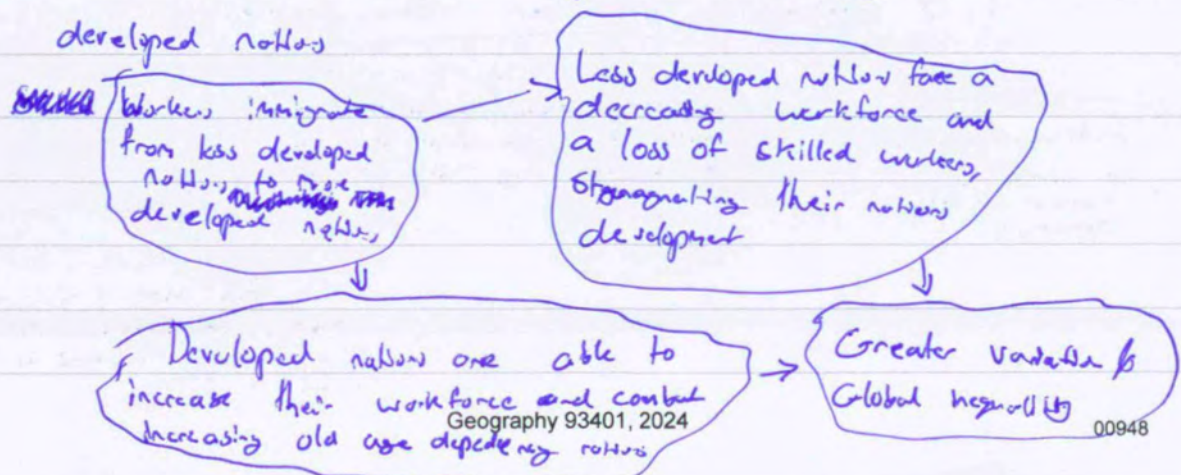
^{new paragraph} ~~there~~ ^{also} has lead to a rise from two to 35 ^{Megacities between 1950 and 2018.}

As a result of the decreasing TFRs, the incentive for ~~countries~~ these developed countries to ~~begin~~ ^{in many developed countries}

accept immigrants has been growing. This allows for these countries with falling fertility rates to increase their workforce in a sustainable manner.

However, ~~there~~ this immigration does lead to greater variation in demographics and ~~infrastructure~~ challenges in the growth of developing nations. ^{less developed nations} This process can be seen in Figure 2

Figure 2: Greater Effect of immigration on developing and developed nations



As seen in Figure 3, the result of this immigration, ~~Reduction~~ while benefiting developed nations that are facing low total fertility rates, does ultimately result in a decreased workforce in less developed nations and at thus results in a larger number of people attempting to migrate to more developed nations to build wealth and send remittances to their family. ~~while~~ The result of this is greater variation in populations ~~to between~~ around the world and between cities. It is also notable that this process can happen on not just a global scale, but also on a country scale, with rural individuals moving to larger cities for more opportunity. This results in megacities in even less developed nations, such as Kinshasa in the Congo which has a population of 11.5 million people in 2025, expected to increase to 20 million by 2030.

While migration does clearly play a significant role in the ~~increasing~~ increasing variation that is being seen globally, the variations in the ~~total fertility rates~~ TFRs globally are undoubtably ~~the~~ ~~has~~ a more significant factor in the variations of populations globally. Developed countries are ^{generally} facing low TFRs. The

result of this is that the population of these ~~developed~~ countries — such as ^{East} countries in Western Europe, Africa, and North America — are expected to decrease in coming years through the fourth stage of the demographic transition model (DTM). Conversely,

Countries in the second stage stage of the DTM, such as many countries in Sub-Saharan Africa (e.g. Nigeria) are expected to increase in terms of their population. The result of this is a more varied population with a greater number of people living in these countries. However, it is necessary to compare this with ~~immigration~~ migration. On a national scale, migration results in smaller rural communities and a more urbanised society due to the perceived opportunities. However, TFRs in rural communities do tend to be higher than TFRs in urban communities, which counteracts (to an extent) the impact of migration into urban areas. However, (however migration tends to attract the high TFRs in rural communities on a national scale). However, on a global scale, migration and emigration generally does not attract high TFRs, primarily due to the challenges behind migrating to a new country (i.e. cost and cultural shifts) and due to many societies being culturally insular such as Japan. As a result, on a global scale, whilst the impacts of migration is by no means negligible something that can be ignored, high total fertility rates certainly result in greater variation in global variations. ~~Countries with high fertility rates tend to face greater inequalities~~ This is since, countries with high TFRs have a largely growing population, whereas countries with

low TFRs are experiencing falling population stagnation or even falling populations. As a result, countries, such as Nigeria, are expected to have significant increases in populations, whereas ⁱⁿ countries such as South Korea, populations are expected to fall. The result of this is a more diverse greater variation in global demographics.

Clearly, the TFRs and migration play significant roles in creating variation in global demographics globally in terms of size, distribution, in composition.

QUESTION TWO

Critically evaluate and justify the most significant implication(s) of predicted future changes in populations across the globe.

Information to answer any question can be taken from any resource.

Your answers to ALL three questions must include:

- specific information from the resource booklet
- knowledge and insight you have gained from your studies in geography
- relevant original and/or effective visuals, such as maps, graphs, and diagrams.

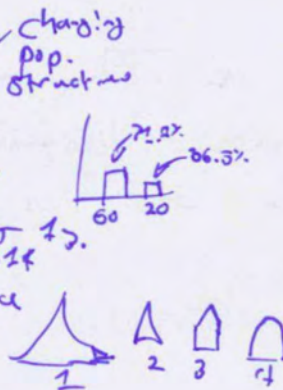
PLANNING

Not one single impl → Multiple:

- OADR (rising → healthcare costs

→ elderly focused societies
→ pension costs
→ less focus on educational

future of nation? workforce shrinkage
↑ Not always the case.



- Africa - centre population } youth bulge

↳ highest fertility rates in poorest countries

↳ Concerns for future inequalities

↳ Links to Migration - people moving to mega cities → higher prices (costs)
↳ greater inequalities

↳ RSE workers in NZ + brain drain

- Climate & food & consumption

↳ Anthropogenic CO₂ emissions & pop. size

↳ P. 23

↳ Resource usage has ↑ } consumerist societies

↳ Overconsumption / food
↳ food & water

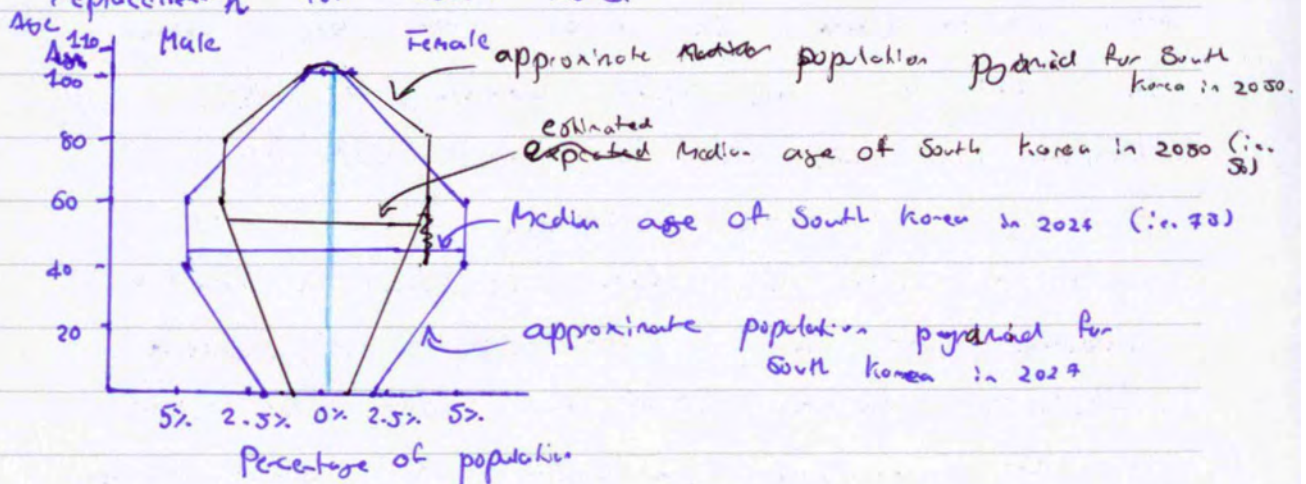
- GOVTs / changes in societal structures.

Begin your answer to **Question Two** here:

Predicted future changes in populations globally, ^{particularly} in terms of size and distribution, are expected to have significant implications globally. However, these are not these implications are multifaceted, both presenting risks and ~~a~~ opportunities for ~~our~~ the present and future of our societies and our planet.

One of the most significant changes to in our world population - which is already happening now and is predicted to continue into the future - is a rising old age dependency ratio (OADR), which is typically measured as the ratio of the population between the working age population (aged 15-64) and the elderly population (aged 65 or older). This rising OADR can be attributed to the ~~falls~~ ^{fall} in the total fertility rate (TFR). Such process can be seen diagrammatically in Figure 1.

Figure 1: Rising OADR as a result of a falling TFR (below replacement) for South Korea



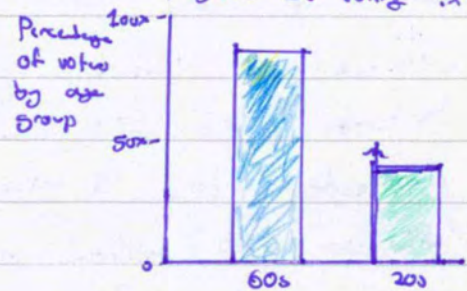
As seen in Figure 1, the population of South Korea is expected to shift to become more elderly focused, with the ~~estimated~~ median age of South Korea estimated to increase from around 45 in 2024 to around 55 in 2050. This would place an unprecedented strain on healthcare due to the larger number of elderly people, and the fact that elderly people typically require ^{higher} healthcare costs. Moreover, an increasing median age would result in fewer workers to support these costs, placing a greater burden on workers to ~~now~~ support the elderly. This is especially true in Asian ^{through time and} countries where caring for elderly, such as ~~by~~ grandparents, is perceived as an integral part of the nation's culture. ^{This trend that is being} ~~The new paragraph~~ observed in South Korea with an aging population is not a unique issue. For instance, the ratio of workers to pensioners in Japan has increased from 6 to under six workers for every pensioner in 1990 to only two workers for every pensioner in 2025. This is coupled with the growing workforce shrinkage, where countries such as Hong Kong have experienced a workforce shrinkage of ¹ ~~the~~ ^{one} expected to experience 13.03% between 2015 and 2030. This results in two worrisome implications: a greater burden expectation being placed on the working population to provide for the elderly and a more elderly

focused populations. A greater expectation being placed on the working aged population would mean that workers would be expected to work longer hours and perhaps pay higher taxes in order to meet the needs of the pensioners. Otherwise, the nation could face significant national debt which would be unsustainable for future generations. Moreover, the a large elderly population and thus a higher OADR would likely see governments tailoring their policies towards helping these older populations. Such implications have already been seen in countries

such as Japan, with governments placing policies for allocating more spending to elderly. This is coupled with how elderly individuals tend

to be more likely to vote than younger individuals, with 71.4% of 60 year olds voting in the 2022 Japanese election, while only 36.5% of 20 year olds voted. This means that there is a disproportionate focus on the needs of the elderly over the needs of the younger population, which could have will likely continue to have implications in terms of young people being pressured to work longer and harder.

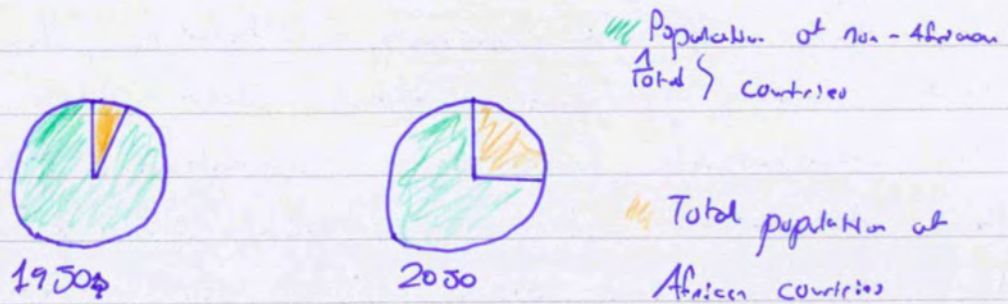
Figure 2: Voting in Japan



However, the changes in population are not limited to the size of the population. The population is also changing in terms of distribution, with

Also, the population of Africa increasingly becomes a greater share of the world's population.

Figure 3: Population of Africa relative to the world



As seen in Figure 3, in 1950 Africa's population made up only 10% of the world's population (in orange); however, by 2030, this is expected to increase by 25%, with countries such as Nigeria projected to reach a population of around 500 million in 2100 (UN). However,

Africa also faces some of the greatest inequalities in the world. For instance, the Gini coefficient^{which is a measure of inequality} of South Africa is around

0.62, whereas the Gini coefficient of Norway is around 0.27 (where 0 is perfectly equal, 1 is perfectly unequal). A growing African population means that, without significant developments, a greater number of children could be born into poverty. While immigration does allow for these individuals to achieve a better life and can help combat the ~~many pop~~ falling TFRs in many countries, ~~many countries~~ these immigrants would be taking away from the labour force of their own country.

For example, Samoa has expressed concerns over New Samoans working in New Zealand under the recognised seasonal employee (RSE) scheme since it leads to a reduction in the labour force in Samoa. Similarly, New Zealand is experiencing a brain drain with many highly skilled workers moving overseas ~~there~~ to receive higher gross wages. The result of this is a less skilled workforce in these less developed countries, such as in ~~the~~ ~~for~~ countries in Africa, which results in ~~the~~ can compromise the development of these nations.

However, it is notable that a ~~decreasing~~ ~~world~~ ~~population~~ ~~as~~ ~~projected~~ ~~in~~ ~~the~~ ~~future~~ ~~the~~ ~~world~~ ~~provide~~ ~~great~~ ~~benefit~~ ~~to~~ ~~the~~ ~~climate~~ ~~due~~ ~~to~~ ~~there~~ ~~being~~ ~~less~~ ~~consumption~~ ~~from~~ ~~humans.~~ ~~and~~ ~~as~~ ~~clearly,~~ ~~though,~~ ~~the~~ ~~negative~~ ~~implications~~ ~~of~~ ~~predicted~~ ~~future~~ ~~changes~~ ~~in~~ ~~the~~ ~~future~~ ~~do~~ ~~outweigh~~ ~~these~~ ~~potential~~ ~~positive~~ ~~implications.~~

QUESTION THREE

Perspectives are bodies of thought, theories, or world views that shape people's values.

Through perspectives, discuss the most important factor(s) that global leaders need to consider when making strategic decisions to reach sustainable populations.

Information to answer any question can be taken from any resource.

Your answers to ALL three questions must include:

- specific information from the resource booklet
- knowledge and insight you have gained from your studies in geography
- relevant original and/or effective visuals, such as maps, graphs, and diagrams.

PLANNING

- Political

- Eco

- Fem

- Social

- Tech

- Elderly

~~etc~~

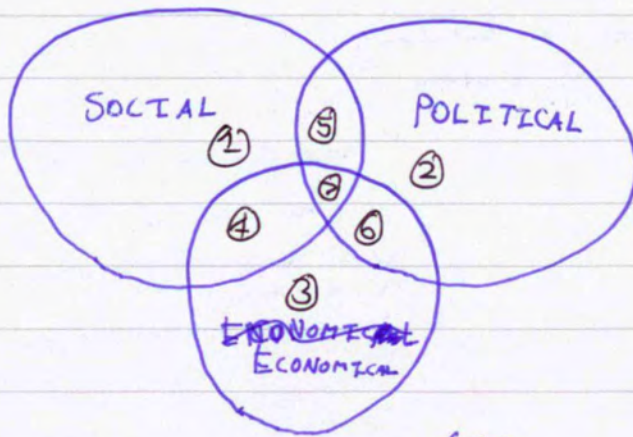
↑ Dynamic

} Consumption,
growth

Begin your answer to **Question Three** here:

The world's populations are already at unsustainable levels. Since 1950, ^{world population} CO₂ ^{emissions} ~~per person~~ ^{per million} have increased from around 315 PPM ^(parts per million) to around 390 PPM today. However, for ~~our~~ for our populations to reach more sustainable levels - whereby our future generations can thrive - global leaders must make rational ~~decisions~~ decisions based on important factors.

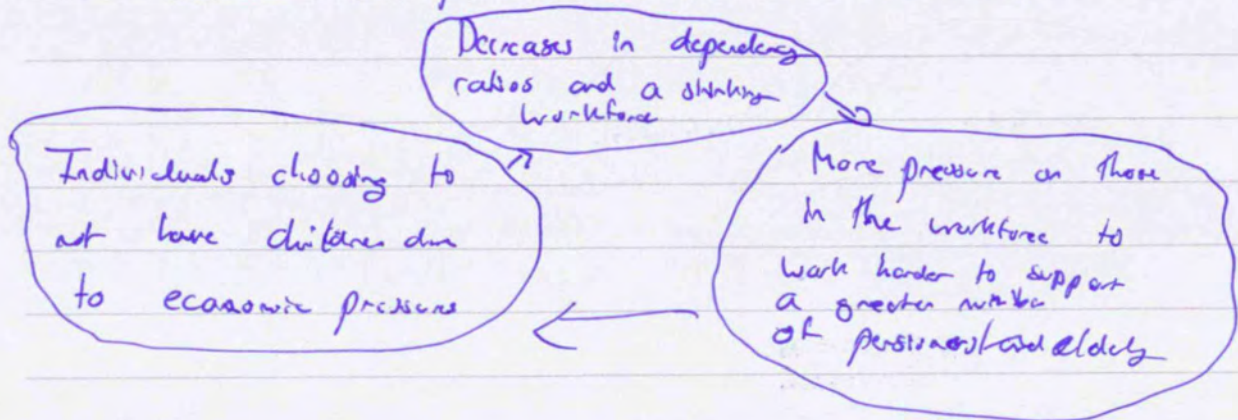
Figure 1: Core perspectives to sustainable populations through ~~po~~ government policy



From an ⁽³⁾ economic perspective, our global economy as we know it is fundamentally dependent on growth. The prospect of a decreasing populations presents an unprecedented risk to the sustainability of our society's economic system and thus the sustainability of future populations. However, from an environmental perspective, a further increasing population would only strain resources further and lead to the further risks of destruction to our planet's resources and food supply, which would be unsustainable ~~from~~ for future generations. ~~However,~~ ^{Moreover,} when considering the ~~env~~ social perspective in light of the economic perspective ⁽⁴⁾, it

is evident that a shrinking global economy as a result of decreasing fertility rates and a growing elderly population would place nations at higher rates of poverty and a greater number of dependent elderly people, and as input can be seen in Figure 2.

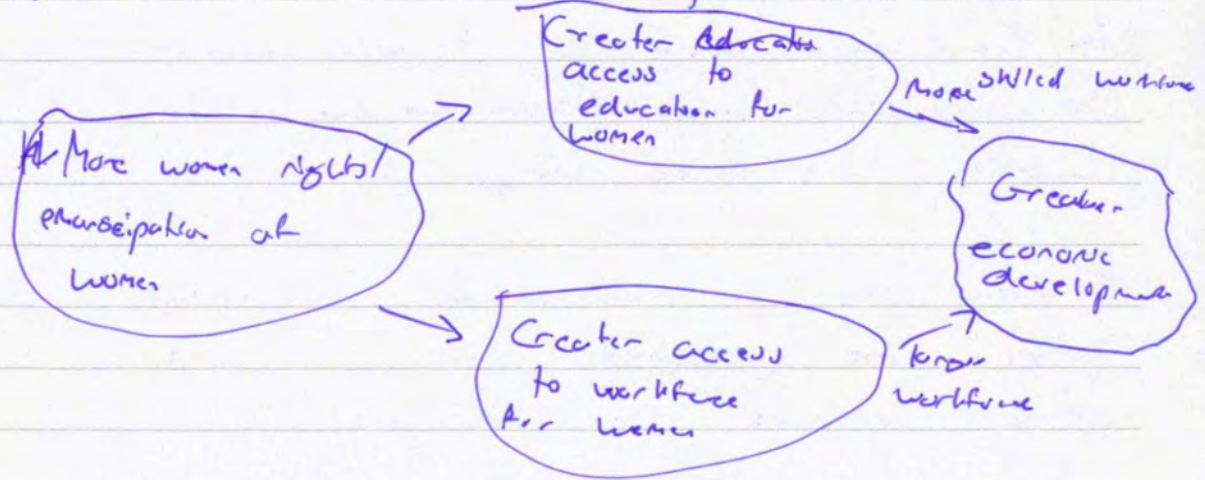
Figure 2: Cycle of decreasing fertility rates and robust development as a result of economic factors



Evidently, such a cycle is unsustainable and would only lead to further decreasing TFRs and more economic pressure on working age individuals. However, countries like South Korea that have offered baby bonuses have found that such economic incentives are ineffective. This is since, despite these economic incentives, from a feminist perspective, women have become more career focused in many developed nations. As a result of this, spending time away from their career to have children places their career in jeopardy, even in countries such as the Czech Republic where

up to 20% of one's salary during maternity leave. While this ^{pro-natalist} economic incentive does support mothers, it by having children, they are still risking loss ~~of~~ in their career, such as pay rises. This can also make firms less willing to hire women, creating a systemic problem. Additionally, given the emancipation of women, more women now have the choice to (in many countries) as to how many children they want and when they want them. This ~~can lead to women~~ Also, women now have greater access to education and ^{the} workforce, which results in ~~a~~ in greater national development, as seen in Figure 3. ~~This~~ national development.

Figure 3: Benefits of the emancipation of women



In this regard, ~~the~~ ~~the~~ ~~the~~ women rights have benefitted society. ^{from a political perspective,} Policy makers must consider this as restricting these rights, ~~would result in~~ in great ~~as~~ as by ~~burdening~~ access to abortion and access to contraceptives, ~~which would~~ despite likely resulting in a ~~sterile~~ increase in the ~~TFR~~ TFR, would result in an increase

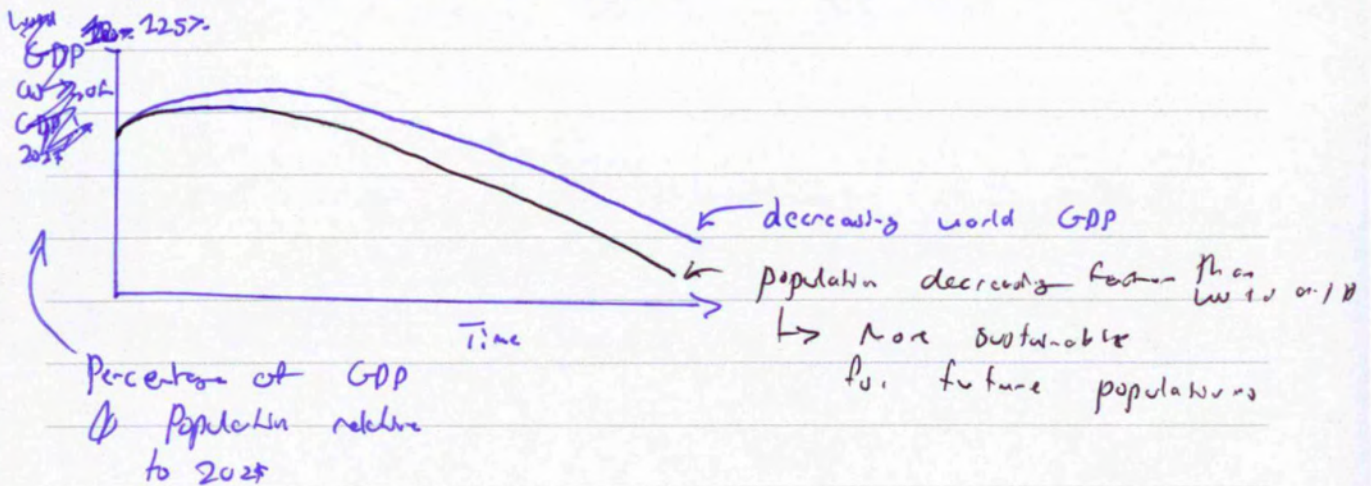
in unwanted pregnancies and a decrease in national economic development, ultimately harming the country.

Again when considering the social and economic ^{and political} perspectives, the importance of retirement age arises. Countries such as ~~France~~ France have recently ~~raised~~ raised the retirement age from 62 to 64 in order to combat ^{the} decreasing labour force, this resulted in a large political ~~unrest~~ and ~~notion~~ against Emmanuel Macron (the president at the time). In this respect, increasing retirement ages is undesirable for the nation's future as it would lead to less productive workers ~~due to~~ due to those workers being more elderly.

However, from a technological perspective, factors are presented which could make falling populations more sustainable. For instance, the use of robots in health care sectors (e.g. in retirement homes) can free up labour and reduce the ~~unrest~~ strain of these sectors. However, ~~policy~~ policy makers need to consider the issue of consumption. That is, as populations fall, there will be less people to consume goods and services produced, leading to a surplus of goods and an

Economic downturn. Instead, policy makers need to consider how economic growth can be slowed sustainably. See Figure 4.

Figure 4: Sustainable decline in economy.



Clearly, these per factors are multifaceted and there is the need for holistic considerations by policy makers to ensure a more sustainable population in the future, with sustainable economic growth, social health, and environmental health.

Scholarship

Subject: Geography

Standard: 93401

Total score: 16

Q	Score	Marker commentary
1	5	Response critically analyses significant factors and justifies the stance. Shows an understanding of the complexities at a global scale. Uses original diagrams well to enhance the argument. This answer is shaped from ideas from the resource booklet. However, it is light on the integration of specific evidence in places.
2	6	Critical evaluation and justification of implications evident. Logical development and clarity of ideas is demonstrated. Visuals enhance the answer. Specific global evidence is integrated throughout the answer. Overall, shows an understanding of the complexities of potential future implications.
3	5	Discussion is purposefully shaped through perspectives. Specific evidence is woven throughout the answer. Original diagrams are integrated well. Clarity of ideas and critical thinking demonstrated.