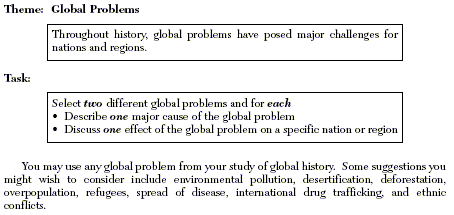
**Thematic Essay Seven: Environmental or Global Problems**

[](http://www.greececsd.org/files/filesystem/GHG_Thematic_Essays/GHG_Thematic_06.05.pdf)

**Global Problem One: Deforestation**

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| **Causes of Desertification** | **Effects of Desertification** |
| Overgrazing : Overgrazing was not as large of a problem long ago because animals would move in response to rainfall. People would move with the animals so it prevented overgrazing in such areas. Now, humans have a steady food supply so they do not have to move about. Therefore, people use fences to keep their animals in one place which causes overgrazing.   Farming of Average Land : Farming of average land is causing desertification worldwide. Farmers are clearing average land, and using it which takes away the richness in the soil. People should let the average land replenish itself before farming.   Destruction of Plants in Dry Regions: Destruction of plants in dry regions is causing desertification to occur. People are cutting down tress to use them as a source of fuel. Once all these trees are cut down there is nothing to protect the soil. Therefore, it turns to dust and is blown away by the wind.  About half of southern Africa is semi-arid and thus at risk of desertification. The area already transformed into desert-like conditions is not accurately known because uncertainty surrounds the precise definition of a desert, and what the original state of the vegetation was in the semi-arid areas of southern Africa. | Soil becomes less usable The soil can be blown away by wind or washed away rain. Nutrients in the soil can be removed by wind or water. Salt can build up in the soil which makes it harder for plant growth.  -Vegetation is Lacked or Damaged Loosened soil may bury plants or leave their roots exposed. Also, when overgrazing occurs, plant species may be lost.  -Causes Famine Places that have war and poverty are most likely to have famine occur. Drought and poor land management contribute to famine.  -Food Loss The soil is not suited for growing food; therefore the amount of food being made will decline. If the population is growing, this will cause economic problems and starvation.  -People near Affected Areas Desertification can cause flooding, poor water quality, dust storms, and pollution. All of these effects can hurt people living near an affected region.  About half of southern Africa is semi-arid and thus at risk of desertification. The area already transformed into desert-like conditions is not accurately known because uncertainty surrounds the precise definition of a desert, and what the original state of the vegetation was in the semi-arid areas of southern Africa.  **SOLUTION TO DESERTIFICATION?**  To halt desertification various points should be considered. As humans we need to respond smartly yet efficiently to these problems.   * Farmers play a big role in human response as the main problem occurs at farms. They should change farming methods to suit the land and soil as well as reduce the number of animals on the land, allowing plants to regrow. * Soil conditions must be made favourable for plant growth by, for example, mulching. Mulch (a layer of straw, leaves or sawdust covering the soil) reduces evaporation, suppresses weed growth, enriches soil as it rots, and prevents runoff and hence erosion. Reseeding may be necessary in badly degraded areas. Mulching and reseeding are unfortunately expensive practices. The more developed countries should offer assistance to southern Africa in obtaining these expensive practices. * Increase processes that remove greenhouse gases from the atmosphere. |

**Global Problems Two: Desertification**

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| **Causes of Deforestation** | **Effects of Deforestation** |
| * **Deforestation** in simple term means the felling and clearing of forest cover or tree plantations in order to accommodate agricultural, industrial or urban use. It involves permanent end of forest cover to make that land available for residential, commercial or industrial purpose. * With the world growing at a pace hard to match, the increasing need for space is turning out to be an area of concern. With desperate need for land for agricultural, industrial and most importantly urban needs to contain cities and their growing population, a direct action that we have come to recognize as “Deforestation” occurs. * **Logging:** Apart from this, wood based industries like paper, match-sticks, furniture etc also need a substantial amount of wood supply. Wood is used as fuel both directly and indirectly, therefore trees are chopped for supplies. Firewood and charcoal are examples of wood being used as fuel. Some of these industries thrive on illegal wood cutting and felling of trees. * **Urbanization:** Further on order to gain access to these forests, the construction of roads are undertaken; here again trees are chopped to create roads. Overpopulation too directly affects forest covers, as with the expansion of cities more land is needed to establish housing and settlements. Therefore forest land is reclaimed. * Deforestation occurs around the world, though tropical rainforests are particularly targeted. Countries with significant deforestation currently or in the recent past include Brazil, Indonesia, Thailand, the Democratic Republic of Congo and other parts of Africa | 1. **Climate Imbalance:** Deforestation also affects the climate in more than one ways. Trees release water vapor in the air, which is compromised on with the lack of trees. Trees also provide the required shade that keeps the soil moist. This leads to the imbalance in the atmospheric temperature further making conditions for the ecology difficult. Flora and fauna across the world are accustomed to their habitat. This haphazard clearance of forests have forced several of these animals to shift from their native environment. Due to this several species are finding it difficult to survive or adapt to new habitats. 2. **Increase in Global Warming:** Trees play a major role in controlling [global warming](http://conserve-energy-future.com/GlobalWarming.php). The trees utilize the [green house gases](http://www.conserve-energy-future.com/GreenHouseEffect.php), restoring the balance in the atmosphere. With constant deforestation the ratio of green house gases in the atmosphere has increased, adding to our global warming woes. 3. **Soil Erosion:** Also due to the shade of trees the soil remains moist. With the clearance of tree cover, the soil is directly exposed to the sun, making it dry. 4. **Floods:** When it rains, trees absorb and store large amount of water with the help of their roots. When they are cut down, the flow of water is disrupted and leads to floods in some areas and droughts in other. 5. **Wildlife extinction:** Due to massive felling down of trees, various species of animals are lost. They lose their habitat and forced to move to new location. Some of them are even pushed to extinction. Our world has lost so many species of plants and animals in last couple of decades.   **Solutions to Deforestation**  1. The best solution to deforestation is to **curb the felling of trees**, **by employing a series of rules and laws to govern it**. Deforestation in the current scenario may have reduced however it would be too early to assume. The money-churner that forest resources can be, is tempting enough for deforestation to continue.  2. **Clear cutting of forests must be banned**. This will curb total depletion of the forest cover. It is a practical solution and is very feasible.  3. Land skinned of its tree cover for urban settlements should be urged to plant trees in the vicinity and replace the cut trees. Also the **cutting must  be replaced by  planting young trees to replace the older ones that were cut**. Trees are being planted under several initiatives every year, but they still don’t match the numbers of the ones we’ve already lost |