

Vinyl 2010 Essay Competition Submission Template

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Faced with today's food and energy crisis, how can society improve its well-being?

Summary:

Food and energy are basic commodities, essential for peoples' lives. Their growing shortage, however, requires people and governments to be more adaptive. There are three ways to tackle with the crises: expand agricultural production by making it more commercial, invest more in science in terms of increasing research and the use of GM crops and finally, strictly regulate domestic production of bio fuel. Also, innovation has already brought us efficient wind and sun energy. Yet, their use is not promoted enough. Society's well-being can be improved by politicians and their policy-makers taking the necessary steps.

Essay:

In recent years food prices have been going up at an alarming rate. Demand has risen substantially while supply has remained unchanged. This is the result of fast economic growth, especially in Asia. More people are consuming more food. Along with that petrol is becoming scarcer by the day. People themselves can not solve these problems. Politicians, on the other hand, are able to do so.

Firstly, high food prices are due to slow production rate of agriculture in mostly developing countries. Small farms with little technology are slower. The solution is reform to a more commercial type of production. A high-tech method of operation would secure a higher supply rate. Rising prices can be countered by increasing the output. However, commercial agriculture requires a lot of government support. For example, developing countries e. g. Bulgaria, have inefficient agricultural sectors with enough output to satisfy demand up to a certain level of economic development. When that level is reached, reform is necessary to increase the output. Additional investment would make the agricultural sector more commercial. In that sense the EU is assisting Bulgaria in making its agriculture more efficient and productive. In other developing countries, governments must lay efforts in order to attract investment and make the agricultural sectors more efficient.

Science is the second way to counter rising food prices. Genetically-modified crops can be the answer to the rising demand. The most popular GM crops are maize and soybean.¹ Biotechnology has made such crops better resistant to insects, droughts and cold² and has increased their harvest quantity. Additional scientific breakthrough has combined the genes of different crops thus producing more nutritious food. Scientific agriculture is not harmful to the environment if applied the right way. There are no negative effects documented on animals feeding on GM crops. However, the European Union has imposed a legal ban on the growing of such crops. For example, canned corn must be labeled properly if it has been modified and there is a one per cent threshold of

¹ Green facts, 2005, 07.01.08, <<http://www.greenfacts.org/en/gmo/>>

² Green facts, 2005, 07.01.08, <<http://www.greenfacts.org/en/gmo/>>

GM content. Above that percentage a product can not be marketed. Therefore, the GM crop ban has slowed the pace of scientific research and decreased innovation in the field of biotechnology.

Europe's protection of health and environment appears to affect global food prices because the recent advent of GM crops allows food of better quality to be produced in bigger quantities. The GM ban has also affected African agricultural production because much of it is exported to Europe. Given that in most African countries the agriculture is significant contributor to the economy, they can not afford to use the available biotechnology because exports to the EU will fall sharply. Both in global and in national scale the GM crop ban stalls agricultural production and renders futile further efforts to solve the food crisis.

The attempt to solve the energy crisis by producing biofuel is actually a third reason for rising food prices. The United States produce ethanol from corn trying to reduce their dependence on Arab oil. However, recent studies indicate that converting grain into ethanol uses almost as much energy as it produces. It appears that a third of American grain has been channeled for biofuel production.³ The US government has set strict percentages for higher biofuel usage and less oil dependence. However, these policies are not concerted with the rest of the world. Thus prices of basic foods are massively affected – more expensive grain and corn takes beef and milk to unprecedented price levels. American policies have established huge subsidies for their own biofuel without taking account of the consequences for the rest of the world. Brazilian biofuel, on the other hand, is reported to be much cheaper and is produced more efficiently because of the tropical climate. Intergovernmental efforts are required to achieve a balance and make the production of biofuel a solution to both the food and energy crisis.

It is essential that the world decreases its oil dependency. Expensive petrol also affects food prices because of transportation costs. Other fossil fuels used to generate electricity are becoming scarcer and are harmful to the environment. Fortunately, there are the alternatives of wind and solar energy. They are reported to be one of the most environmentally friendly and very efficient for producing electricity. If a power plant running on natural gas switches to wind or sun energy, the natural gas may be used for running cars or public transportation. This fossil fuel is not as rich in octanes as conventional petrol but it is cheaper and “greener.” Conventional petrol engines are easy to convert to running on natural gas.

In recent years, numerous associations and companies have sprung up advocating wind and sun as reliable energy sources. This fact has contributed to a vast availability of installations for both domestic and commercial use. Everyone is able to install solar panels or construct wind power generators in his field or backyard. The European Union as a supranational body has established legislation promoting environmental protection and inhibiting climate change. However, on the state level there is much more to be done. Governments must develop specific policies encouraging the use of any type of alternative energy. They should provide subsidies and pressure electrical companies to switch to more efficient and environmental methods.

³ Collier, Paul; The Politics of Hunger; Foreign Affairs magazine, Nov/Dec 2008, vol.87, No.6, New York 2008

Commercializing agriculture in developing countries and applying GM technology on a larger scale are essential to bringing food prices down. Governments and supranational bodies like the European Union have the power to invest in these areas. Biofuel production should be regulated so that it is effective enough and does not drive food prices higher. The relevant governmental sectors must promote and encourage the use of wind and solar energy. The technology for solving the food and energy crisis is at hand and only political will and cooperation are able to improve society's well-being.