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## Water Resources and Sanitation in Public Schools of Datu Odin Sinsuat, Maguindanao

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Abstract: Using descriptive-experimental research methods, this study aimed to identify the main resources of water, assessed the water quality, sanitation and hygiene practices, and extent of implementation. Complete enumeration was done in 28 elementary public schools of Datu Odin Sinsuat Municipality. Questionnaires were given to the school advisers. Water samples were obtained from the same schools and were submitted to the Department of Science and Technology (DOST) Region XII for microbial analysis, specifically the presence of fecal coliform bacteria. Four water resources such as hand pump, faucet, deep well and spring were found being used in the 28 schools. Of water resources, the only treated was from the faucet. Most of the schools used the water for drinking and washing. Two schools strongly agreed, nine schools agreed and seventeen schools disagreed that they implemented DepEd Order no.56 s. 2009. In addition, two schools strongly agreed and twenty six agreed that they implemented DepEd Order No. 65 s. 2009. Five schools had water supply that were safe to drink while sixteen schools had water supply that were not safe to drink due to high fecal coliform count and did not undergo chemical treatment. The only safe for drinking were water resources that came from faucet because they were chemically treated. Seven out of 28 schools did not have water supply due to their location in mountainous areas. More than half of the schools did not comply with the DepEd Order No. 56 s. 2009 due to the lack of funds and support from the PTA and LGU. It is recommended that the Department of Education must have an urgent assessment of implementing both DepEd Orders No.56 and 65, to assure that the schoolchildren be protected from water and sanitation related ailments. Also, all water resources that are not treated must be used for washing only. Ideally, all the water resources must be treated to assure the safety of all school constituents. Moreover, the school administrators and teachers in the municipality must be provided copies of the results of this study for reference in implementing the said programs.

**Keywords:** assessment, drinking water, fecal coliform, groundwater **Conference Title:** ICE 2016: International Conference on Education

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