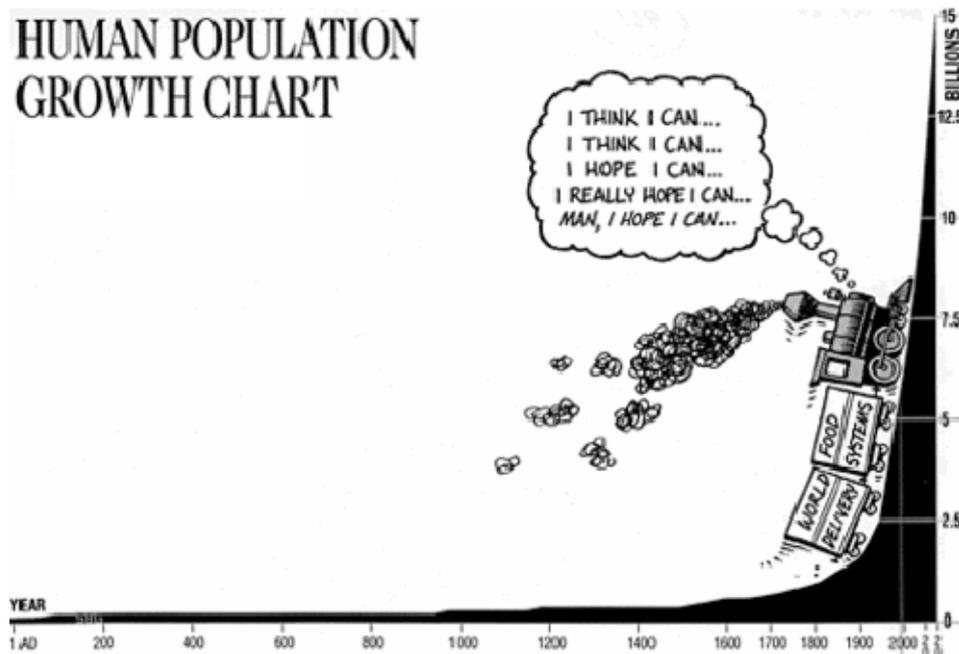


**Forum:** Environmental Committee  
**Issue:** Effects of over-consumption and increasing populations  
**Student Officer:** Maria Lafazani  
**Position:** Co-Chair

## INTRODUCING TOPIC:



Human population is growing like never before. It is believed that we have surpassed the breaking point, since the human population is estimated to be over 7 billion and still growing rapidly. We are now adding one billion people to the planet every 12 years. That's about 220,000 per day. The following question is now more urgent than ever: **are the natural resources enough to sustain life?**

Quoting Mahatma Gandhi, the primary leader of India's independence movement, "There is enough in the world for everyone's need; there is not enough for everyone's greed".

It is an undeniable fact that, Earth has a finite amount of oil, coal, and virtually every other resource that is used to sustain life or manufacture our consumable goods that would be more than adequate if the human kind had been exploiting it with moderation from the very beginning. However, it is estimated that in the past 30 years about 30% of Earth's natural resources have been consumed. If we also use a conservative estimate of 10% of our global consumption of natural resources in all the previous history up to 1975, we have consumed 40% of Earth's total natural resources up to this moment in human history. What

does this mean? Briefly, we could say that by 2020 it is possible that we will have consumed 80% of Earth's natural resources.

The aforementioned immense growth of population, whose demands cannot be covered due to the lack of access to enough resources, can harm mankind in every aspect, causing social and political instability, security issues and deteriorating the global economy.

However, this is the Environmental Committee, so we are going to examine and try to tackle the environmental impacts of the problem which are alarmingly serious.

## KEY TERMS:

### Overpopulation:

**“The condition of having a population so dense as to cause environmental deterioration, an impaired quality of life, or a population crash”  
(according to the Merriam Webster dictionary)**

One of the major concerns related to population growth is overpopulation, which is when the number of individuals of a species exceeds a certain threshold. In most cases, the threshold that is exceeded is the carrying capacity, which is the maximum population size of a species that an ecosystem can support indefinitely.

When the human population is below the carrying capacity, there are more than enough resources available for all individuals to survive without depleting the availability of the resources. As the population approaches the carrying capacity, resources become more limited because more people are relying on the same amount of resources.

If the human population was to exceed their carrying capacity, the rate of resource depletion would increase rapidly. This would lead to an inability to provide basic resources, such as shelter, food, and medical care, which could lead to increased competition for resources and increased mortality.



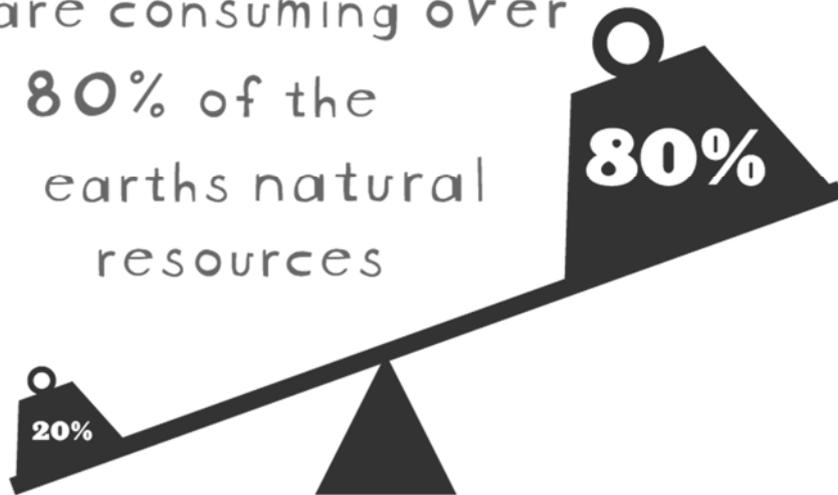
<b>TOP TEN COUNTRIES WITH THE HIGHEST POPULATION</b>					
		#	Country	2000	
		Population		2010	
		Population		2014	
		Population		2050	
				Expected Pop.	
1	<a href="#">China</a>	1,268,853,362	1,330,141,295	<b>1,355,692,576</b>	1,303,723,332
2	<a href="#">India</a>	1,004,124,224	1,173,108,018	<b>1,236,344,631</b>	1,656,553,632
3	<a href="#">United States</a>	282,338,631	310,232,863	<b>318,892,103</b>	439,010,253
4	<a href="#">Indonesia</a>	213,829,469	242,968,342	<b>253,609,643</b>	313,020,847
5	<a href="#">Brazil</a>	176,319,621	201,103,330	<b>202,656,788</b>	260,692,493
6	<a href="#">Pakistan</a>	146,404,914	184,404,791	<b>196,174,380</b>	276,428,758
7	<a href="#">Nigeria</a>	123,178,818	152,217,341	<b>177,155,754</b>	264,262,405
8	<a href="#">Bangladesh</a>	130,406,594	156,118,464	<b>166,280,712</b>	233,587,279
9	<a href="#">Russia</a>	146,709,971	139,390,205	<b>142,470,272</b>	109,187,353
10	<a href="#">Japan</a>	126,729,223	126,804,433	<b>127,103,388</b>	93,673,826
	<b>TOTAL World Population</b>	6,084,907,596	6,845,609,960	<b>7,181,858,619</b>	9,256,342,700

### Overconsumption:

Another problem associated with population growth that puts humans in danger is overconsumption, which is when resources are used in excess and at a rate that is higher than the production rate.

We live in a world of material objects, and our culture has been referred to as a 'throwaway' society, meaning that we are accustomed to utilizing products that are short-lived or disposable. This is especially true in wealthy countries where individuals consume the most natural resources. The average American citizen uses over 10 times more resources than the average citizen of Zimbabwe or Zambia.

20% of the world population  
are consuming over  
80% of the  
earth's natural  
resources



### Ecological footprint:

“The impact of human activities measured in terms of the area of biologically productive land and water required to produce the goods consumed and to assimilate the wastes generated” (according to WWF)



When discussing consumption of natural resources, the term ecological footprint is often used. An ecological footprint is an estimate of the amount of land that is needed to supply a person with the resources they need to survive. The resources included in the ecological footprint include all materials and services that a person needs, such as housing, food, energy, and land to dispose of waste.

Although the Earth might be able to support seven billion people now, that number can be greatly influenced by how we use resources and individual's

ecological footprints. If we continue to use large quantities of resources and our ecological footprints continue to grow, we will use up our resources quickly. If humans continue the overconsumption of resources, our population will be limited by the amount of resources we have left.

Recycling is the option that everyone likes to throw out as the way to save our planet and achieve sustainability,

but this is only because people don't have all the facts. The fact is that for every one can of waste that's created by consumers, 70 cans are created by corporations.



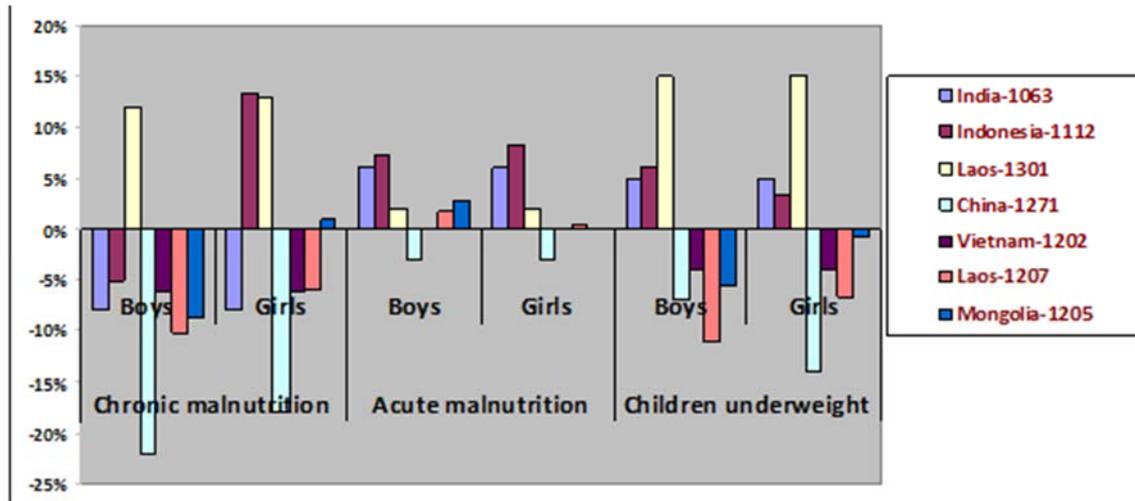
This means that consumers account for discarding only 1.4% of all natural resources that end up as waste. Unfortunately, the majority of waste that's created by corporations and consumers is toxic or unable to be recycled.

## BACKGROUND INFORMATION

First of all, we should clarify which the main effects of overconsumption are and how and at which extend they harm the environment.

### Food:

Whilst the habitats of the developed countries are consuming extravagant amounts of food not only to survive but also to savour every bite of it, third world countries' population are starving to death. It is estimated that one billion people, one out of every seven people alive, go to bed hungry. Every day, 25,000 people die of malnutrition and hunger-related diseases. Almost 18,000 of them are children under 5 years old. A brief idea of the unjust distribution of food could be formed by examining the following diagram:



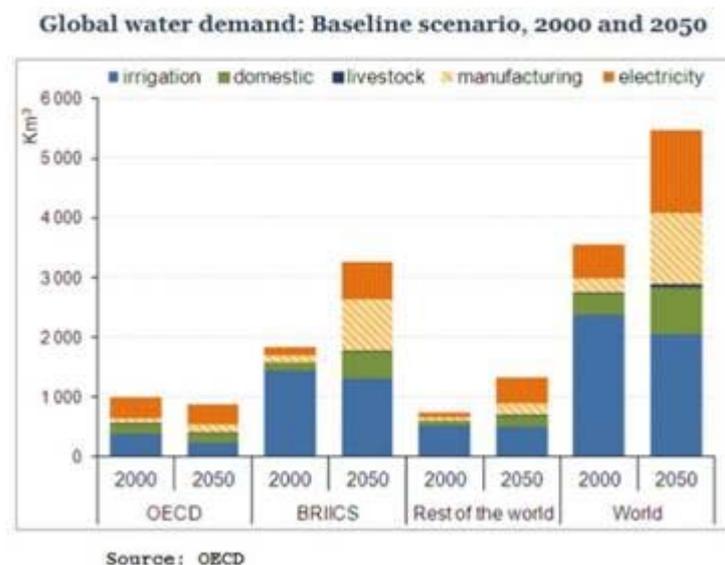
In 2015, the World Hunger Education Service publish their calculation concerning hunger and malnutrition worldwide:

- The United Nations Food and Agriculture Organization estimates that nearly 870 million people of the 7.1 billion people in the world, or one in eight, were suffering from chronic undernourishment in 2010-2012. Almost all the hungry people, 852 million, live in developing countries, representing 15 percent of the population of developing countries. There are 16 million people undernourished in developed countries.
- The number of undernourished people decreased nearly 30 percent in Asia and the Pacific, from 739 million to 563 million, largely due to socio-economic progress in many countries in the region. The prevalence of undernourishment in the region decreased from 23.7 percent to 13.9 percent.
- Latin America and the Caribbean also made progress, falling from 65 million hungry in 1990-1992 to 49 million in 2010-2012, while the prevalence of undernourishment dipped from 14.6 percent to 8.3 percent. But the rate of progress has slowed recently.
- The number of hungry grew in Africa over the period, from 175 million to 239 million, with nearly 20 million added in the last few years. Nearly one in four are hungry. And in sub-Saharan Africa, the modest progress achieved in recent years up to 2007 was reversed, with hunger rising 2 percent per year since then.
- Developed regions also saw the number of hungry rise, from 13 million in 2004-2006 to 16 million in 2010-2012, reversing a steady decrease in previous years from 20 million in 1990-1992.

### Water Shortages:

About one billion people lack access to sufficient water for consumption, agriculture and sanitation. Aquifers are being depleted faster than they can be replenished. Melting glaciers threaten the water supply for billions. Not only is the amount of drinkable water limited, but most of it is being used for manufacturing and a great amount of it is not even being exploited because it has been polluted. The global water demand is depicted in the chart below, by OECD:

## Global water demand



World Watch Institute also point out that water will once again be at the centre of new conflicts. It was pointed out that institutes like IMF and World Bank-backed privatization policies, flawed big dam projects etc have caused further tensions, protest and violence.

### Air quality:

In many regions, childhood asthma rates have risen dramatically in the past 20 years. The problems are not limited to the industrialized countries with their automobiles and factories, since children in undeveloped countries, where people depend on burning wood and dung for their heat and cooking, are also at risk.

There are some interesting statistics calculated by the World Health Organisation:

- In the WHO European Region alone, exposure to particulate matter (PM) decreases the life expectancy of every person by an average of almost 1 year, mostly due to increased risk of cardiovascular and respiratory diseases, and lung cancer.
- A recent study using data from 25 cities in the European Union has estimated that life expectancy could be increased by up to approximately 22 months in the most polluted cities if the long-term PM2.5 concentration was reduced to the WHO guideline annual level.
- Data from the WHO Environment and Health Information System (ENHIS), covering 357 European cities in 33 countries, show that in 2009 almost 83% of the population in these cities was exposed to PM10 levels exceeding the WHO guidelines
- Some 40 million people in the 115 largest cities in the European Union (EU) are exposed to air exceeding WHO air quality guideline values for at least one pollutant. Children living near roads with heavy-duty vehicle traffic have twice the risk of respiratory problems as those living near less congested streets.

### Loss of biodiversity:

In the past 40 years the planet's biodiversity has been reduced by 30%, while humanity is now using resources as if we had a planet and a half, outstripping Earth's ability to renew and maintain itself. The more the human population is growing, the more in danger biodiversity and endangered animals are. The worst part is that only a few of these resources, such as forests, can even be replenished by mankind. To give some indication of the severity of this crisis, we now have only 20% of old growth forest remaining and 75% of fisheries are producing at or above capacity. However, the loss of biodiversity is another topic of the Environmental Committee and it is going to be discussed thoroughly. (WWF)

## CONFLICTS AND WAR-ZONES OVER NATURAL RESOURCES:



### Conflicts in Africa:

There have been over 9 million refugees and internally displaced people from conflicts in Africa over natural resources. If this scale of destruction and fighting was in Europe, then people would be calling it World War III with the entire world rushing to report, provide aid, mediate and otherwise try to diffuse the situation.

The countries involved are from all over Africa, thus some of the incidents are briefly mentioned below:

- East Africa Food Crisis 2011: Into mid-2011, the world's worst food crisis is being felt in East Africa, in Ethiopia, Somalia and Kenya. 12 million people are in dire need of food, clean water, and basic sanitation.

- DRC (Africa's First World War): the conflict in the DRC has involved seven nations. There have been a number of complex reasons, including conflicts over basic resources such as water, access and control over rich minerals and other resources as well as various political agendas.
- The Niger Delta & oil

### Tensions in the Middle East:

In the Middle East national interests in the vast oil fields have led to wars. Water scarcity in the Gaza region has contributed to the tensions. The Nile area, on which Egypt rely for downstream water, is largely controlled by Ethiopia. Tensions surrounding the water that flows in the **Euphrates and Tigris** arise among Iraq, Syria and Turkey.

A new conflict arose between **Israel and Jordan**, since Israel cut water supplies to Jordan due to severe drought.

There is also conflict between **Israel and Palestine** over water supplies.

### MAJOR COUNTRIES INVOLVED:

Leading the pack with the larger resource use and largest ecological footprint is **Qatar**, followed by **Kuwait** and the **United Arab Emirates**. After that are the big consumers: **Denmark**, the **US**, **Belgium**, **Australia**, **Canada**, **Netherlands** and **Ireland**.

**Australia** is a case in point. It ranks seventh in negative environmental impact. If everyone lived like Australians, it would take three and three-quarter planet Earths to support humanity. Carbon emissions are the Aussies' greatest contribution to environmental destruction.

**Canada**, meanwhile, has become a major player in the resource extraction industry planet-wide, from the Oil Sands project in Alberta to mining on all the continents of the developing world.

The top 10 countries with the highest population are also the first to blame for the effects of overpopulation. For example, the U.S., being the most abusive global consumer with only 5% of the world population, accounts for 30% of the annual worldwide consumption. Whilst **China** has already adopted the one-child policy, a major difference is yet to be made.

## POSSIBLE SOLUTIONS:

What has to be done is a major change in people's mentality in order to reduce the amount of natural sources we exploit to the point our planet can sustain. The problem is, we have already exploited them to such a degree that it is really hard, even impossible, to overcome the damage that has already been made. The worst part is that only a few of these resources, such as the forests, can even be replenished by mankind. To give some indication of the severity of this crisis, we now have only 20% of old growth forest remaining and 75% of fisheries are producing at or above capacity.

It is a common belief that recycling is the way to address the issue, but the truth is that individuals cannot make any significant difference. Just for conversation, let's consider the possibility to recycle 100% of consumer waste or in other words, the entire 1.4% of the total waste. But the fact is that only about 15% of that waste is actually capable of being recycled. This means that in the best and most optimal circumstances, only .2% of consumer waste can be reused, the rest still ends up as waste. Is this shedding some light on the problem? The population has been brainwashed into believing that consumers are responsible for the problem and that all we need to do is home recycling to fix the problem. The bottom line is that unless we achieve a high enough recycling rate for corporate waste, recycling will not enable us to achieve anything except conscious awareness.

The only way to reverse this irreversible damage would not only be for mankind to halt consumption at their current levels, but we would actually need to reduce our consumption levels to those of nearly 50 years ago. And how do you accomplish that when the world population is continuing to expand out of control with more and more people being uneducated, starving, and suffering?

No previous attend to do so has turned out to be fruitful. Is that an indication that the accomplishment of this aim is within the realm of our fantasy? No way. We can still make a difference and this is what we are planning to do during the forthcoming PS-MUN.

Closing, here is a quote from the movie “Matrix” that expresses man-kinds’ impact on nature and our natural resources:

“I’d like to share a revelation that I’ve had during my time here. It came to me when I tried to classify your species. I realized that you’re not actually mammals. Every mammal on this planet instinctively develops a natural equilibrium with the surrounding environment, but you humans do not. You move to an area and you multiply, and multiply until every natural resource is consumed. The only way you can survive is to spread to another area. There is another organism on this planet that follows the same pattern. Do you know what it is? A virus. Human beings are a disease, a cancer of this planet. You are a plague.”

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