**Title: Heavy metal contamination in drinking water and its impact on animal health**

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**Abstract**

The quality of groundwater is very important for the better health of the dairy animals. The presence of heavy metals in drinking water is regarded as important hazard to animal health. The study evaluated the consequences of varying groundwater quality on milking animal’s health. Groundwater samples were collected from 108 specific places from the District Sahiwal, Punjab, Pakistan. Samples were tested to look the fitness of groundwater for livestock consumption.  Samples were analyzed to check the presence of Cadmium and Arsenic. Cadmium and Arsenic were out of WHO standards in 56 and 11 samples, respectively. Data were collected from the same respondents from whom the water samples were taken. Excess of cadmium and arsenic in water primarily cause the miscarriages and skin problems among milking animals respectively. Findings showed that miscarriage and skin problems were higher with high concentration of heavy metals. There is positive correlation among cadmium and miscarriages and Arsenic and skin problems. Results show that the drinking water quality is severally affecting animal health, that ultimately declining the milk production. It is recommended that the drinking water should be routinely monitored, and provide heavy metals free drinking water to the animal to maintain their health.

**Key Words:**Drinking water, Quality, Heavy metals, Animal health, Pakistan