

Focus: Brick kilns

Zambia has one of the highest deforestation rates in the world.

The major causes for this include: agricultural expansion, growth of human settlements, dependence on wood for cooking, reliance on burnt bricks for construction and low levels of reforestation.

With the rise of population across the country the construction of houses has become a major activity. However, since many people are poor, they are unable to afford cement for their buildings. They must resort to a cheaper means — that is —digging soil and using it to make bricks — and then drying the bricks to make them strong.

The burning process requires wood and that leads to deforestation.

People are cutting down trees for many, many reasons: things like construction, fuel and to plant crops. The problem is – these trees are not being replaced by new saplings.

Reducing the impact of climate change requires commitment to reforestation and changing the attitudes of people cutting the trees.

In this bulletin, we will discuss the impact that the process of brick making has on the environment.

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: Brick Kilns and the Environment.

Houses in most rural areas of Zambia are built from bricks and these are commonly made by putting clay soil into molds and then drying them in the sun.

These sun-dried bricks are then placed into a large kiln-oven and a huge amount of wood is used to fire the bricks.

It is common to see people burning bricks around the country -- and there is no restriction on this activity which encourages deforestation.

To make enough bricks for even a small family house requires a large number of trees. So, the bigger the house, the more trees that need to be cut for fuel for the brick-making process.

People in urban areas are also beginning to use these clay bricks to build their homes.

The main environmental impact of brick kilns is the emission of fine particulate matter, that is, air pollution. This pollution is bad for our health – leading to all sorts of respiratory problems.

In fact, research has shown that kilns produce six kinds of gases: carbon monoxide, carbon dioxide, nitrous oxide, nitrous dioxide, nitric oxide and methane.

All of these gases are can cause health problems in humans – and they contribute to global warming.

Another problem -- the making of the clay bricks creates land pits. These land pits are dangerous because when clay is removed from the ground it is never returned.

This can lead to soil erosion and barren land since the topsoil has been scrapped away.

Activities for Journalists

Use your radio station to help your community understand the negative impact of brick kilns. Make the following points:

When brick kilns are fired, they produce some harmful gases which pollute the air. People who breathe this polluted air are affected by it. Particulate matters such as dust and smoke particles penetrate deeply into the lungs and get deposited there.

Sulfur dioxide causes irritation of the respiratory system. When a person inhales carbon monoxide they can experience dizziness, vomiting and in higher concentrations it can be fatal.

Crops are also adversely affected by air pollution. Pollutants like fluorine, lead and mercury cause damage to plants. Those who work at the brick kilns are the ones most at risk of suffering health issues from the smoky pollutants.

Inhaling of these pollutants causes irritation of the skin and eyes and can cause pulmonary diseases. Yet, the harmful effect of these pollutants can be reduced by dispersing the pollutants across a large area. That is why it is recommended to have tall smoke stacks for brick kilns.

A tall smoke stack on a kiln ensures release of pollutants at a higher height, which gives more time for the pollutants to disperse into the atmosphere before reaching the ground.

However, an even better solution is to not use burnt bricks. Cement bricks are better. They are more expensive, but they are less harmful to the environment.

It is very important also to ensure that people are educated on the need to plant a tree when one is cut – trees help combat climate change.

Do an interview with people who are about to fire a brick kiln. Ask them about the materials needed to burn the kiln. Ask them about the number of trees needed to burn the bricks.

A follow up question could be -- how do they get the trees. Also find out if they know the impact that tree cutting has on the environment.

Talk to a local environmentalist and have him/her talk about the negative effects of burning brick kilns.

Ask the environmentalist if there are inexpensive alternatives to using burnt bricks? Find out if the government plans to provide any subsidies to people who decide not to use burnt bricks to build their house.

Useful Links

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