

Global Warming

Global warming is the rise in the average temperature of Earth's atmosphere.

Warming of the earth is primarily caused by increasing concentrations of greenhouse gases produced by human activities such as the burning of fossil fuels and deforestation.

Greenhouse gases include carbon dioxide, methane, ozone which is produced when fossil fuels –such as oil and coal – are burned.

The massive cut down of trees, or deforestation, leads to greenhouse gases not being absorbed into the atmosphere thereby causing the planet to heat up.

Since we live in an age where carbon dioxide is very abundant in the atmosphere, released through man-made inventions, such as cars, factories, and power plants, it is important that trees fulfill their role in the environment and take some of the excess carbon dioxide out of the air.

Unfortunately, deforestation is preventing this job to be fully accomplished, and with half of all the Earth's forests gone, and four million trees cut down each year, the amount of carbon dioxide is rising. With more carbon dioxide in the atmosphere, more of the sun's radiation is being reflected back to earth, instead of space, and this is causing our average temperature to rise. In this way, deforestation is a major issue when it comes to global warming.

The Weekly

Information Resource Bulletin

The goals of the Weekly Bulletin are:

- Bring listeners in the project area the latest information on natural resources, the environment and agriculture
- Focus on solutions, what works and what people can do
- Encourage listeners to share both their questions and solutions (African solutions for African problems)
- Raise awareness of issues that need to be discussed to affect public policy.
- Bring the latest solutions and practices that have relevance to this region from around the world
- Identify and link other NGOs working in the region share the project interests and goals
- Give the participating journalists guidance and tips on their reporting on these issues

The Problem: Deforestation

Deforestation is one of the major environmental challenges in Zambia.

Zambia is one of the most forested countries in Africa and approximately 67% (49,468,000 ha) of Zambia's land surface is covered by forest (FAO, 2011). Estimated rates of deforestation vary depending on the methods of measurements used. For example, the Food and Agriculture Organization of the United Nations (FAO, 2011) estimates that Zambia loses about 8,000 hectares of forest every year. (REDD+Unit, Forestry Department).

Some of the main activities leading to high levels of deforestation in Zambia are charcoal production, agricultural farm expansions and wood extraction for infrastructure development.

The massive cutting down of trees has now led to high temperatures in the country and change in the weather pattern.

Many species are lost due to deforestation. Many of the species being lost are vital to the preservation of our ecosystem. Some of the trees

are home to certain species for instance caterpillars. Caterpillars (vikubala) are food to most households in Zambia but due to the increasing number of trees being cut the number of caterpillar varieties being found is also declining.

Also deforestation has led to the scarcity of some of the indigenous wild fruits that used to grow. If no proper measures are put in place even the remaining wild fruits that are seen today may not be around much longer.

It's been known for a while that warm temperatures could help certain diseases breed like as malaria.

Malaria comes about due to hot and humid areas where the female mosquito can live. As the temperature warms, the territory where the mosquito that carries the malaria parasite lives will likely expand, putting more people at risk (Benson Zulu, Student Doctor, The University Teaching Hospital).

Activities for Journalists

Use your community radio station to help citizens understand what can be done to reduce deforestation and how the communities can get involved in reducing deforestation – and what are some alternatives?

Many of the problems that lead to deforestation stem from the fact that people want to feed their families hence expansion of their farming land. In doing this, trees are cut down and the land is left bare.

In addition, low wages, coupled with high demand for fuel such as wood, exert pressure on forest resources in rural Zambia. For instance, charcoal production is by far the most frequent driver of deforestation.

The need to promote alternative energy to replace charcoal cannot be overemphasized. Therefore, there is a need to scale up the promotion of alternatives – such as coal briquettes. A ten kilogram bag of coal briquettes costs about US\$1.50 compared to charcoal which costs \$5. A one-and-a-half kilogram bag of coal briquettes can burn for six hours, while the same size bag of charcoal will burn for only one and a half hours. So it is obvious that coal briquettes are more efficient.

SAVE 80 Stove & "Wonder Cooker," a Lusaka-based CDM Project is expected to benefit about 180,000 people by providing them with SAVE 80 stoves. The stainless steel stove, with 80% improvement in energy efficiency, is designed to use twigs (two centimetres in diameter, 30 centimetres in length). The cooker stoves can provide warmth and cook foods.

Does anyone in your community used this type of stove? Do they like it better than a traditional stove? Why do they like it?

Initiatives such as tree planting in open land needs to be encouraged where local communities' plant trees to reduce the impact of global warming in the country. Has this been done in your community?

Permaculture agriculture should be encouraged as it incorporates a wide range of practices aimed at minimising soil disturbance and can turn bare earth into fertile soil for planting gardens.

The use of indigenous knowledge can help with the preservation and conservation of our trees. For instance the cutting down of certain trees in parts of Lundazi is considered a taboo as it brings bad luck. Some trees are left for medicinal purposes and some of the trees are left to enable communities to predict rainfall patterns.

But also trees are protected to give respect to the ancestral gods. For instance, during the Lwiindi ceremony of the

Tonga people in a southern province no tree is cut at the shrine as it is believed that cutting of trees at the shrines brings bad luck to one's family.

- Are there any alternative energy sources in your community?
- Is anything being done in your community to discourage deforestation
- What punishments have you heard about for those who cut protected trees?
- How best do you think the community can help reduce on the effects of global warming?

Community Engagement

Urge listeners to send SMS, call or stop by the radio station to talk about deforestation and how rising temperatures are affecting them. Document their experiences and thoughts and turn them into a program!

Useful Links

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This link features alternatives to charcoal and traditional cook stoves:

http://www.irinnews.org/printreport.aspx?reportid=81797

Good technical information on deforestation in Zambia: http://www.fao.org/forestry/32680-0c227f4c90a3ef146c7f4e1728302c62b.pdf

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