

Introduction: Community based management system of water sources has been introduced as a solution to poor management states of rural water sources in the world but to date, the problem still remains extensive and in Uganda most of the rural water sources are poorly managed. The community management of boreholes is at only 24% in Amida sub county, Kitgum district however the district has been advocating for the system despite others challenges.

Objectives: The main objective of this study was to assess factors affecting community-based management of borehole water sources in Labongo-Amida subcounty- Kitgum District with specific attention to the functionality of Water User Committee, the functionality status of borehole water sources and the community practices towards the management of the borehole water sources.

Methodology: The study was cross sectional including both qualitative and quantitative methods in which 270 respondents who are water user committees, members were interviewed. It involved observation of 30 sampled boreholes water sources with the help of observation check list to assess their operation and maintenance status. Five key informants “ interviews were also done. Quantitative data was analysed using SPSS software version 16.0 and presented in form of tables, pie charts, graphs at university, bivariate and multivariate levels. Qualitative data was analysed manually presented in verbatim quotations.

Results: All the water sources had water user committee in place, the maintenance status of the boreholes was bad since 76.8% of the water points had dirty surrounding and the community had high sense of ownership of the borehole water sources at 98.1%.At multivariate analysis the following factors significantly influenced the community based management system of borehole water source in Labongo Amida sub county. The demographic characteristics was age of WUC who are male only (P-values =0.028).The water users“ committee factors were when one became a member of the WUC (P-values male= 0.014 and Female=0.003), how one is elected as a member of the WUC(P-values male= 0.042 and Female=0.038), training as WUC members (P-values male= 0.000 and Female=0.004),when the last training was conducted (P-values male= 0.000 and Female=0.01), the documentation and implementation of bylaws on operation and maintenance of borehole (P-values male= 0.000 and Female=0.000), community knowledge of bylaws (P-values male= 0.024 and Female=0.046) and local authority support in the enforcement of bylaws for male only (P-values male= 0.033). The functionality status of borehole factors that were significant include break down of boreholes for male only (P-value =0.011), where borehole spare parts are obtained (P-values male= 0.001and Female=0.000), motivation of hand pump mechanics (P-values male= 0.000 and Female=0.000) and when the borehole was installed (P-values male= 0.000 and Female=0.000). The community practices were community participation in planning and siting of Borehole (P-values male= 0.001 and Female=0.002) and community support to water users committee (P-values male= 0.013 and Female=0.037).

Recommendations: The community, water users committee members, the community leaders, subcounty authorities , Kitgum district water office, Ministry of water and Environment should join hands to ensure that emphasise are put on the age of WUC,when they became member of the WUC , how they are elected as WUC member , their training as WUC members, when they received the last training, the documentation and implementation of bylaws on operation and maintenance of borehole, Knowledge of bylaws by the community, local authority support in the enforcement of bylaws , break down of boreholes , where borehole spare parts are obtained, motivation of hand pump mechanics , when the borehole was installed ,community participation in planning and siting of Borehole and community support to water users committee.

Conclusions: The community based management system (CBMS) for borehole water sources in Labongo AmidaSub County was significantly influence by the age of WUC, when they became member of the WUC , how they are elected as WUC member , their training as WUC members, when they received the last training, the documentation and implementation of bylaws on operation and maintenance of borehole, Knowledge of bylaws by the community and local authority support in the enforcement of bylaws , break down of boreholes, where borehole spare parts are obtained motivation of hand pump mechanics, when the borehole was installed, community participation in planning and siting of Borehole and community support to water users committee.