



DEVELOPING RADIO PARTNERS

Focus: Ground - water

Groundwater is important to all communities of Zambia in that it is the major source from which water is collected. Most of the urban and rural populations have, for a long time, drawn water from wells.

This can be attributed to the fact that many of the urban settlements are either unplanned or illegal. In rural communities initiatives of building hand pumps is most common as it is the most cost-effective option.

Though groundwater is used in many communities, the main challenge is contamination. Groundwater contamination is nearly always the result of human activity. In areas where population density is high and human use of the land is intensive, groundwater is especially vulnerable. Virtually any activity where chemicals or wastes may be released to the environment, either intentionally or accidentally, has the potential to pollute groundwater. When groundwater becomes contaminated, it is difficult and expensive to clean up.

It is always important to make sure that the environment and all forms of water sources are protected from pollution and contamination so that communities are kept safe and healthy.

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

Pollution and Contamination of Groundwater

Groundwater can be contaminated with heavy metals in underground rocks such as copper, cobalt, fluoride and lead. These metals produce toxic emissions that would cause people drawing this water to become sick. There are also radioactive materials found in the soil that can cause health problems.

For instance, the lead metal that has been absorbed in water can lead to complications in unborn children and also when many of the absorbed metals are consumed they may lead to blindness and cancerous diseases in humans.

Litter, trash, and other garbage can contaminate groundwater. This can be done when there is no proper management of waste. The more waste that is dumped at a particular area the more likely there is to be contamination.

It is therefore important to have a proper waste management system.

Groundwater can also be contaminated from the released human and animal wastes. These pollutants come from outdated septic/sewer systems that need to be repaired or replaced. When sewer lines are not properly installed or outdated they can cause water contamination. The sewer waste will get mixed with drinking water and cause contamination.

The issue of using pesticides and fertilizers on farms can also cause groundwater contamination. The more the pesticides and fertilizers are used on the commercial farms the more contamination there is likely to be in the underground water.

It is also important to note that with the rise in the number of structures being built on water recharge areas there is a greater threat of contamination.

Water recharge areas are deep drainage zones where surface water moves down into the soil into the groundwater.

Activities for Journalists

The rise of the population has brought with it a rise in food consumption hence the need to have food security as a country. Therefore there is a rise in commercial farming which is heavily dependent on pesticides and fertilizers. These chemicals are toxic to the soil and groundwater as it leads to contamination. Therefore, there is a need to reduce the use of chemical fertilizers and pesticides and instead promote organic farming.

Looking at the number of commercial farms in the country from Chisamba farming and the other newly established blocks it is important to encourage organic farming to reduce groundwater contamination. Kasisi agricultural training centre has been promoting organic farming among the communities of Chongwe as it reduces soil and groundwater contamination. Organic farming is the less expensive form of farming in that livestock manure is used as compared to expensive chemical fertilizers.

The treatment of groundwater at wells or hand pumps at collection points would go a long way to reducing contamination. For instance, the offering of free or subsidized chlorine to communities would help in alleviating diseases that might come from contaminated groundwater.

When water recharge areas are used for the construction of buildings there is likelihood that most of the groundwater will be contaminated. This can be seen from the case where Robert Chimambo an environmentalist has brought before the high court of Zambia to stop the construction of Zambia Air Force houses in Chongwe as the area is a water recharge area for the city of Lusaka.

It has also been brought out that the newly

promoted investment zone the Lusaka South Multi facility Economic Zone (LS MFEZ) is within the water recharge area for Lusaka City.

It has been argued that these industries that are being built in this area will contaminate groundwater in Lusaka – creating a serious threat to the city's water supply.

How can Zambia as a country improve in the areas of groundwater testing for human safety?

Is there adequate, qualified staff to deal with groundwater-related contamination?

How is the issue of increase in population growth supposed to be dealt with in relation to underground water?

Does your community offer subsidized or free chlorine to treat groundwater? Should government do so?

Identify a family or families that have had their water contaminated. What are they doing now to get water?

Launch a campaign on your radio station to make people aware of the danger of contaminated water and what can be done to reduce the contamination.

Are there water recharge areas in your community that are under threat? Is anything being done to protect these areas?

Useful Link

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