

2018 VCE Geography examination report

General comments

The 2018 Geography examination assessed components of the study design in Units 3 and 4. Students needed to have an overall conceptual understanding of the study design in relation to both units of study. Students could then apply context, in terms of use of case studies, evidence (including quantifications) and relevant elaborations and content learnt over the year to respond to each of the eight questions. Responses to the questions highlighted the ability of students to show their understanding of the Geography study, with the majority of students completing most questions. A confidence in using geographic language and context was displayed by many students.

All questions assessed components of content, context and conceptual understanding but to varying levels. Questions that required students to identify a location highlighted the ability of students to recall content such as the location of deforestation on a map, while questions that required a holistic understanding allowed students to choose the correct context in which to bring in data, evidence or case studies to show their conceptual knowledge of the study.

The study of Geography involves a complex focus on understanding a range of natural processes, human activities and interconnections between them. The strong conceptual understanding of many aspects of the study was evident in student responses.

When case studies were chosen to exemplify or as evidence, some responses highlighted that students did not understand the complexity of the particular case study, or that the ability of a student to write succinctly under examination conditions using highly complex case studies was limited. This was especially apparent when the chosen fieldwork location focused on the minutiae of land use classification and the actual land use change was not clearly evident. The choice of case studies, evidence included in responses and answers needs to be reflective of the relevant outcome from the study design.

Areas of strength included:

- Students were confident in their use of geographic language reflected in succinct and clear responses to questions that brought together a range of components and ideas from the study design.
- Students were generally able to respond to each question in an appropriate way, often with examples and elaborations that were relevant, detailed and incorporated relevant data.
- Students were able to respond specifically to the key directive terms given in questions.
- Succinct and clear responses that directly reflected the question were provided by many students, indicating a higher-order understanding of the study in terms of all aspects of content, context and concepts learnt.
- Higher-order understanding of each component of the study design was evident throughout responses. Students were able to bring together content learnt, provide an appropriate context in which to refer to content and then show excellent conceptual understanding of the question. The ability of many students to directly assess and succinctly respond to a question was evident.

Areas of weakness included:

- Appropriate choice of fieldwork meant that some students found identification of land use change difficult. Some fieldwork examples reflected a more generalised approach to fieldwork and did not reflect use of cross-study specifications and outcome statements in order to frame that fieldwork. While components of the fieldwork may tie into a land use change it is essential that all components of the outcome and cross-study specifications on a fieldwork report be utilised to develop fieldwork.
- Map drawing skills ranged from excellent to very poor; students are encouraged to bring in appropriate equipment for annotating and shading maps clearly.
- Application of learnt knowledge required students to think through all components of the study and then make links between what they had learnt and what the question was asking. Some students provided examples that were not relevant or too generalised. Students are encouraged to work through all aspects of the study design rather than look for generalised case studies that provide generalised responses to a number of aspects of the study design.
- The use of the term 'working class' was often used to describe the economically active component of a population. Students need to develop a better understanding of where to use such terminology.
- Students who wrote all they knew in response to a question rather than salient points did not show good conceptual understanding of the requirements of the question. While learnt content is important in writing responses, the context in which it is used is equally relevant. Students are encouraged to think through responses prior to writing and choose appropriate case studies, evidence and elaborations in order to provide a succinct response that directly addresses the question.

Specific information

Note: Student responses reproduced in this report have not been corrected for grammar, spelling or factual information.

This report provides sample answers or an indication of what answers may have included. Unless otherwise stated, these are not intended to be exemplary or complete responses.

The statistics in this report may be subject to rounding resulting in a total more or less than 100 per cent.

Question 1a.

Marks	0	1	2	3	4	Average
%	1	5	23	42	30	3

Students were required to describe either one positive or one negative impact of land use change in the local area and do this through appropriate fieldwork techniques or secondary sources. Students were required to give a description of an impact but were not required to give an explanation. The land use change investigated needed to be clearly described. However, some students wrote about movement of traffic through a bypass or other components of the fieldwork that did not directly relate to land use change or show evidence of the focus on land use change. Fieldwork chosen to investigate needs to clearly follow Area of Study 1 of the study design in order for students to respond to questions related to land use change.

Some students chose to focus on a land use classification as distinct from land use change in more general terms. This created confusion for some students when elaborating on state or federal government indices of land use classes as students were not clear on the land use change (as outlined in the study design) that they were investigating. While land use classification indices may

be helpful when investigating land use changes, it is advised, as per Area of Study 1 in Unit 3, that the location for the fieldwork shows evidence of clear land use change. Some students experienced difficulty in responding to this component of the question. For example, the shift in classification from state to national park tended to be written as a change in land use of forest to forest with no elaborating discussion of the change in land use classification evident. When the focus of fieldwork was clearly on a change in land use, students tended to be better able to respond: examples included changes from rural to urban, industrial to residential and residential to nature parks.

Students were able to reference relevant primary fieldwork and secondary sources and then describe the impact (positive or negative) on the local area. This provided an opportunity for students to discuss interconnections with the location from fieldwork and provide a clear statement related to the fieldwork undertaken.

Question 1b.

Marks	0	1	2	3	4	Average
%	3	6	17	33	41	3.1

Students needed to evaluate the effectiveness of the fieldwork technique or secondary source referred to in Question 1a., with most students able to link parts a. and b. of Question 1. Students were able to evaluate the effectiveness of the technique in reaching conclusions, but more often this was in general terms or in a superficial way rather than as an evaluation of the fieldwork as indicated in the cross-study specifications. Higher-scoring responses had clear elaborations, often utilising the fieldwork data or secondary source to support statements on effectiveness of the technique.

The use of surveys, census data and interviews was not described or evaluated well, with students confusing the meaning of a survey and interview and then census data. Students conducting surveys need to ensure that adequate numbers are taken as the critique of not enough surveys being conducted draws the conclusion that they were not the most valid form of technique for the fieldwork. The consideration of interviews and types of interviews requires further improvement.

It is important to note that there is a range of primary data collection techniques that can be utilised. For example, traffic counts, pedestrian counts, photographic evidence and observational evidence may all be utilised where a survey is not appropriate.

The following is an example of a high-scoring response.

A fieldwork technique used to evaluate the connectivity in Fishermans Bend was the traffic count. This allows the road networks to be evaluated, and the efficacy of its connections to Melbourne's CBD, a highlight of Fishermans Bend, to be identified. The number of transportation methods were counted in a period of 5 minutes on a Sunday afternoon at the corner of Plummer and Salmon St. The results demonstrated 87 cars, 4 buses and 6 bikes. As the projected population of 80,000 residents have not moved in yet, these high statistics demonstrate a high likelihood that the road connections will not support this population, hence connectivity will likely be ineffective. This positive social impact therefor loses credibility.

Question 2a.

Marks	0	1	Average
%	29	72	0.7

B

Question 2b.

Marks	0	1	Average
%	19	81	0.8

D

Question 2c.

Marks	0	1	2	Average
%	9	58	33	1.3

Students were required to suggest a natural phenomenon that could contribute to substantial glacial loss in a single year. The focus here was on the short-term glacial ice lost rather than long-term cumulative loss. The response needed to provide elaboration on the suggestion and not simply state a phenomenon. Examples included but were not limited to: extreme weather conditions, El Niño, La Niña, volcanic eruption, drought and solar radiation changes/sunspot activity/variable radiation. Climate change could have been considered as an appropriate answer but needed to be clearly stated with reference to the short-term aspects that could contribute to substantial glacial ice loss in a single year.

Students responded well but needed to clearly state the phenomenon and clearly suggest the type of natural phenomenon. While most students could name the natural phenomenon, many were not able to suggest the link to the contribution to substantial glacial ice loss in a single year (i.e. the short term). Students are advised to use the marks allocated for a question and the answer space provided as a guide to how much detail is required in the response.

The following are examples of high-scoring responses.

Example 1

A solar flare could contribute to substantial glacial ice loss, being a random event it would only contribute to ice loss in on single year.

Example 2

Volcanic Activity could mean debris and hot ash are transferred from Volcanic Regions to Glacial Regions which heat and ultimately melt ice on glaciers.

Question 2d.

Marks	0	1	Average
%	35	65	3.3

The most significant increases in ice loss have occurred since 1990.

Question 3a.

Marks	0	1	2	3	4	Average
%	4	4	18	13	61	3.3

Students were required to mark and name the locations accurately as well as clearly highlight which process (deforestation or desertification) was occurring at which location. This could have been done through a legend on the map or through annotations. The locations could have been a village, country or a region. Most students were able to clearly identify a location for each process, with some either incorrectly labelling the location or neglecting to identify which process was

occurring at the location. Some students did not indicate which process their case study linked to and could not be awarded full marks.

Students should consider using coloured pencils in the examination as map work may be completed more accurately. Students are also encouraged to practise the skill of map-making in preparation for their examination.

Question 3b.

Marks	0	1	2	3	4	5	6	Average
%	4	6	15	24	24	14	13	3.6

This question proved challenging for many students, with many responses highlighting generalisations related to the economic activity at the location mapped. As the question asked for impacts (plural), more than one impact needed to be discussed. These may have been linked (that is, related to the one economic activity), consequential (again, related to the one economic activity) or separate. Generalisations included an increase in jobs/employment, loss of land for Indigenous land owners and increased revenue for governments through taxes, tourism and other aspects. Higher-order understanding was shown when students could clearly describe economic impacts at the location mapped that went beyond generalisations and focused on the process of deforestation. The activity needed to be clearly economic but some cross-referencing to social and environmental impacts was possible. Higher-scoring responses had clear quantification and elaboration of the impacts and were directly related to the mapped location.

The following is an example of a high-scoring response.

In Cameroon, deforestation has had both positive and negative impacts on economic activity. The Cameroon timber and logging trade contributes 5% to their gross domestic product (GDP) and is worth over 100 million euros. Indeed, approximately 20% of the population's income comes from logging and deforestation. This is positive as it increases the economy and allows the government to spend more money on increasing facilities and services such as healthcare. However, despite this, much of lead to government spending approximately 2% of their GDP on combatting this illegal logging and planting more trees meaning that they cannot spend as much money on healthcare. Thus deforestation is having both positive and negative impacts on Cameroon's economy.

Question 3c.

Marks	0	1	2	3	4	5	6	7	8	9	10	Average
%	3	4	7	12	15	17	13	11	8	4	4	5.1

A number of approaches were possible in responding to this question. Students needed to refer to the location for desertification mapped in part a. and most students were able to do this. Students then needed to evaluate the role of climate change in the process of desertification at the location mapped in part a. The evaluative statement needed to highlight that climate change is not the only process involved (i.e. the process of desertification is caused by both human activity and natural processes and/or an interaction of the two – students could then elaborate on this).

Reference to climate change could have been in a broad context in terms of the natural process of climate change over thousands of years, as well as the impact and interconnection of human activity on the process of climate change such as through altering the Earth's energy budget.

The response needed to cover the following key components:

- discussion of the causes of desertification (natural process and human activity) at the selected location

- elaboration with some or all of quantification, specific impacts, specific location examples, time sequence, scale of impact of desertification and/or the role of climate change at the selected location. A key component was the appropriate selection of case study information rather than a description of the whole process of desertification at a location. A broad range of ideas could have been discussed
- evaluation of the role of climate change in the process of desertification at the selected location.

Higher-order responses were clear and showed an excellent understanding of the question, covering most aspects in a succinct manner and utilising appropriately selected case study elaborations. Students should be selective with the information they provide in responses as more succinct responses that clearly addressed key components of the question tended to show the higher-order understanding required in the conceptual elements of the response. Students are encouraged to focus on the key components of the question and not add irrelevant details from a learnt case study.

Most students showed a good understanding of the role of climate change in general terms, in accelerating and intensifying the impacts of desertification over time. Many students had a broad understanding that climate change involves both human activity and natural process interconnections; however, many of these were summarised with a discussion of the increasing temperature changing the amount of heat at a location that is already hot rather than understanding the interconnections to the Earth's energy budget and subsequent impact of increased carbon on all aspects of climate. Students struggled to address the impact of climate change at the selected location, with higher order responses showing a clear impact of climate change. For some locations, such as the Aral Sea, the impact of climate change has been less than the impact of human activity at the location in causing desertification.

The following is an example of a high-scoring response.

Climate change is a natural process interconnected with human activity which is contributing to desertification in Niger to an extent. However, other processes such as overfarming and growing population are also contributing significantly to desertification in Niger.

Climate change is causing temperatures in Niger and globally to rise. These increased temperatures cause the land to dry out with 30% of Niger's land classified as dry due to an increase of 1.5-2.0 0C from 1900-1989. Climate change also causes below average rainfall across the Sahel region which leaves the soil barren and exposed, increasing land degradation. These rising temperatures and below average rainfalls from climate change significantly contribute to Niger's desertification.

Conversely, human activities such as overfarming has caused 49% of Niger's land loss of 720 000km² per year. Farmers tend to leave their livestock in one area for Long periods of time which causes the land to become stressed and removing much vegetation leaves the ground exposed, progressing the process of desertification. Niger's population increase from 10 million in 2011 to 21 million in 2016 has put a strain on Niger's agricultural industry to supply food and has caused unsustainable farming practices such as slash and burn techniques which further cause the breakdown of land.

Question 4

Marks	0	1	2	3	4	5	6	7	Average
%	5	4	9	15	20	21	14	12	4.2

Using a selected location, students were required to discuss the success or failure of a global response to one of the processes identified: deforestation, desertification or melting ice sheets and glaciers. Students needed to clearly identify the global response and then discuss the success or

failure, or partial success and partial failure, using supporting evidence for the response and evaluation. The key to higher-order responses was the student's ability to discuss the global response and aspects of it using elaborative evidence from both the global response and the selected location.

While many students clearly identified a global response, some did not clearly identify the global aspects of the response. Discussion of the success or failure of the response could have been completed in a range of ways, with high-scoring responses utilising criteria, strengths and weaknesses or other clear ways to evaluate the response. While a SWOT (strengths, weaknesses, opportunities, threats) analysis may have been appropriate, students needed to take care in how this was used as some responses did not clearly articulate the SWOT analysis directly in relation to the success or failure of the response. Some responses provided a superficial evaluation that was more generalised and not based upon the success or failure at the selected location.

The following is an example of a high-scoring response.

A global response to deforestation in Borneo is the 'United Nations Convention for Combatting Climate changes' (UNCCC plan for 'Reducing Emissions from Deforestation Degradation' (REDD), which aims to cut carbon emissions by 50% by 2030 that are from deforestation. In doing so, it stategizes to provide financial incentives to governments and companies to cut down the carbon emissions released through deforestation. In Borneo, this response has largely been unsuccessful in achieveing its aims. It has been very costly, with only US\$43 billion of the required US\$38 billion to fund the project, highlighting its ineffectiveness economically. Moreover, this response has shown a relatively weak social sustainability, with many of those reliant on deforestation for their jobs and livelihood likely to be the ones to suffer. However, the response is still "on track to achieve its aims halving deforestation emissions especially in Borneo by 2030. This hints at the response's environmentally sustainability into the future but until then, REDD has proven to be more of a failure than a success.

Question 5a.

Marks	0	1	2	3	4	5	6	Average
%	1	2	7	17	25	25	24	4.4

Students needed to compare levels of the under-five-years mortality rate in Europe with those of Africa, using evidence from Figure 2. Most students were able to do this well, providing an overall statement for each continent that reflected the general trend of the continent followed with quantification from the maps that clearly identified examples of the trend and variations found within and across both regions. Similarities and differences could also be identified.

While most students could identify major trends in each region, low-scoring responses did not clearly identify variations or utilise quantified evidence from the map.

Students are encouraged to learn the location of and be able to identify a range of regions across the globe as this can assist them to demonstrate their geographical knowledge. General content knowledge of countries of the world enabled high-scoring responses to hone in on specific variations across each region. Many students were able to utilise their knowledge of countries studied as part of Area of Study 2 in Unit 4.

The following is an example of a high-scoring response.

Compared to Europe, Africa has a higher level of under-five years mortality rates. For example, according to figure 2, countries in Africa such as Somalia have under-five years mortality rates of 130 and over, where in Europe, there is no country that consists of this index, Other countries such as D.R Congo and Uganda have under-5 years mortality rates of 100-129.9 and 70-99.9 respectively. In Europe, lower levels of under – 5- years mortality rates can be seen. In contrast to Africa, the majority of countries in Europe have under- 5- mortality rates of less than 10, For

example, Russia, Switzerland and Norway all have less than 10 under – 5 – year mortality rates. There are no countries in Africa with less than 10 under – 5 – year mortality rates.

Question 5b.

Marks	0	1	2	3	4	5	6	7	8	Average
%	4	2	6	10	17	20	20	10	11	4.9

Students were required to identify one factor that accounted for the strong level of spatial association found between Figures 2 and 3. Factors included, but were not limited to, gross domestic product (GDP), gross national income (GNI), level of economic development, healthcare, female education level, population growth rates and political stability.

Students needed to refer to at least two regions or specific countries as well as the maps and most students were able to do this. Some students used the regions to write a descriptive response that reiterated the spatial association. While the spatial association provided an exemplar for the student to identify regions or countries, it was not the focus of the question, rather the factor accounting for the spatial association was the key component in responding to the question and many students did not go beyond a statement of the factor. Explanation as to why this factor accounts for the spatial association was required, with specific elaboration/data/examples from each region or country that explained how the factor accounts for the spatial association. Factors included, but were not limited to, use of wellbeing categories such as GDP and GNI, and provision of health care and social services such as number of doctors, schools and hospitals.

The following is an example of a high-scoring response.

FACTOR: GNI

A country's level of GNI determines whether they are represented as a low-income country, middle-income country or high-income country. The high spatial association between under-five mortality per 1000 live births and life expectancy can be determined by a countries level of GNI. For example, Australia, a high-income country had an under-five mortality rate of less than 1- per 1000 live births, and a life expectancy of 80 and over. On the other hand, India, a middle-income country had a under five-mortality rate of approximately 40-69.9 per 1000 live births and a life expectancy of around 56-69.9, which is significantly lower than the high income countries. GNI is an important factor and accounts for the level of spatial association shown in each figure because a high GNI can provide good outcomes within a country such as access to healthcare, clean water and sanitation, food security, access to housing and other resources such as education. This can ultimately reduce under-five mortality rates and increase life expectancy as people have a decent standard of living.

Question 6a.

Marks	0	1	2	Average
%	9	29	62	1.6

This question required students to show an understanding of the stages found in the Demographic Transition Model, specifically within Stage 2. Students were required to identify one piece of quantified evidence from the figure in order to support the statement. Most students could identify that Stage 2 had a falling birth rate, wide base and high young dependency ratio. Many then gave specific quantified evidence from the relevant population profile or were able to identify one component of Stage 2 of the Demographic Transition Model.

The following is an example of a high-scoring response.

The population pyramid is widest at the lowest demographic (0-4 years) with approx. 12% of the total population. This indicates a high birth rate, which is characteristic of countries in Stage 2.

Question 6b.

Marks	0	1	2	Average
%	7	31	62	1.6

This question required students to show an understanding of the stages found in the Demographic Transition Model, specifically within Stage 5. Students were to identify one piece of quantified evidence from the figure in order to support the statement. Most students could identify that Stage 5 had a low birth rate, narrow base and high old age dependency ratio. Many then gave specific quantified evidence from the relevant population profile or were able to identify one component of Stage 5 of the Demographic Transition Model.

The following is an example of a high-scoring response.

The population's lowest demographic is at 75-79 years, which accounts for just less than 4% of the total population. This indicates a high life expectancy and a median age which is characteristic of stage 5.

Question 6c.

Marks	0	1	2	3	4	Average
%	6	12	31	19	32	2.6

The question required students to outline two ways in which the migration of Cubans to the United States of America has had an impact on Cuba's population structure, specifically in 2018. Students were required to support the statement made with relevant reference to appropriate figures that could account for the changes in population structure observed in 2018. Examples included a drop in total population evident from total numbers, and evidence of a slowing of the number of people born in the lowest age categories and related to the relevant movement prior to 2018.

Care needs to be taken when talking about birth and death rates as the overall population profile does not provide these but rather indicates that these may be dropping by a relative amount in comparison to previous years. Choosing specific evidence from relevant figures confused some students. Students needed to choose which piece of data (content) provided the best evidence (context) to support their outline of impacts (conceptual understanding).

The following is an example of a high-scoring response.

One way that the migration of Cubans to the United States has had an impact on the population structure was a decrease in working aged people in Cuba. Figure 5 highlights In 2000-2009 there was a rapid population increase over a short period of time from 250 000 cubans admitted to the USA to approximately 300 000 in approx. 2 years. This lead to a fall in the birth rates as people in the child bearing age had left the country shown by figure 7c where cubas population structure was just over 2% for both males and females aged between 0-4 living in their country compared to 1959 where there was approx. 6% of males and females aged between 0-4 years old.

Question 7

Marks	0	1	2	3	4	5	6	7	8	Average
%	5	5	12	16	18	17	13	8	6	4.1

The question required students to discuss the contribution of migrants to a change in population structure. Responses could refer to origin or destination (not both) and students were directed not to use Cuba as an example. This response was a direct reflection of a point from Area of Study 2 in which population movement is investigated in terms of its impact on population structure for the case studies of an ageing and a growing population. Examples may have included a range of

movements such as international migration or rural-urban migration, with a focus on either the destination or the origin. A specific origin or destination needed to be stated and the type of movement described with some quantification of this movement. Students were then required to discuss the contribution of migrants to changes in the population structure. This could refer to ages, workforce changes or total population, but needed to be a clear discussion of changes in population structure. Students were able to utilise skills such as sketching a population profile to help them with this and could also use specific evidence, elaborations and quantifications.

While the majority of students were able to describe a specific movement at either an origin or destination their understanding of the changes to population structure was limited. Gross generalisations were made with an overestimation of the impact of a specific group of migrants at a destination. The impact of Syrian refugees on Germany's population was a notable instance of over-generalisations being made. Responses that referenced a specific study of the impact of population movement on population structure showed a greater understanding of the interconnection between population movement and the population structure.

Some responses did not directly address the component of population structure and focused on the social, economic and environmental impacts of population movement. It is important that students directly address the question rather than providing background information that may not be directly relevant.

The following are examples of high-scoring responses.

Example 1

Uganda has been a destination for migration from South Sudan. Neighbouring Uganda (which is a landlocked country) is South Sudan. There has been ongoing civil war since 2013 in South Sudan, which has forced South Sudanese people to cross the Ugandan border to receive refuge. According to world vision, more than 88,000 + Sudanese migrants go to Uganda annually, and this mostly consists of young children. This influx of migrants has thus changed Uganda's population structure, contributing to its high proportion of young children, which is indicative of Stage 2 on the DTM, The addition of children in Uganda increases the already high dependency ratio to 103 dependents for every 100 economically active person, and thus may result in Uganda being unable to financially support these young dependents by providing infrastructure such as education and health care services. This contribution of migrants also contributes to the median age of 15.5 years and thus a shrinking workforce due to economically active Ugandans leaving to find better paid work (25%).

Example 2

Yamatsun is a small rural municipality in Japan, approximately 113km from the city of Tokyo. Internal, rural to urban migration occurs in this area, as young workers from the town move towards cities for more life style choices, education and career opportunities. This has dramatically altered the population structure. In 2014, the population decreased from 7000 to 6000, significantly decreasing the number of residents. Since the people migrating away from the area are mainly young adults, the workforce and people working age is rapidly declining. This results in an ageing population and an increased dependency ratio elderly to the remaining workers available. It is estimated that the percentage of the elderly may exceed 35% in the next 10 years. Numbers of young children are also declining, as young families bring their children to cities with them as they migrate. This has resulted in the closing of some primary schools and increased need for healthcare and pensions from the government.

Question 8

Marks	0	1	2	3	4	5	6	7	8	9	10	Average
%	3	2	4	7	9	13	15	15	15	8	9	6.1

The response was required to cover the following key components:

- identification of a specific country with an issue of population growth – this could have been an ageing population with a growing aged dependency group as well as a rapidly growing young population or other relevant component of population growth
- identification of the issue in the country and elaboration (e.g. population trends contributing to the issue, time, sequence, quantification)
- identification of the strategy and elaboration (e.g. with time, extent, quantification)
- discussion of the effectiveness of the strategy. This could be done through use of criterion/criteria, thoroughness, conviction and justification of this effectiveness.

Many students showed a very good understanding of the population growth issue and the effectiveness of one strategy in response to the population issue, with excellent use of quantification and factual evidence to support this discussion. Improvements could be made by students directly addressing the key components of the question as some students tended to either over-generalise the strategy or effectiveness or provide a wealth of background information not directly relevant to the question.

The following is an example of a high-scoring response.

The One-Child Policy was introduced the Chinese government into China in 1979 in response to the rapid population growth of over 3000 million between 1950-1975, along with a fertility rate of 5.7 in 1970. The aim of the policy is to decrease the rate of china's population growth and to limit the population to 1.2 billion by 2000. The policy only allows each couple to have one-child, and are penalized for having another child. These penalties include 3-6 annual incomes payed by both parents, increased medical costs for both children and a lack of access to education. Along with this, 324 million women had an IUD implanted after their first child to prevent another pregnancy. This policy has not been effective in achieving its overall aim, though has had some success in decreasing the fertility rate in China and the rate of population growth. The population was not limited to 1.2 billion in 2000, but was rather 1.26 billion, a surplus of 60 million people, deeming the policy ultimately ineffective. However, the policy is predicted to have prevented 4000 million births, and the fertility rate in china declined from 5.7 in 1970 to 1.64 today. Some factors contributing to the lack of effectiveness of the policy are the exploitation of exceptions to the policy, including people faking rural residency and disability of their first child. Also, many couples chose to pay the fines and deliberately have a second child against the aims of the polity. There were also a predicted 1 million unregistered births due to feat of being penalized. Also, a number of challenges arose as a result of the one-child policy, including a national gender imbalance of 118 men to 100 females, today, and an increase in the elderly population in China. The policy was ultimately abolished in 2015 even though it was expected to continue for 100 years. The One-Child policy has been effective in decreasing China's fertility rate and population growth, though it has been ultimately unsuccessful in reaching its overall aim of limiting the population to 1.2 billion.