

**EFFECT FROM COW FARM WASTE TO GROUNDWATER
QUALITY IN BOKOHARJO VILLAGE , PRAMBANAN, SLEMAN,
YOGYAKARTA**

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ABSTRACT

Based from livestock are the problems that need to be considered. Cow livestock manure such as feces, urine, and the rest of the food is directly discharged to the ground without previous management which could potentially affect groundwater quality. The study was conducted in the village of Trimurti, Srandakan, Bantul. The research objective was to determine the effect of waste produced cow farms to ground water and determine the content of contaminants in groundwater due to the cow farm waste.

The method used is survey method, laboratory testing, and an index of pollution. The sampling technique used was purposive random sampling with 6 area sample point. Sample 3 is an upstream area observation point that has not been affected by livestock waste, sample 1, 2, 4, and 5 is an area where there are a lot of cow farms, point 6 is the area after the cow farm. Observation sample point is determined by the direction of groundwater flow. The parameters used in this study were turbidity, pH, BOD, ammonia, nitrat and Escherichia Coli.

Based regulation of Yogyakarta Special Region Government Rules Number 20 of 2008 concerning on Water Quality Standard in the Yogyakarta Special Region for Class I drinking water. Status of the groundwater quality at observation points 1 to 5 may include slightly contaminated, while sample 6 area may in a state that is high contaminated. Alternative management in this research area is by utilizing waste for biogas and making liquid fertilizer from livestock waste.

Keywords : *cow farms , livestock waste , groundwater quality , water quality status*