

S2. INCREASE IRON AND TOXICITY IN GROUND DRINKING WATER RESOURCES IN DARFUR-SUDAN

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This presentation is aims to explain the increase nitrate and toxicity in grownd drinking water resources in Darfur-SUDAN

Darfur is a region in western Sudan, In 2008, Darfur's population was 7.5 million. This is an increase by nearly six times from 1973 (1.3 million). 52% are aged 16 years or younger. Water supplying is providing by cery old water net works some of them which were built in 1960.

Water is given daily for 2-3 hours from the water supplying net work, while at other times the water can not be given.

About 60% of the population water needs are supplied from wells operated by private ventures, while the remaining portion is estimated to be covered by individual water pump located on their property.

For biological and chemical analysis of the water, supplies and trained staff in the established laboratory is inadequate.

Water network and control of private individual wells can not be made. Almost there is no Informative and educational work for community about water health in the region.

There are high concentrations of iron proportion in drinking water sources, which all the existing resources of water are ground water resources.

According to the WHO standards iron quantitiy must be below than 00.30 mg\L, and comparing with the Water Quality Guidelines for Turkeys it must be 00.30 mg\L but in Darfur Area – SUDAN it is over 00.68 mg\L, in the drinking water analysis.

Increase the concentration of iron led to the appearance of some diseases related to toxicology in water.

As a result of the lack of water distribution system, water storage ways helps to increase or not to decrease the concentration of iron in drinking water. Where drinking is often storage in metal, plastic or clay containers.

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