

Vinyl 2010 Essay Competition Submission Template

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Summary:

Controlling population growth is the key factor in overcoming food and energy shortages. Without it, any improvements in overall supply will be absorbed by another boom in population, therefore leaving the problem unresolved. There are still opportunities to increase the supply of food, clean water and renewable energy, while minimizing waste and the demand for energy. Sustainable sources of food and energy are also essential to avoid future catastrophic collapses in supply that will result if problems of global warming cannot be overcome. These goals are achievable, if the political will can be found.

Essay:

For the past two centuries our society has been developing at an unprecedented rate, yet there are still billions of people struggling for survival. Improvements in technology have not resulted in improvements in living standards across the globe, but instead have compounded the growing gap between rich and poor. It is time to accept the shortfalls in our current direction and look for a new approach to ensure a future with less misery. Targeting effort towards three interrelated areas will provide the best hope for achieving this goal. They are; (i) focussing future effort towards improving efficiency and minimising waste to achieve maximum yield of food, fresh water and energy from the resources available; (ii) moving towards a sustainable global lifestyle by reducing dependence on non-sustainable fossil fuels and energy sources; and (iii) facing up to the fact that eradicating poverty is impossible without the essential but politically difficult task of stabilizing global population growth.

The earth is finite. Civilisation can no longer continue to expand into new territories, and humans have now colonised the globe. With no large expanse of habitable land left to discover we need to utilise the land and water available as efficiently as possible, and maximise its productivity. If we accept that our land is limited, we can maximise its efficiency by choosing the most suitable land use for each area. Protecting the remaining high value ecosystems should be top priority (notably the remaining rainforests which hold a huge amount of biodiversity), planting new forest for sustainable logging where soil is fragile and prone to erosion or nutrient loss, keeping urban areas compact, and then growing foods that are suited to the land and are environmentally sustainable in the remaining areas. From a global perspective, food production may potentially be increased through means such as improved world trade, and use of genetic modification. While both of these pose risks that need to be mitigated, both can potentially play major roles in increasing overall productivity. Trade can allow various foods to be grown in the most suitable region and then traded, but can potentially be damaging to smaller local economies. As for genetic modification, disease resistant strains of crop can increase yield and reduce the chance of sudden famine caused by pests or diseases but adds the risk of further losses of genetic diversity. The same rules apply to the limited amount of fresh water available for irrigation, hydroelectricity production, industrial use and, naturally, domestic water supplies. As this quantity is again essentially fixed, improving quality and promoting efficiency are the only ways to maximise its value. This can be

done by maintaining healthy ecosystems and catchment areas thereby keeping it free from pollution and contamination, and utilising systems such as water recycling for industry and agriculture, thereby minimising waste.

Our society must become sustainable to avoid future humanitarian crises far larger than those that we face today. At present we rely mainly on non-sustainable minerals for our energy supply. These are not only in limited supply but are often environmentally damaging through the release of climate altering emissions that will in general cause a reduction in global output and increase the occurrence of drought and flood. The development and improvement of technology that harnesses renewable energy sources such as solar, tidal and wind power will help to maintain our current standard of living without the long-term damage that is being done; however cutting energy demand is also required. Reducing climate changing emissions can also be achieved by adequately pricing all emissions, including agricultural emissions from livestock and conversely rewarding the protection and plantation of forest. If all true prices of emissions and environmental damage were charged, this would push our society towards a more sustainable future. While it may for example increase the price of meat and dairy products, this could free up more land for grain production leading to higher grain supply and cheaper prices. By maintaining sustainably managed fishing and forestry industries, these resources can be provided indefinitely, potentially even at an increased level. Reducing waste through reuse and recycling and increasing tariffs on waste disposal will also reduce our overall consumption and global impact.

Finally, the above measures will have limited success without efforts to stabilise the global human population. As uncomfortable as this statement is to bear, the alternative choice (not acting) will result in greater suffering. As Malthus theorised two centuries ago, increases in food production will lead to an increase in population until food sources are scarce again, meaning a perpetual proportion of the population being doomed to poverty. Unchecked population growth will inevitably lead to evermore extreme cases of population crash through famine, war, disease or genocide. The environmental impact that humans now exert on the world is unsustainable and our environmental footprint would be some 12 times higher should the third world manage to obtain current first world living standards. While population control can sound extreme, the reality does not have to be inhumane or overly authoritarian, and in fact it is happening naturally in several first world countries. The emphasis initially needs to go towards widely accessible contraception, education, and family planning advice which are currently resisted and in some cases prohibited on religious grounds.

Advances in human civilisation and knowledge have been monumental since the Renaissance. Many difficult challenges have been overcome and yet the eradication of poverty has never been so far from reality. This will not change without a radical rethink on the best way forward. If we face the choice between stabilising population growth and having billions of people fight and starve over a shortage of resources, the conscious approach is the more desirable. We now have the knowledge and power to better foresee and determine our future. Emphasis should be put on improving output per capita (rather than gross output), achieving it in a sustainable manner and spreading the wealth more equitably. Only then will we finally stand a chance of living in a world of stability and peace.