A.1   Statistical Comparison of Estimates from EIVC1 and EICV2: 95 Percent Confidence Intervals and Tests of Hypothesis

The estimates from the EICV1 and EICV2 data presented in the preliminary report are subject to sampling variability, which can be measured by the standard error calculated from the survey data. A simple way of interpreting the precision of the survey estimates is through a confidence interval, which specifies the lower and upper limit of an interval that contains the true value being estimated with a specified level of confidence. In this annex the 95 percent confidence intervals are presented for the main EICV1 and EICV2 estimates appearing in the tables of the report. Each of these intervals has a 95 percent chance of containing the true value being estimated. The 95 percent confidence interval for a survey estimate $\hat{p}$ is calculated as follows:

$$\hat{p} \pm 1.96 \times s(\hat{p}),$$

where:

$$s(\hat{p}) = \quad \text{standard error (square root of variance) of } \hat{p}$$

One way of statistically comparing the EICV1 and EICV2 estimates for the same characteristics is to determine whether there is any overlap in their respective confidence intervals. If these intervals do not overlap, we can conclude that the estimates from the two surveys are significantly different, with at least a 95 percent level of confidence. This is considered a conservative test, meaning that if there is no overlap in the confidence intervals, the probability that the difference is significant is actually greater than the stated confidence level.

A test of hypothesis will provide a more accurate test to determine whether the difference between two survey estimates is statistically significant. The following null hypothesis would be tested:

$$H_o : \hat{p}_1 = \hat{p}_2,$$

where $\hat{p}_1$ and $\hat{p}_2$ are estimates from the EICV1 and EICV2 data.

If this null hypothesis can be rejected with a specified level of confidence, then the difference between the two estimates can be considered statistically significant.

First it is necessary to calculate the standard error of the difference between the two survey estimates. The variance of this estimated difference can be expressed with the following formula:

$$\text{var}(\hat{p}_1 - \hat{p}_2) = \text{var}(\hat{p}_1) + \text{var}(\hat{p}_2) - 2 \times \text{cov}(\hat{p}_1, \hat{p}_2),$$

where $\text{cov}(\hat{p}_1, \hat{p}_2)$ is the covariance between the two estimates.

Since the EICV1 and EICV2 samples are independent and the sampling frames are from two different censuses, the covariance can be considered zero, and the variance of the difference

would be equal to the sum of the variances of the estimates from the two surveys. Therefore the standard error of the estimated difference can be calculated as follows:

$$s(\hat{p}_1 - \hat{p}_2) = \sqrt{\text{var}(\hat{p}_1) + \text{var}(\hat{p}_2)}$$

In order to test the null hypothesis, we can calculate the following Z statistic:

$$Z_o = \frac{\hat{p}_1 - \hat{p}_2}{s(\hat{p}_1 - \hat{p}_2)}$$

The p-value corresponding to Z_o can be looked up in a table based on the normal distribution, in order to determine the probability of the null hypothesis being true. If the p-value is less than 0.05, the null hypothesis can be rejected at the 95 percent confidence level, thus concluding that there is a statistically significant difference. The value of Z_o corresponding to a p-value of 0.05 is 1.96, so if Z_o is greater than 1.96, the difference can be considered statistically significant.

This type of hypothesis test was done for the estimates of poverty incidence by domain from the EICV1 and EICV2 data, in order to identify any domain for which there are statistically significant differences between the estimates of poverty incidence from the two surveys. The results from these tests of hypothesis are presented in the first table of this annex. The p-values were only obtained for domains where the value of Z_o was greater than 1.96.

The remaining tables in this annex show the main EICV1 and EICV2 estimates with the corresponding 95 percent confidence intervals and the number of observations.

Table A.1   Hypothesis test for comparing estimates of poverty incidence from EICV1 and EICV2 by domain

Null hypothesis:

Ho: p(EICV1)=p(EICV2)

Domain	EICV1		EICV2		Difference (EICV1-EICV2)	SE(Diff.)	Z-value	p-value
	Estimate	S.E.	Estimate	S.E.				
RWANDA	0.604	0.010	0.569	0.009	0.035	0.013	2.6015	0.0094
STRATUM 2002								
City of Kigali	0.161	0.033	0.130	0.014	0.031	0.036	0.8648	
Other Urban	0.465	0.032	0.415	0.033	0.050	0.046	1.0877	
Rural	0.661	0.012	0.625	0.010	0.036	0.016	2.3047	0.0214
NEW PROVINCE								
Kigali	0.244	0.036	0.202	0.027	0.042	0.045	0.9333	
Southern	0.658	0.019	0.673	0.016	-0.015	0.025	-0.6039	
Western	0.631	0.019	0.620	0.020	0.011	0.028	0.3987	
Northern	0.669	0.023	0.627	0.025	0.042	0.034	1.2364	
Eastern	0.618	0.028	0.504	0.022	0.114	0.036	3.2014	0.0014
OLD PROVINCE								
City of Kigali	0.161	0.033	0.130	0.014	0.031	0.036	0.8648	
Kigali Ngali	0.707	0.038	0.465	0.036	0.242	0.052	4.6232	<0.001
Gitarama	0.538	0.035	0.565	0.026	-0.027	0.044	-0.6193	
Butare	0.735	0.029	0.706	0.029	0.029	0.041	0.7071	
Gikongoro	0.761	0.022	0.792	0.025	-0.031	0.033	-0.9309	
Cyangugu	0.639	0.035	0.614	0.038	0.025	0.052	0.4839	
Kibuye	0.731	0.022	0.645	0.024	0.086	0.033	2.6415	0.0082
Gisenyi	0.549	0.032	0.618	0.034	-0.069	0.047	-1.4778	
Ruhengeri	0.712	0.024	0.645	0.036	0.067	0.043	1.5485	
Byumba	0.647	0.037	0.672	0.025	-0.025	0.045	-0.5599	
Umutara	0.537	0.041	0.454	0.042	0.083	0.059	1.4141	
Kibungo	0.537	0.048	0.503	0.031	0.034	0.057	0.5950	
SEX OF HEAD								
Male	0.581	0.012	0.558	0.011	0.023	0.016	1.4129	
Female	0.665	0.014	0.602	0.013	0.063	0.019	3.2976	<0.001

Table A.2 Estimates of poverty incidence by domain, with 95 percent confidence intervals, from EICV1 and EICV2

Domain	EICV1				EICV2			
	Estimate	Confidence Interval		No. Observ.	Estimate	Confidence Interval		No. Observ.
		Lower Limit	Upper Limit			Lower Limit	Upper Limit	
RWANDA	0.604	0.584	0.625	6,420	0.569	0.550	0.587	6,900
STRATUM 2002								
City of Kigali	0.161	0.096	0.227	792	0.130	0.102	0.158	900
Other Urban	0.465	0.402	0.528	669	0.415	0.351	0.479	720
Rural	0.661	0.638	0.684	4,959	0.625	0.604	0.645	5,280
NEW PROVINCE								
City of Kigali	0.244	0.175	0.314	885	0.202	0.148	0.255	1,026
Southern	0.658	0.621	0.694	1,558	0.673	0.642	0.704	1,707
Western	0.631	0.594	0.667	1,605	0.620	0.581	0.659	1,653
Northern	0.669	0.624	0.714	1,012	0.627	0.579	0.675	1,059
Eastern	0.618	0.562	0.673	1,360	0.504	0.461	0.546	1,455
OLD PROVINCE								
City of Kigali	0.161	0.096	0.227	792	0.130	0.102	0.158	900
Kigali Ngali	0.707	0.632	0.782	441	0.465	0.395	0.535	534
Gitarama	0.538	0.469	0.607	514	0.565	0.514	0.616	606
Butare	0.735	0.678	0.791	559	0.706	0.649	0.762	606
Gikongoro	0.761	0.718	0.803	497	0.792	0.743	0.841	507
Cyangugu	0.639	0.571	0.707	506	0.614	0.540	0.687	525
Kibuye	0.731	0.688	0.774	496	0.645	0.598	0.692	525
Gisenyi	0.549	0.487	0.611	543	0.618	0.551	0.685	543
Ruhengeri	0.712	0.664	0.760	543	0.645	0.573	0.716	552
Byumba	0.647	0.575	0.720	492	0.672	0.622	0.722	543
Umutara	0.537	0.456	0.618	501	0.454	0.372	0.536	498
Kibungo	0.537	0.444	0.630	536	0.503	0.442	0.565	561
SEX HEAD HH.								
Male	0.581	0.558	0.604	4,386	0.558	0.537	0.579	4,954
Female	0.665	0.638	0.693	2,034	0.602	0.576	0.629	1,946

Table A.3   Estimates of extreme poverty incidence by domain, with 95 percent confidence intervals, from EICV1 and EICV2

Domain	EICV1				EICV2			
	Estimate	Confidence Interval		No. Observ.	Estimate	Confidence Interval		No. Observ.
		Lower Limit	Upper Limit			Lower Limit	Upper Limit	
RWANDA	0.413	0.392	0.434	6,420	0.369	0.352	0.386	6,900
STRATUM 2002								
City of Kigali	0.084	0.030	0.139	792	0.063	0.044	0.082	900
Other Urban	0.285	0.235	0.336	669	0.253	0.196	0.309	720
Rural	0.457	0.433	0.482	4,959	0.409	0.390	0.429	5,280
NEW PROVINCE								
City of Kigali	0.154	0.096	0.212	885	0.111	0.069	0.152	1,026
Southern	0.459	0.421	0.497	1,558	0.472	0.441	0.503	1,707
Western	0.418	0.382	0.455	1,605	0.409	0.369	0.450	1,653
Northern	0.472	0.420	0.523	1,012	0.408	0.364	0.452	1,059
Eastern	0.417	0.358	0.476	1,360	0.287	0.251	0.323	1,455
OLD PROVINCE								
City of Kigali	0.084	0.030	0.139	792	0.063	0.044	0.082	900
Kigali Ngali	0.540	0.451	0.628	441	0.264	0.208	0.320	534
Gitarama	0.345	0.280	0.409	514	0.312	0.269	0.356	606
Butare	0.525	0.460	0.589	559	0.534	0.477	0.592	606
Gikongoro	0.565	0.508	0.623	497	0.629	0.571	0.686	507
Cyangugu	0.452	0.384	0.520	506	0.409	0.343	0.475	525
Kibuye	0.471	0.405	0.536	496	0.417	0.364	0.470	525
Gisenyi	0.360	0.303	0.418	543	0.423	0.349	0.498	543
Ruhengeri	0.494	0.434	0.554	543	0.411	0.345	0.477	552
Byumba	0.438	0.350	0.526	492	0.433	0.376	0.491	543
Umutara	0.332	0.251	0.413	501	0.241	0.179	0.304	498
Kibungo	0.332	0.255	0.409	536	0.301	0.244	0.358	561
SEX HEAD HH.								
Male	0.388	0.364	0.412	4,386	0.356	0.337	0.375	4,954
Female	0.479	0.448	0.509	2,034	0.411	0.384	0.438	1,946

Table A.4   Estimates of poverty depth by domain, with 95 percent confidence intervals, from EICV1 and EICV2

Domain	EICV1				EICV2			
	Estimate	Confidence Interval		No. Observ.	Estimate	Confidence Interval		No. Observ.
		Lower Limit	Upper Limit			Lower Limit	Upper Limit	
RWANDA	0.415	0.404	0.427	3,436	0.400	0.391	0.410	3,528
STRATUM 2002								
City of Kigali	0.344	0.275	0.413	95	0.294	0.252	0.336	100
Other Urban	0.359	0.331	0.388	232	0.373	0.338	0.408	264
Rural	0.421	0.408	0.433	3,109	0.404	0.395	0.414	3,164
NEW PROVINCE								
City of Kigali	0.399	0.352	0.446	148	0.321	0.277	0.365	145
Southern	0.425	0.407	0.443	994	0.427	0.411	0.442	1,103
Western	0.400	0.378	0.422	946	0.410	0.390	0.430	975
Northern	0.424	0.400	0.449	616	0.401	0.380	0.422	619
Eastern	0.415	0.383	0.447	732	0.361	0.341	0.381	686
OLD PROVINCE								
City of Kigali	0.344	0.275	0.413	95	0.294	0.252	0.336	100
Kigali Ngali	0.468	0.425	0.511	282	0.364	0.329	0.400	232
Gitarama	0.376	0.343	0.409	265	0.341	0.317	0.365	310
Butare	0.433	0.403	0.463	372	0.457	0.431	0.484	408
Gikongoro	0.469	0.437	0.500	366	0.481	0.454	0.508	395
Cyangugu	0.449	0.408	0.490	290	0.428	0.386	0.470	312
Kibuye	0.384	0.351	0.417	333	0.399	0.365	0.432	321
Gisenyi	0.378	0.340	0.417	281	0.414	0.385	0.444	308
Ruhengeri	0.422	0.389	0.456	342	0.405	0.375	0.436	328
Byumba	0.410	0.372	0.448	302	0.394	0.365	0.422	345
Umutara	0.396	0.340	0.452	238	0.321	0.285	0.358	204
Kibungo	0.363	0.321	0.404	270	0.366	0.337	0.395	265
SEX HEAD HH.								
Male	0.404	0.391	0.418	2,230	0.392	0.381	0.403	2,456
Female	0.441	0.424	0.457	1,206	0.426	0.409	0.442	1,072

Table A.5   Percentage of households headed by children by domain, with 95 percent confidence intervals, from EICV1 and EICV2

Domain	EICV1				EICV2			
	Estimate	Confidence Interval		No. Observ.	Estimate	Confidence Interval		No. Observ.
		Lower Limit	Upper Limit			Lower Limit	Upper Limit	
RWANDA	1.3	1.0	1.6	6,420	0.7	0.5	0.9	6,900
STRATUM 2002								
City of Kigali	1.5	0.7	2.3	792	0.5	0.1	0.8	900
Other Urban	1.6	0.6	2.5	669	1.3	0.3	2.4	720
Rural	1.2	0.9	1.6	4,959	0.6	0.5	0.8	5,280
NEW PROVINCE								
City of Kigali	1.4	0.7	2.0	885	0.4	0.1	0.6	1,026
Southern	1.4	0.7	2.1	1,558	0.5	0.3	0.8	1,707
Western	1.3	0.8	1.8	1,605	0.8	0.4	1.3	1,653
Northern	1.1	0.4	1.8	1,012	1.0	0.5	1.6	1,059
Eastern	1.3	0.7	2.0	1,360	0.6	0.3	0.9	1,455
QUINTILE								
Lowest	1.3	0.5	2.1	1,053	0.8	0.3	1.3	1,180
Second	1.1	0.6	1.5	1,112	0.7	0.2	1.2	1,238
Third	1.6	0.9	2.3	1,244	0.5	0.2	0.7	1,321
Fourth	1.5	0.8	2.2	1,301	0.8	0.4	1.2	1,418
Highest	1.0	0.6	1.4	1,710	0.6	0.3	0.9	1,743
POVERTY								
Poor	1.3	0.9	1.7	3,436	0.7	0.4	0.9	3,528
Non-Poor	1.3	0.8	1.7	2,984	0.7	0.5	0.9	3,372

Table A.6   Percentage of households headed by females by domain, with 95 percent confidence intervals, from EICV1 and EICV2

Domain	EICV1				EICV2			
	Estimate	Confidence Interval		No. Observ.	Estimate	Confidence Interval		No. Observ.
		Lower Limit	Upper Limit			Lower Limit	Upper Limit	
RWANDA	27.6	26.1	29.0	6,420	23.8	22.6	24.9	6,900
STRATUM 2002								
City of Kigali	27.7	23.4	31.9	792	21.9	18.8	25.1	900
Other Urban	30.4	26.4	34.4	669	27.2	23.1	31.3	720
Rural	27.3	25.6	29.0	4,959	23.6	22.3	24.8	5,280
NEW PROVINCE								
City of Kigali	29.6	25.2	34.1	885	23.5	19.9	27.1	1,026
Southern	29.6	27.0	32.3	1,558	25.0	23.0	27.1	1,707
Western	26.9	23.6	30.2	1,605	23.8	21.5	26.1	1,653
Northern	23.3	20.3	26.3	1,012	22.0	19.1	24.8	1,059
Eastern	29.3	25.9	32.7	1,360	23.9	21.4	26.4	1,455
QUINTILE								
Lowest	34.1	30.7	37.5	1,053	28.7	25.9	31.5	1,180
Second	29.9	26.4	33.3	1,112	24.2	21.6	26.8	1,238
Third	26.5	23.9	29.2	1,244	22.9	20.4	25.4	1,321
Fourth	25.1	22.0	28.1	1,301	22.5	20.2	24.9	1,418
Highest	22.3	19.8	24.7	1,710	20.6	18.3	22.8	1,743
POVERTY								
Poor	30.4	28.5	32.3	3,436	25.2	23.6	26.8	3,528
Non-Poor	23.3	21.4	25.2	2,984	21.9	20.3	23.5	3,372

Table A.7   Percentage of households headed by widows by domain, with 95 percent confidence intervals, from EICV1 and EICV2

Domain	EICV1				EICV2			
	Estimate	Confidence Interval		No. Observ.	Estimate	Confidence Interval		No. Observ.
		Lower Limit	Upper Limit			Lower Limit	Upper Limit	
RWANDA	22.0	20.7	23.4	6,420	18.7	17.6	19.7	6,900
STRATUM 2002								
City of Kigali	19.4	14.7	24.2	792	16.0	13.4	18.6	900
Other Urban	24.2	19.9	28.6	669	19.6	15.9	23.3	720
Rural	22.1	20.6	23.6	4,959	18.8	17.6	20.0	5,280
NEW PROVINCE								
City of Kigali	22.4	17.3	27.4	885	17.3	13.8	20.8	1,026
Southern	22.4	20.2	24.7	1,558	20.0	18.0	21.9	1,707
Western	21.5	18.6	24.4	1,605	19.7	17.6	21.8	1,653
Northern	19.4	16.8	22.1	1,012	16.7	14.2	19.2	1,059
Eastern	24.8	21.6	28.0	1,360	18.3	16.0	20.6	1,455
QUINTILE								
Lowest	28.1	24.9	31.3	1,053	22.3	19.8	24.9	1,180
Second	24.6	21.3	27.9	1,112	19.1	16.8	21.5	1,238
Third	21.4	18.8	23.9	1,244	18.0	15.8	20.2	1,321
Fourth	20.0	17.3	22.6	1,301	18.1	15.9	20.2	1,418
Highest	16.2	13.8	18.6	1,710	15.8	13.8	17.8	1,743
POVERTY								
Poor	24.8	23.1	26.6	3,436	19.7	18.2	21.1	3,528
Non-Poor	17.8	16.0	19.6	2,984	17.4	15.9	18.8	3,372

Table A.8   Estimates of net primary school enrolment rates by domain, with 95 percent confidence intervals, from EICV1 and EICV2

Domain	EICV1				EICV2			
	Estimate	Confidence Interval		No. Observ.	Estimate	Confidence Interval		No. Observ.
		Lower Limit	Upper Limit			Lower Limit	Upper Limit	
RWANDA	73.7	72.0	75.4	25,143	85.9	84.7	87.1	28,018
STRATUM 2002								
City of Kigali	82.7	78.7	86.7	3,323	90.4	87.9	92.8	3,862
Other Urban	74.1	68.2	79.9	2,660	90.1	86.8	93.5	2,937
Rural	72.9	71.1	74.8	19,160	85.1	83.8	86.4	21,219
SEX								
Male	73.7	71.5	75.9	11,468	84.8	83.3	86.4	13,141
Female	73.7	71.7	75.8	13,675	86.9	85.4	88.4	14,877
STRATUM BY SEX								
City of Kigali								
Male	81.5	75.0	87.9	1,507	89.8	86.4	93.2	1,871
Female	83.9	78.8	89.0	1,816	91.0	87.2	94.8	1,991
Other Urban								
Male	75.5	69.2	81.8	1,208	89.0	84.7	93.2	1,359
Female	72.8	65.4	80.2	1,452	91.3	86.7	95.9	1,578
Rural								
Male	72.9	70.4	75.3	8,753	84.0	82.3	85.7	9,911
Female	73.0	70.8	75.3	10,407	86.2	84.5	87.8	11,308

Table A.9   Estimates of gross primary school enrolment rates by domain, with 95 percent confidence intervals, from EICV1 and EICV2

Domain	EICV1				EICV2			
	Estimate	Confidence Interval		No. Observ.	Estimate	Confidence Interval		No. Observ.
		Lower Limit	Upper Limit			Lower Limit	Upper Limit	
RWANDA	110.5	107.5	113.5	25,143	140.2	137.0	143.3	28,018
STRATUM 2002								
City of Kigali	112.9	106.0	119.8	3,323	130.5	123.9	137.0	3,862
Other Urban	115.1	104.8	125.4	2,660	149.6	138.0	161.2	2,937
Rural	109.9	106.5	113.2	19,160	139.9	136.4	143.4	21,219
SEX								
Male	111.4	107.1	115.6	11,468	140.4	135.7	145.0	13,141
Female	109.6	105.9	113.3	13,675	140.0	136.0	144.0	14,877
STRATUM BY SEX								
City of Kigali								
Male	107.4	97.4	117.3	1,507	129.3	120.3	138.3	1,871
Female	118.3	107.1	129.5	1,816	131.7	122.4	141.0	1,991
Other Urban								
Male	117.8	106.3	129.3	1,208	149.4	131.8	167.1	1,359
Female	112.6	97.9	127.4	1,452	149.7	136.8	162.6	1,578
Rural								
Male	111.2	106.4	116.0	8,753	140.2	135.1	145.4	9,911
Female	108.7	104.6	112.7	10,407	139.6	135.1	144.0	11,308

Table A.10   Estimates of net secondary school enrolment rates by domain, with 95 percent confidence intervals, from EICV1 and EICV2

Domain	EICV1				EICV2			
	Estimate	Confidence Interval		No. Observ.	Estimate	Confidence Interval		No. Observ.
		Lower Limit	Upper Limit			Lower Limit	Upper Limit	
RWANDA	6.9	6.0	7.8	25,143	10.0	9.0	11.0	28,018
STRATUM 2002								
City of Kigali	23.6	19.3	27.8	3,323	29.1	25.3	32.9	3,862
Other Urban	9.3	6.2	12.4	2,660	13.8	10.2	17.4	2,937
Rural	5.0	4.1	5.9	19,160	7.9	6.9	9.0	21,219
SEX								
Male	6.2	5.2	7.3	11,468	10.6	9.2	11.9	13,141
Female	7.5	6.4	8.6	13,675	9.5	8.2	10.7	14,877
STRATUM BY SEX								
City of Kigali								
Male	24.9	19.4	30.4	1,507	29.2	23.1	35.4	1,871
Female	22.7	18.1	27.3	1,816	29.0	23.8	34.1	1,991
Other Urban								
Male	7.4	4.2	10.6	1,208	12.6	8.5	16.7	1,359
Female	11.3	6.7	15.9	1,452	14.9	9.9	20.0	1,578
Rural								
Male	4.5	3.4	5.6	8,753	8.9	7.5	10.3	9,911
Female	5.4	4.3	6.6	10,407	7.0	5.8	8.2	11,308

**Table A.11   Literacy rate (%) for population 15 years and older by domain,
with 95 percent confidence intervals, from EICV2**

Domain	EICV2			
	Estimate	Confidence Interval		No. Observ.
		Lower Limit	Upper Limit	
RWANDA	65.3	64.3	66.3	28,018
STRATUM 2002				
City of Kigali	86.5	84.7	88.2	3,862
Other Urban	70.9	67.6	74.2	2,937
Rural	62.5	61.4	63.7	21,219
SEX				
Male	71.5	70.3	72.6	13,141
Female	60.1	58.8	61.3	14,877
STRATUM BY SEX				
City of Kigali				
Male	89.5	87.7	91.3	1,871
Female	83.6	81.3	86.0	1,991
Other Urban				
Male	75.6	71.5	79.7	1,359
Female	67.0	63.3	70.7	1,578
Rural				
Male	69.1	67.7	70.4	9,911
Female	57.1	55.6	58.5	11,308

Table A.12   Literacy rate (%) for population 15 to 24 years old by domain, with 95 percent confidence intervals, from EICV2

Domain	EICV2			
	Estimate	Confidence Interval		No. Observ.
		Lower Limit	Upper Limit	
RWANDA	76.8	75.5	78.2	76.8
STRATUM 2002				
City of Kigali	88.1	86.0	90.3	88.1
Other Urban	81.5	77.7	85.4	81.5
Rural	75.1	73.5	76.6	75.1
SEX				
Male	76.9	75.2	78.6	76.9
Female	76.8	75.1	78.5	76.8
STRATUM BY SEX				
City of Kigali				
Male	88.8	86.0	91.5	88.8
Female	87.6	84.8	90.4	87.6
Other Urban				
Male	78.4	72.9	84.0	78.4
Female	84.5	80.7	88.2	84.5
Rural				
Male	75.5	73.6	77.4	75.5
Female	74.7	72.7	76.7	74.7

Table A.13 Percentage of population reporting any illness in the last two weeks by domain, with 95 percent confidence intervals, from EICV1 and EICV2

Domain	EICV1				EICV2			
	Estimate	Confidence Interval		No. Observ.	Estimate	Confidence Interval		No. Observ.
		Lower Limit	Upper Limit			Lower Limit	Upper Limit	
RWANDA	24.7	23.9	25.5	32,153	19.6	18.9	20.3	34,785
STRATUM 2002								
City of Kigali	17.6	15.0	20.3	4,162	17.3	15.5	19.1	4,686
Other Urban	25.4	22.7	28.2	3,401	19.0	16.3	21.8	3,569
Rural	25.4	24.4	26.3	24,590	19.9	19.1	20.7	26,530
SEX								
Male	22.7	21.7	23.7	14,928	18.3	17.5	19.0	16,528
Female	26.5	25.5	27.4	17,225	20.9	20.0	21.7	18,257
STRATUM BY SEX								
City of Kigali								
Male	14.6	11.7	17.6	1,900	16.0	14.3	17.8	2,297
Female	20.2	17.2	23.2	2,262	18.6	16.2	20.9	2,389
Other Urban								
Male	22.4	18.6	26.2	1,586	16.1	13.7	18.5	1,666
Female	28.0	25.3	30.8	1,815	21.6	18.2	25.0	1,903
Rural								
Male	23.5	22.4	24.6	11,442	18.7	17.8	19.6	12,565
Female	26.9	25.8	28.0	13,148	21.0	20.1	21.9	13,965

Table A.14 Percentage of population consulting a medical practitioner in the last two weeks by domain, with 95 percent confidence intervals, from EICV1 and EICV2

Domain	EICV1				EICV2			
	Estimate	Confidence Interval		No. Observ.	Estimate	Confidence Interval		No. Observ.
		Lower Limit	Upper Limit			Lower Limit	Upper Limit	
RWANDA	5.6	5.2	6.0	32,153	6.5	6.1	6.9	34,785
QUINTILE								
Lowest	3.6	2.9	4.3	5,937	4.0	3.4	4.7	6,468
Second	4.1	3.4	4.9	5,883	5.6	4.9	6.3	6,599
Third	5.5	4.7	6.2	6,139	6.3	5.5	7.0	6,591
Fourth	6.8	5.9	7.7	6,192	7.2	6.4	8.0	6,746
Highest	8.1	7.3	8.9	8,002	9.3	8.4	10.2	8,381
SEX								
Male	5.3	4.8	5.9	14,928	6.1	5.6	6.6	16,528
Female	5.9	5.4	6.3	17,225	6.8	6.3	7.3	18,257
QUINTILE BY SEX								
Lowest								
Male	4.0	3.0	5.0	2,659	3.8	3.0	4.6	2,970
Female	3.3	2.5	4.0	3,278	4.2	3.4	5.0	3,498
Second								
Male	4.1	3.1	5.0	2,733	5.6	4.7	6.5	3,102
Female	4.2	3.3	5.1	3,150	5.5	4.6	6.4	3,497
Third								
Male	5.8	4.7	6.9	2,809	6.4	5.4	7.4	3,105
Female	5.2	4.3	6.0	3,330	6.1	5.3	7.0	3,486
Fourth								
Male	5.6	4.6	6.7	2,921	6.9	5.9	7.9	3,264
Female	7.9	6.7	9.0	3,271	7.5	6.5	8.5	3,482
Highest								
Male	7.0	5.9	8.1	3,806	7.8	6.7	8.9	4,087
Female	9.2	8.0	10.4	4,196	10.8	9.6	11.9	4,294

Table A.15 Percentage of population reporting malaria as the main illness in the last two weeks by domain, with 95 percent confidence intervals, from EICV2

Domain	EICV2			
	Estimate	Confidence Interval		No. Observ.
		Lower Limit	Upper Limit	
RWANDA	34.1	32.4	35.8	34,785
STRATUM 2002				
City of Kigali	26.0	20.9	31.1	4,686
Other Urban	32.6	27.4	37.9	3,569
Rural	34.9	33.0	36.7	26,530

Table A.16 Percentage of population reporting intestinal parasites as the main illness in the last two weeks by domain, with 95 percent confidence intervals, from EICV2

Domain	EICV2			
	Estimate	Confidence Interval		No. Observ.
		Lower Limit	Upper Limit	
RWANDA	21.4	20.2	22.6	34,785
STRATUM 2002				
City of Kigali	17.0	13.9	20.1	4,686
Other Urban	19.6	16.1	23.1	3,569
Rural	21.9	20.5	23.2	26,530

Table A.17 Percentage of population reporting respiratory infection as the main illness in the last two weeks by domain, with 95 percent confidence intervals, from EICV2

Domain	EICV2			
	Estimate	Confidence Interval		No. Observ.
		Lower Limit	Upper Limit	
RWANDA	18.2	16.9	19.5	34,785
STRATUM 2002				
City of Kigali	30.6	24.7	36.6	4,686
Other Urban	22.6	16.6	28.6	3,569
Rural	16.8	15.5	18.1	26,530

Table A.18   Percentage of women receiving antenatal care during last pregnancy by domain, with 95 percent confidence intervals, from EICV1 and EICV2

Domain	EICV1				EICV2			
	Estimate	Confidence Interval		No. Observ.	Estimate	Confidence Interval		No. Observ.
		Lower Limit	Upper Limit			Lower Limit	Upper Limit	
RWANDA	82.4	80.2	84.7	32,153	94.9	94.3	95.6	34,785
QUINTILE								
Lowest	81.0	74.1	87.9	5,937	93.3	91.5	95.2	6,468
Second	81.1	75.4	86.8	5,883	95.2	93.8	96.7	6,599
Third	75.5	69.6	81.4	6,139	94.4	93.0	95.9	6,591
Fourth	86.2	82.3	90.2	6,192	96.5	95.2	97.7	6,746
Highest	86.5	82.3	90.7	8,002	95.1	93.8	96.4	8,381

Table A.19   Percentage of population with no health insurance by domain, with 95 percent confidence intervals, from EICV1 and EICV2

Domain	EICV2			
	Estimate	Confidence Interval		No. Observ.
		Lower Limit	Upper Limit	
RWANDA	56.5	54.7	58.4	34,785
STRATUM 2002				
City of Kigali	61.3	57.7	64.9	4,686
Other Urban	60.2	54.5	65.9	3,569
Rural	55.7	53.6	57.9	26,530
QUINTILE				
Lowest	67.0	63.5	70.5	6,468
Second	62.6	59.3	65.9	6,599
Third	55.2	52.1	58.3	6,591
Fourth	49.4	46.3	52.5	6,746
Highest	48.6	45.7	51.5	8,381

Table A.20 Estimates of percentage of adult population (16 years and older) in the agriculture industry by domain, with 95 percent confidence intervals, from EICV1 and EICV2

Domain	EICV1				EICV2			
	Estimate	Confidence Interval		No. Observ.	Estimate	Confidence Interval		No. Observ.
		Lower Limit	Upper Limit			Lower Limit	Upper Limit	
RWANDA	88.8	87.7	89.8	14,071	79.8	78.6	80.9	15,615
STRATUM 2002								
City of Kigali	16.7	8.1	25.3	1,463	14.9	12.2	17.6	1,959
Other Urban	79.7	73.7	85.6	1,386	55.7	49.2	62.2	1,573
Rural	95.0	94.3	95.7	11,222	87.6	86.6	88.6	12,083
NEW REGION								
Kigali	35.4	23.9	46.9	1,676	28.5	21.5	35.4	2,245
Southern	92.2	90.8	93.6	3,520	83.6	80.9	86.3	3,815
Western	94.5	93.1	95.8	3,564	84.1	82.1	86.2	3,771
Northern	92.8	91.1	94.5	2,215	85.2	83.1	87.4	2,425
Eastern	95.6	94.0	97.2	3,096	87.0	85.0	89.0	3,359
QUINTILES								
Lowest	97.7	96.9	98.5	2,486	90.5	88.9	92.1	2,665
Second	96.7	95.8	97.6	2,527	88.9	87.5	90.4	2,884
Third	95.5	94.5	96.5	2,789	88.0	86.6	89.4	3,029
Fourth	91.5	90.2	92.9	2,839	81.6	79.8	83.5	3,126
Highest	63.0	59.3	66.6	3,430	52.4	49.5	55.3	3,911
SEX								
Male	83.8	82.2	85.4	6,237	71.8	70.2	73.3	7,082
Female	92.6	91.7	93.5	7,834	86.2	85.1	87.4	8,533
AGE GROUP								
15-19 years	91.9	90.5	93.3	2,413	81.8	79.6	83.9	1,955
20-24 years	87.1	85.0	89.3	2,337	78.3	76.3	80.3	3,003
25-29 years	83.5	81.3	85.6	1,746	73.7	71.6	75.8	2,341
30-34 years	81.6	79.0	84.1	1,486	74.5	72.0	77.0	1,754
35-39 years	85.7	82.9	88.4	1,390	76.8	74.4	79.2	1,371
40-44 years	90.8	89.2	92.4	1,341	78.7	76.5	81.0	1,380
45-49 years	90.7	88.9	92.6	991	83.6	81.3	85.9	1,181
50-54 years	91.9	89.9	93.8	779	85.2	82.7	87.8	889
55-59 years	96.4	94.9	97.8	494	87.1	84.3	89.8	571
60-64 years	96.1	94.2	98.0	409	90.3	87.3	93.3	389
65-69 years	95.2	93.0	97.5	298	92.7	89.7	95.8	320
70-74 years	96.6	94.2	99.0	209	94.4	91.4	97.4	228
75-79 years	99.1	97.8	100.4	102	90.3	85.3	95.2	131
80+ years	99.2	98.1	100.3	76	97.9	94.8	100.9	102

Table A.21 Estimates of percentage of adult population (16 years and older) in the trade industry by domain, with 95 percent confidence intervals, from EICV1 and EICV2

Domain	EICV1				EICV2			
	Estimate	Confidence Interval		No. Observ.	Estimate	Confidence Interval		No. Observ.
		Lower Limit	Upper Limit			Lower Limit	Upper Limit	
RWANDA	3.0	2.6	3.4	14,071	6.9	6.4	7.4	15,615
STRATUM 2002								
City of Kigali	24.2	19.8	28.5	1,463	23.3	20.5	26.1	1,959
Other Urban	5.2	3.2	7.1	1,386	13.2	10.8	15.6	1,573
Rural	1.2	0.9	1.5	11,222	4.9	4.4	5.4	12,083
NEW REGION								
Kigali	18.7	14.3	23.1	1,676	19.4	16.6	22.2	2,245
Southern	1.6	1.0	2.1	3,520	5.8	4.7	6.8	3,815
Western	1.6	1.0	2.1	3,564	6.2	5.2	7.3	3,771
Northern	1.9	1.2	2.6	2,215	5.0	4.0	6.1	2,425
Eastern	1.2	0.6	1.7	3,096	5.5	4.5	6.5	3,359
QUINTILES								
Lowest	0.5	0.2	0.7	2,486	3.4	2.5	4.3	2,665
Second	1.0	0.4	1.5	2,527	3.6	2.9	4.4	2,884
Third	1.3	0.8	1.8	2,789	4.9	4.0	5.8	3,029
Fourth	2.2	1.6	2.9	2,839	6.5	5.6	7.5	3,126
Highest	9.9	8.3	11.4	3,430	15.3	13.9	16.8	3,911
SEX								
Male	3.5	2.9	4.1	6,237	7.7	7.0	8.4	7,082
Female	2.6	2.1	3.1	7,834	6.2	5.6	6.9	8,533

Table A.22   Estimates of percentage of adult population (16 years and older) in an agriculture occupation by domain, with 95 percent confidence intervals, from EICV1 and EICV2

Domain	EICV1				EICV2			
	Estimate	Confidence Interval		No. Observ.	Estimate	Confidence Interval		No. Observ.
		Lower Limit	Upper Limit			Lower Limit	Upper Limit	
RWANDA	88.6	87.5	89.6	14,071	79.6	78.4	80.7	15,615
STRATUM 2002								
City of Kigali	16.9	8.3	25.4	1,463	14.7	11.9	17.5	1,959
Other Urban	79.0	72.9	85.1	1,386	56.0	49.5	62.5	1,573
Rural	94.8	94.1	95.6	11,222	87.3	86.3	88.3	12,083
NEW REGION								
Kigali	35.4	24.1	46.8	1,676	28.1	21.1	35.1	2,245
Southern	91.8	90.3	93.3	3,520	83.7	81.0	86.4	3,815
Western	94.3	93.0	95.7	3,564	84.0	81.9	86.2	3,771
Northern	92.6	90.6	94.5	2,215	84.9	82.7	87.1	2,425
Eastern	95.6	94.2	97.1	3,096	86.3	84.3	88.4	3,359
QUINTILES								
Lowest	97.7	96.9	98.5	2,486	90.7	89.2	92.2	2,665
Second	96.6	95.6	97.5	2,527	88.5	86.9	90.0	2,884
Third	95.2	94.2	96.2	2,789	87.7	86.3	89.0	3,029
Fourth	91.4	90.1	92.8	2,839	81.4	79.6	83.2	3,126
Highest	62.6	59.0	66.2	3,430	52.1	49.2	55.0	3,911
SEX								
Male	83.5	82.0	85.1	6,237	71.2	69.7	72.7	7,082
Female	92.4	91.6	93.3	7,834	86.3	85.2	87.5	8,533
AGE GROUP								
15-19 years	91.7	90.3	93.2	2,413	81.9	79.7	84.1	1,955
20-24 years	86.9	84.7	89.0	2,337	77.8	75.7	79.8	3,003
25-29 years	83.6	81.4	85.7	1,746	73.3	71.2	75.4	2,341
30-34 years	81.3	78.8	83.9	1,486	74.1	71.6	76.6	1,754
35-39 years	85.0	82.2	87.8	1,390	76.8	74.4	79.2	1,371
40-44 years	90.8	89.3	92.3	1,341	79.1	76.8	81.3	1,380
45-49 years	90.6	88.8	92.5	991	83.0	80.7	85.3	1,181
50-54 years	91.6	89.7	93.6	779	85.5	83.1	88.0	889
55-59 years	96.1	94.6	97.6	494	86.5	83.7	89.3	571
60-64 years	96.1	94.2	98.0	409	90.7	87.9	93.6	389
65-69 years	94.1	91.5	96.7	298	92.7	89.7	95.8	320
70-74 years	96.7	94.4	99.0	209	93.7	90.6	96.8	228
75-79 years	98.2	96.1	100.4	102	89.8	84.4	95.2	131
80+ years	99.2	98.1	100.3	76	95.6	91.4	99.9	102

Table A.23   Estimates of percentage of adult population (16 years and older) in a trade occupation by domain, with 95 percent confidence intervals, from EICV1 and EICV2

Domain	EICV1				EICV2			
	Estimate	Confidence Interval		No. Observ.	Estimate	Confidence Interval		No. Observ.
		Lower Limit	Upper Limit			Lower Limit	Upper Limit	
RWANDA	2.7	2.3	3.1	14,071	5.9	5.4	6.3	15,615
STRATUM 2002								
City of Kigali	21.3	17.6	25.1	1,463	19.4	16.6	22.1	1,959
Other Urban	4.7	2.8	6.6	1,386	11.8	9.7	13.9	1,573
Rural	1.1	0.9	1.4	11,222	4.2	3.7	4.6	12,083
NEW REGION								
Kigali	16.6	12.8	20.4	1,676	16.3	13.7	18.9	2,245
Southern	1.3	0.8	1.9	3,520	4.4	3.6	5.2	3,815
Western	1.5	0.9	2.0	3,564	5.5	4.5	6.5	3,771
Northern	1.9	1.3	2.6	2,215	4.5	3.5	5.5	2,425
Eastern	1.0	0.5	1.5	3,096	4.8	3.9	5.8	3,359
QUINTILES								
Lowest	0.5	0.2	0.7	2,486	2.5	1.8	3.3	2,665
Second	0.8	0.3	1.3	2,527	2.9	2.1	3.6	2,884
Third	1.1	0.6	1.5	2,789	4.2	3.4	5.0	3,029
Fourth	2.0	1.4	2.7	2,839	6.0	5.1	6.8	3,126
Highest	9.1	7.7	10.5	3,430	13.0	11.6	14.4	3,911
SEX								
Male	3.3	2.7	3.8	6,237	6.5	5.8	7.1	7,082
Female	2.3	1.9	2.7	7,834	5.4	4.8	6.0	8,533

Table A.24 Estimates of percentage of adult population (16 years and older) in a services occupation by domain, with 95 percent confidence intervals, from EICV1 and EICV2

Domain	EICV1				EICV2			
	Estimate	Confidence Interval		No. Observ.	Estimate	Confidence Interval		No. Observ.
		Lower Limit	Upper Limit			Lower Limit	Upper Limit	
RWANDA	2.8	2.4	3.2	14,071	5.5	4.9	6.1	15,615
STRATUM 2002								
City of Kigali	24.5	20.5	28.6	1,463	30.6	27.7	33.6	1,959
Other Urban	6.3	4.0	8.6	1,386	16.1	11.6	20.6	1,573
Rural	0.9	0.6	1.1	11,222	2.4	2.0	2.7	12,083
NEW REGION								
Kigali	18.8	14.6	23.0	1,676	24.4	20.6	28.1	2,245
Southern	2.0	1.4	2.6	3,520	4.5	2.9	6.1	3,815
Western	1.0	0.6	1.5	3,564	3.7	2.9	4.6	3,771
Northern	1.2	0.7	1.8	2,215	3.2	2.4	4.1	2,425
Eastern	1.0	0.5	1.4	3,096	2.8	1.9	3.8	3,359
QUINTILES								
Lowest	0.3	0.0	0.5	2,486	2.2	1.5	2.9	2,665
Second	0.4	0.1	0.7	2,527	2.5	1.8	3.3	2,884
Third	0.7	0.3	1.0	2,789	2.6	2.0	3.2	3,029
Fourth	1.9	1.4	2.5	2,839	4.1	3.1	5.0	3,126
Highest	10.7	9.2	12.3	3,430	15.2	13.7	16.8	3,911
SEX								
Male	3.4	2.8	4.0	6,237	7.2	6.4	8.0	7,082
Female	2.4	2.0	2.8	7,834	4.1	3.5	4.8	8,533

Table A.25   Estimates of mean number of cattle by domain, with 95 percent confidence intervals, from EICV1 and EICV2

Domain	EICV1				EICV2			
	Estimate	Confidence Interval		No. Observ.	Estimate	Confidence Interval		No. Observ.
		Lower Limit	Upper Limit			Lower Limit	Upper Limit	
RWANDA	2.9	2.4	3.4	6,420	2.7	2.2	3.2	6,900
STRATUM 2002								
City of Kigali	8.8	-0.8	18.4	792	4.7	3.0	6.5	900
Other Urban	2.7	1.4	4.0	669	3.0	1.8	4.3	720
Rural	2.8	2.3	3.4	4,959	2.6	2.1	3.2	5,280
NEW REGION								
Kigali	3.5	0.6	6.5	885	3.5	2.4	4.6	1,026
Southern	2.0	1.8	2.2	1,558	1.9	1.8	2.0	1,707
Western	1.7	1.6	1.8	1,605	1.8	1.6	2.1	1,653
Northern	1.9	1.7	2.2	1,012	1.9	1.7	2.0	1,059
Eastern	8.0	4.7	11.4	1,360	6.0	3.4	8.5	1,455
QUINTILES								
Lowest	1.9	1.5	2.3	1,053	1.4	1.2	1.5	1,180
Second	1.7	1.5	1.9	1,112	2.1	1.4	2.9	1,238
Third	2.1	1.7	2.4	1,244	1.9	1.5	2.3	1,321
Fourth	2.6	2.1	3.1	1,301	2.8	2.2	3.4	1,418
Highest	4.7	3.2	6.2	1,710	4.1	3.1	5.1	1,743

Table A.26 Estimates of mean number of goats by domain, with 95 percent confidence intervals, from EICV1 and EICV2

Domain	EICV1				EICV2			
	Estimate	Confidence Interval		No. Observ.	Estimate	Confidence Interval		No. Observ.
		Lower Limit	Upper Limit			Lower Limit	Upper Limit	
RWANDA	2.5	2.4	2.7	6,420	2.4	2.3	2.5	6,900
STRATUM 2002								
City of Kigali	2.9	2.1	3.7	792	3.7	2.9	4.5	900
Other Urban	2.0	1.8	2.2	669	2.5	2.2	2.8	720
Rural	2.6	2.5	2.7	4,959	2.4	2.3	2.5	5,280
NEW REGION								
Kigali	2.7	2.2	3.2	885	2.9	2.4	3.3	1,026
Southern	2.1	2.0	2.3	1,558	2.2	2.0	2.3	1,707
Western	2.2	2.1	2.4	1,605	2.1	2.0	2.3	1,653
Northern	2.9	2.6	3.3	1,012	2.2	2.0	2.4	1,059
Eastern	2.9	2.6	3.2	1,360	2.9	2.7	3.2	1,455
QUINTILES								
Lowest	2.1	1.9	2.3	1,053	1.9	1.8	2.0	1,180
Second	2.3	2.1	2.5	1,112	2.1	1.9	2.3	1,238
Third	2.4	2.2	2.6	1,244	2.4	2.2	2.6	1,321
Fourth	2.6	2.4	2.8	1,301	2.5	2.3	2.6	1,418
Highest	3.0	2.7	3.3	1,710	3.0	2.7	3.3	1,743

Table A.27   Estimates of mean number of chickens by domain, with 95 percent confidence intervals, from EICV1 and EICV2

Domain	EICV1				EICV2			
	Estimate	Confidence Interval		No. Observ.	Estimate	Confidence Interval		No. Observ.
		Lower Limit	Upper Limit			Lower Limit	Upper Limit	
RWANDA	2.8	2.6	3.0	6,420	3.3	3.0	3.5	6,900
STRATUM 2002								
City of Kigali	3.7	2.8	4.6	792	6.4	1.2	11.7	900
Other Urban	3.3	2.8	3.7	669	3.6	3.0	4.1	720
Rural	2.7	2.6	2.9	4,959	3.1	3.0	3.3	5,280
NEW REGION								
Kigali	3.8	3.1	4.5	885	5.2	2.4	8.0	1,026
Southern	2.5	2.3	2.7	1,558	3.0	2.8	3.3	1,707
Western	2.7	2.4	3.0	1,605	2.8	2.5	3.0	1,653
Northern	3.1	2.7	3.5	1,012	3.0	2.7	3.3	1,059
Eastern	2.9	2.5	3.3	1,360	3.7	3.3	4.1	1,455
QUINTILES								
Lowest	2.4	2.0	2.8	1,053	2.3	2.0	2.6	1,180
Second	2.6	2.2	2.9	1,112	3.0	2.7	3.2	1,238
Third	2.7	2.4	3.0	1,244	3.1	2.8	3.4	1,321
Fourth	2.7	2.5	3.0	1,301	3.2	2.9	3.5	1,418
Highest	3.4	3.0	3.8	1,710	4.3	3.5	5.1	1,743