Tiandra Wolverine

What human activities in Tanzania affect the supply and demand of water resources?

Water Quality:

* Color and turbidity levels become problematic during the rainy season; November and December is their rainy season.
* Rivers have highly natural fluoride concentration; fluoride is highly toxic; fluoride can cause arthritic symptoms and bone fracture well before the onset of crippling fluorosis, and can affect many other tissues besides bone and teeth, including the brain and thyroid gland.
* The contaminated water is caused by urbanization, industrialization, mining activities, the use of chemicals and oil spills.

Causes

* The majority of lakes in Tanzania are not polluted
* Lakes that are polluted are located in:

- Lake Tanganyika, Africa's deepest lake, is facing a high risk of pollution

* Areas close to large polluting industries, such as sisal processing;
* Areas where mining is a major means of income generation;
* Areas where pesticide application is extensive.

Urban Areas

* The rate of growth of its urban population is one of the highest, affecting all urban dwellers
* Air, water, solid wastes and oil pollution are rapidly increasing and have dramatic consequences on the life and health of the urban users

Liquid Waste

* Water pollution has become a common problem and a cause for concern in all urban areas, mostly in raining season
* outbreaks of water-related diseases, such as cholera and diarrhea
* domestic and institutional wastes are the main sources of pollution
* Due to the generally poor sanitary standard, most of the local receiving water bodies, including adjacent soils and coastal waters, are heavily polluted
* Waste from urban animal industry has contributed significantly to pollution of the soils and waterbodies, particularly with nitrates. Considering the animals need the water to drink, they drink the contaminated water and contract sicknesses and diseases; vice versa.

Pollution Due To Solid Wastes

* Solid waste is the most common pollution to the water in Tanzania
* 64% of the waste in the city Centre is collected, only 13% of the waste is removed
* disposal of the wastes do not meet the required minimum standard, it is a source of pollution of the soil, and surface and groundwater
* Water is treated differently compared to the United States. The states have 100% clean drinking water. With the amount of money the United States have, they can afford to have great water treatments. Such as;
* Watershed protection, it is the reduction or prevention of water pollution at its source, represents a tradeoff between treatment plant construction and operation costs
* They can also afford water treatment: dilution, coagulation and flocculation, settling, filtration, disinfection, and other chemical treatments. The quality of the source water and the effectiveness of source-water protection and management have a direct bearing on the complexity of the treatment that is required.

Pollution of Water

* Solids and colloidal materials are responsible for increased sedimentation in water bodies
* The erosion of tailings dumps, the ground and surface water is contaminated with toxic substances
* At low pH values, heavy metals (iron, manganese, cadmium, zinc, aluminum) can create serious water pollution problems
* gold is extracted from the soil using mercury, which contaminates soil and water

Methods of Pollution Control:

* Drainage and refuse handling, can be solved if people actually participate in keeping their surroundings clean

- recycling programs can be investigated, it will also generate jobs for Tanzanian citizens

* recycling of liquid and solid waste should be assessed

-inventing a method for converting waste into a usable resource that can supply limitless energy

-using solid waste as fertilizers, will help reduce the amount of chemical fertilizers that are polluting the water.