

Nitrate and Chloride pollution from Behedi Basin, Dist Nashik, Maharashtra

Jaydeep Nikam
Y.C.M. Open University, Nashik.

The Behedi basin is located in the Northern part of Deccan trap hydrologic province and it belongs to a highly irrigated belt of Nasik district in Maharashtra. The watershed covering 257 sq Kms. is situated in the rain shadow zone of Western Ghats.

The large amount of NO_3 and Cl in the ground waters from Behedi Basin represents fertilizers as the main source. The NO_3 values have increased with depth of water table. Lower values of NO_3 in the wells with shallow water table have been attributed to denitrification process in the vadose zones. High values of NO_3 obtained in the wells with deeper water table indicate cessation of Denitrification process at greater depth. The Cl/ NO_3 ratio for the ground waters from irrigated land use is less than 2 indicating fertilizer is the predominant source of NO_3 .