

**Table S1:** Bivariate and multivariate logistic results of the determinants of households' access to improved drinking water sources in 2010 and 2014

Variables	The year 2010		The year 2014	
	Logistic regression		Logistic regression	
	COR (95%CI)	AOR(95%CI)	COR (95%CI)	AOR(95%CI)
<b>Age of the HH(years)</b>				
15-34	1	1	1	1
35-54	0.76(0.70,0.83)	0.87(0.78,0.97)	0.82(0.75,0.90)*	0.93(0.83,1.04)
55 and above	0.52(0.47,0.58)	0.80(0.70,0.91)	0.62(0.57,0.69)*	0.99(0.87,1.13)
<b>Sex of the HH</b>				
Male	1	1	1	1
Female	0.79(0.74,0.86)*	1.00(0.91,1.09)	0.81(0.75,0.87)*	0.91(0.83,0.99)*
<b>The highest education level of the HH</b>				
No education	1	1	1	1
Primary	1.14(1.02,1.28)*	0.92(0.81,1.04)	1.21(1.08,1.37)	1.01(0.88,1.16)
Secondary	1.66(1.46,1.87)*	0.92(0.80,1.07)	1.66(1.46,1.87)*	1.00(0.85,1.17)
High school	2.28(2.01,2.59)*	0.95(0.80,1.11)	2.42(2.13,2.75)*	1.09(0.91,1.30)
Tertiary	2.74(2.37,3.18)*	0.99(0.82,1.21)	2.63(2.29,3.02)*	0.84(0.68,1.03)
<b>Household size</b>				
1-3	1	1	1	1
4-6	0.68(0.62,0.74)*	0.89(0.80,0.98)*	0.68(0.63,0.74)*	0.87(0.79,0.97)
7 and more	0.58(0.53,0.65)*	0.91(0.80,1.03)	0.55(0.50,0.61)*	0.87(0.76,0.99)*
<b>Household wealth index</b>				
Poorest	1	1	1	1
Poor	1.83(1.57,2.13)*	1.68(1.44,1.97)*	0.50(0.36,0.64)*	1.44(1.25,1.67)*
Middle	2.46(2.13,2.83)*	2.02(1.74,2.36)*	0.86(0.73,0.99)*	1.94(1.68,2.24)*
Rich	3.27(2.84,3.76)*	2.63(2.25,3.07)*	1.41(1.28,1.55)*	2.98(2.55,3.50)*
Richest	5.36(4.65,6.18)*	3.71(3.11,4.43)*	1.85(1.71,1.99)*	4.58(3.76,5.57)*
<b>Place of residence</b>				
Rural	1	1	1	1
Urban	2.70(2.49,2.91)*	1.67(1.54,1.88)*	3.40(3.05,3.79)*	2.13(1.87,2.42)*
<b>Region</b>				
Hhohho	1	1	1	1

Manzini	0.95(0.86,1.06)	0.73(0.65,0.83)*	1.12(1.02,1.23)*	0.96(0.86,1.08)
Shiselweni	0.43(0.38,0.48)*	0.53(0.47,0.61)*	0.52(0.46,0.57)*	0.67(0.59,0.75)*
Lubombo	0.65(0.58,0.73)*	0.67(0.59,0.76)*	0.72(0.65,0.80)*	0.73(0.64,0.84)*
Observations		4819		4843
<b>Model fit</b>				
AIC		4518.92		4812.55
BIC		4609.65		4903.35

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Notes: COR=Crude odd ratio, AOR=Adjusted odds ratio, \*Significant at  $p < 0.05$ ; HH= household head