

Table 3 Sample allocation of clusters in each region and number of children age 0-60 months interviewed for MIS

Province	Region	Number of Children	Number of Children tested for Malaria	Malaria Cases	Number of Children Sampled Urban	Number of Children Sampled Rural	Number of cluster
Central	Kiambu	460	133	0	161	299	5
Central	Kirinyaga	322	76	0	156	166	4
Central	Murang'a	417	126	0	129	288	5
Central	Nyandarua	286	92	0	197	89	3
Central	Nyeri	332	90	0	126	206	4
Coast	Kilifi	976	357	64	244	732	8
Coast	Kwale	943	382	15	225	718	8
Coast	Lamu	378	125	0	175	203	4
Coast	Mombasa	665	178	1	665	0	8
Coast	Taita Taveta	504	171	0	169	335	6
Coast	Tana River	420	131	1	283	137	3
Eastern	Embu	731	214	0	297	434	8
Eastern	Isiolo	396	158	0	209	187	5
Eastern	Kitui	573	197	0	212	361	5
Eastern	Machakos	412	117	0	209	203	4
Eastern	Makueni	284	80	0	66	218	4
Eastern	Marsabit	433	193	1	227	206	4
Eastern	Meru	737	242	12	270	467	9
Nairobi	Nairobi	255	55	1	255	0	5
North Eastern	Garissa	558	228	0	265	293	4
North Eastern	Mandera	295	129	0	237	58	3
North Eastern	Wajir	443	200	0	236	207	4
Nyanza	Homa Bay	1844	932	61	523	1321	14
Nyanza	Kisii	599	228	3	214	385	5
Nyanza	Kisumu	1256	424	116	637	619	13
Nyanza	Migori	1323	543	154	558	765	11
Nyanza	Nyamira	482	168	5	245	237	4
Nyanza	Siaya	1227	469	195	313	914	11

Province	Region	Number of Children	Number of Children tested for Malaria	Malaria Cases	Number of Children Sampled Urban	Number of Children Sampled Rural	Number of cluster
Rift Valley	Baringo	327	97	10	129	198	4
Rift Valley	Bomet	839	335	9	244	595	7
Rift Valley	Elgeyo-Marakwet	656	216	1	291	365	8
Rift Valley	Kajiado	358	131	0	128	230	4
Rift Valley	Kericho	214	61	0	91	123	3
Rift Valley	Laikipia	333	107	0	118	215	4
Rift Valley	Nakuru	366	138	0	132	234	4
Rift Valley	Nandi	529	172	1	229	300	5
Rift Valley	Narok	335	116	4	120	215	4
Rift Valley	Samburu	259	104	0	72	187	3
Rift Valley	Trans Nzoia	606	229	4	200	406	5
Rift Valley	Turkana	366	137	21	119	247	4
Rift Valley	Uasin Gishu	546	176	1	256	290	5
Rift Valley	West Pokot	939	401	18	225	714	7
Western	Bungoma	2361	972	255	720	1641	18
Western	Busia	1371	547	268	244	1127	11
Western	Kakamega	1455	558	124	321	1134	12
Western	Vihiga	1240	422	46	343	897	12
Total	-	30651	11357	1391	11485	19166	291

Table 4 :Naive estimates

Region	est	n	se
Baringo	0.1030928	97	0.0308746

Region	est	n	se
Bomet	0.0268657	335	0.0088341
Bungoma	0.2623457	972	0.0141101
Busia	0.4899452	547	0.0213741
Elgeyo-Marakwet	0.0046296	216	0.0046189
Embu	0.0000000	214	0.0000000
Garissa	0.0000000	228	0.0000000
Homa Bay	0.0654506	932	0.0081012
Isiolo	0.0000000	158	0.0000000
Kajiado	0.0000000	131	0.0000000
Kakamega	0.2222222	558	0.0175997
Kericho	0.0000000	61	0.0000000
Kiambu	0.0000000	133	0.0000000
Kilifi	0.1792717	357	0.0203012
Kirinyaga	0.0000000	76	0.0000000
Kisii	0.0131579	228	0.0075466
Kisumu	0.2735849	424	0.0216499
Kitui	0.0000000	197	0.0000000
Kwale	0.0392670	382	0.0099376
Laikipia	0.0000000	107	0.0000000
Lamu	0.0000000	125	0.0000000
Machakos	0.0000000	117	0.0000000
Makueni	0.0000000	80	0.0000000
Mandera	0.0000000	129	0.0000000
Marsabit	0.0051813	193	0.0051679
Meru	0.0495868	242	0.0139551
Migori	0.2836096	543	0.0193435
Mombasa	0.0056180	178	0.0056022
Murang'a	0.0000000	126	0.0000000
Nairobi	0.0181818	55	0.0180158
Nakuru	0.0000000	138	0.0000000
Nandi	0.0058140	172	0.0057970
Narok	0.0344828	116	0.0169415
Nyamira	0.0297619	168	0.0131104
Nyandarua	0.0000000	92	0.0000000
Nyeri	0.0000000	90	0.0000000
Samburu	0.0000000	104	0.0000000

Region	est	n	se
Siaya	0.4157783	469	0.0227580
Taita Taveta	0.0000000	171	0.0000000
Tana River	0.0076336	131	0.0076044
Tharaka-Nithi	0.0000000	194	0.0000000
Trans Nzoia	0.0174672	229	0.0086570
Turkana	0.1532847	137	0.0307792
Uasin Gishu	0.0056818	176	0.0056657
Vihiga	0.1090047	422	0.0151706
Wajir	0.0000000	200	0.0000000
West Pokot	0.0448878	401	0.0103400

Table 5: Direct Estimate(HT)

Region	est	se
Baringo	0.1216111	0.0373881
Bomet	0.0222532	0.0085837
Bungoma	0.3503035	0.0192682
Busia	0.5228636	0.0223631
Elgeyo-Marakwet	0.0004462	0.0004464
Embu	0.0000000	0.0000000
Garissa	0.0000000	0.0000000
Homa Bay	0.0685629	0.0095171
Isiolo	0.0000000	0.0000000
Kajiado	0.0000000	0.0000000
Kakamega	0.2141831	0.0188386
Kericho	0.0000000	0.0000000
Kiambu	0.0000000	0.0000000
Kilifi	0.1188581	0.0154539
Kirinyaga	0.0000000	0.0000000
Kisii	0.0032800	0.0018849
Kisumu	0.2373749	0.0220633
Kitui	0.0000000	0.0000000
Kwale	0.0356482	0.0097710
Laikipia	0.0000000	0.0000000
Lamu	0.0000000	0.0000000

Region	est	se
Machakos	0.0000000	0.0000000
Makueni	0.0000000	0.0000000
Mandera	0.0000000	0.0000000
Marsabit	0.0027796	0.0027829
Meru	0.0580295	0.0165117
Migori	0.3088580	0.0217839
Mombasa	0.0044637	0.0044718
Murang'a	0.0000000	0.0000000
Nairobi	0.0306241	0.0302949
Nakuru	0.0000000	0.0000000
Nandi	0.0027821	0.0027805
Narok	0.0085859	0.0061466
Nyamira	0.0320255	0.0178170
Nyandarua	0.0000000	0.0000000
Nyeri	0.0000000	0.0000000
Samburu	0.0000000	0.0000000
Siaya	0.4317085	0.0239140
Taita Taveta	0.0000000	0.0000000
Tana River	0.0033756	0.0033870
Tharaka-Nithi	0.0000000	0.0000000
Trans Nzoia	0.0251535	0.0124461
Turkana	0.1339589	0.0322783
Uasin Gishu	0.0070939	0.0070910
Vihiga	0.1323147	0.0187494
Wajir	0.0000000	0.0000000
West Pokot	0.0341164	0.0091820

Figure 4: Quantile-quantile plot comparing the direct estimates to a Gaussian distribution

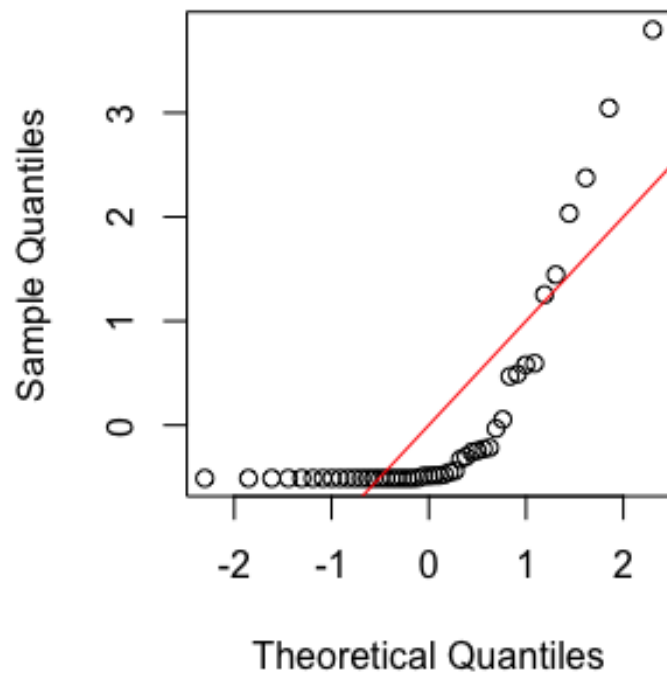


Table 6: Smoothed weighed estimate (FH)

Region	mean	var	median
Baringo	0.09	0.01	0.07
Bomet	0.03	0.00	0.02
Bungoma	0.33	0.01	0.32
Busia	0.51	0.00	0.51
Elgeyo-Marakwet	0.00	0.00	0.00
Embu	0.07	0.01	0.03
Garissa	0.07	0.01	0.03
Homa Bay	0.07	0.00	0.07
Isiolo	0.06	0.01	0.03
Kajiado	0.07	0.01	0.03
Kakamega	0.21	0.00	0.20
Kericho	0.09	0.01	0.05
Kiambu	0.07	0.01	0.03
Kilifi	0.10	0.00	0.09
Kirinyaga	0.08	0.01	0.03
Kisii	0.01	0.00	0.01
Kisumu	0.23	0.00	0.23
Kitui	0.07	0.01	0.03
Kwale	0.04	0.00	0.04
Laikipia	0.07	0.01	0.03
Lamu	0.08	0.02	0.03
Machakos	0.07	0.01	0.03
Makueni	0.08	0.01	0.03
Mandera	0.10	0.03	0.03
Marsabit	0.01	0.00	0.01
Meru	0.06	0.00	0.05
Migori	0.29	0.00	0.28
Mombasa	0.01	0.00	0.01
Murang'a	0.08	0.01	0.03
Nairobi	0.04	0.00	0.03
Nakuru	0.07	0.01	0.04
Nandi	0.01	0.00	0.01
Narok	0.02	0.00	0.02
Nyamira	0.03	0.00	0.03
Nyandarua	0.08	0.01	0.03

Region	mean	var	median
Nyeri	0.08	0.01	0.03
Samburu	0.07	0.01	0.03
Siaya	0.42	0.00	0.42
Taita Taveta	0.07	0.01	0.03
Tana River	0.02	0.00	0.01
Tharaka-Nithi	0.08	0.01	0.03
Trans Nzoia	0.04	0.00	0.03
Turkana	0.13	0.00	0.13
Uasin Gishu	0.02	0.00	0.01
Vihiga	0.13	0.00	0.13
Wajir	0.07	0.01	0.03
West Pokot	0.04	0.00	0.03