

Table S1. Demographics, household characteristics and history of malaria by quadrants in the study area, southwest Ethiopia.

Covariates		Quadrants				
		Q1	Q2	Q3	Q4	Total
		n (%)	n (%)	n (%)	n (%)	n (%)
Gender of HH head	Female	22 (11.0)	36 (12.2)	31 (15.9)	14 (13.7)	103 (13.1)
	Male	182 (89.0)	270 (87.8)	173 (84.1)	88 (86.3)	713 (86.9)
Age of the HH head (years)	<= 35	62 (30.4)	107 (34.3)	70 (32.9)	29 (29.0)	268 (32.4)
	36-40	35 (17.3)	53 (17.3)	42 (20.5)	17 (16.5)	147 (18.1)
	41-50	54 (25.6)	76 (25.0)	47 (23.3)	28 (26.7)	205 (24.9)
	>51	53 (26.7)	70 (23.4)	45 (23.3)	28 (27.8)	196 (24.6)
Education of HH	Above primary	38 (16.5)	28 (10.2)	16 (8.5)	17 (17.9)	99 (12.1)
	Primary	50 (25.6)	25 (8.4)	55 (26.6)	12 (10.7)	142 (17.6)
	No education	116 (57.9)	253 (81.4)	133 (64.9)	73 (71.4)	575 (70.3)
Occupation of HH head	Farmer	191 (93.6)	299 (97.5)	200(98.0)	99 (96.9)	789 (96.6)
	Government employee	10 (4.7)	4 (1.5)	2 (0.8)	1 (0.8)	17 (2.0)
	Other	3 (1.7)	3 (1.0)	2 (1.2)	2 (2.3)	10 (1.4)
Marital status of HH head	Married	178 (86.8)	277 (90.0)	181 (88.2)	93 (91.4)	729 (89.0)
	Widowed	12 (6.3)	20 (6.7)	15 (7.8)	7 (6.7)	54 (6.9)
	Single/divorced	14 (6.9)	9 (3.3)	8 (4.0)	2 (1.9)	33 (4.1)
History of malaria in the past year of HH head	No	154 (75.9)	270 (87.7)	165 (81.0)	75 (75.2)	664 (81.7)
	Yes	50 (24.1)	36 (12.3)	39 (19.0)	27 (24.8)	152 (18.3)
Family size	1-3 persons	34 (16.8)	53 (17.3)	37 (17.9)	14 (13.7)	138 (17.0)
	4-6 persons	118 (59.3)	165 (53.9)	114 (55.2)	54 (52.9)	451 (55.4)
	>=7 persons	52 (23.9)	88 (28.8)	53 (26.9)	34 (33.4)	227 (27.6)
Predominant material in HH walls	Mud	200 (98.2)	306 (100)	199 (96.9)	100 (98.0)	805 (98.5)
	Cements	4 (1.8)	-	5 (3.1)	2 (2.0)	11 (1.5)
Predominant material in HH roof	Iron	101 (51.3)	94 (31.8)	52 (26.2)	34 (31.9)	281 (34.8)
	Thatched	103 (48.7)	212 (68.2)	152 (73.8)	68 (68.1)	535 (65.2)
Firewood use for cooking	No	123 (58.9)	151 (49.1)	102 (50.9)	60 (60.7)	436 (53.2)
	Yes	81 (41.1)	155 (50.9)	102 (49.1)	42 (39.3)	380 (46.8)
Livestock ownership	No	15 (7.9)	6 (1.9)	12 (6.3)	7 (7.0)	40 (5.1)
	Yes	189 (92.1)	300 (98.1)	192 (93.7)	95 (93.0)	776 (94.9)
History of malaria in the past year of any household member	No	164 (82.1)	277 (90.3)	165 (81.4)	87 (85.9)	693 (85.4)
	Yes	40 (17.9)	29 (9.7)	39 (18.6)	15 (14.1)	123 (14.6)
Discussion about malaria in the past month	No	40 (20.8)	69 (22.3)	50 (26.1)	24 (25.8)	183 (23.4)
	Yes	164 (79.2)	237 (77.7)	154 (73.9)	78 (74.2)	633 (76.6)

Table S2. The surveyed population and LLIN ownership, access and use indicators in study villages, Southwest Ethiopia.

Quadrants	Village	People surveyed (n)	I1	I2	I3	I4	I5	I6
Quadrant 1	1	306	56.9	41.2	46.7	72.4	38.2	93.8
	2	270	90.2	78.4	82.4	86.9	74.4	97.3
	3	231	86.3	74.5	80.9	86.4	67.1	80.0
	4	263	92.2	82.4	86.7	89.4	76.0	90.9
Quadrant 2	5	257	96.1	88.2	91.5	91.8	85.2	94.0

	6	264	82.4	64.7	73.4	78.6	63.6	93.4
	7	273	74.5	60.8	67.4	81.6	57.5	87.8
	8	268	86.3	64.7	75.2	75.0	63.8	93.8
	9	267	96.1	80.4	89.9	83.7	78.2	85.5
	10	285	92.2	66.7	79.4	72.3	63.2	85.4
Quadrant 3	11	258	88.2	78.4	82.2	88.9	74.8	90.9
	12	288	90.2	70.6	80.9	78.3	72.6	94.0
	13	277	64.7	54.9	58.8	84.8	44.0	91.6
	14	235	86.3	76.5	81.2	88.6	70.2	87.6
Quadrant 4	15	286	70.5	64.7	66.5	91.7	53.5	80.6
	16	295	74.5	56.9	61.9	76.3	47.1	87.5

I: Calculated indicators of LLIN Coverage, Access and Use; n: number of Ind.